# PUBLIC SERVICE COMMISSION OF UTAH

## Docket No. 12-035-92

## SIERRA CLUB EXHIBIT 20

Response to OCS Data Request 4.8

## **OCS Data Request 4.8**

### Link Testimony, p. 16, lines 311-321; Confidential Exhibit RTL-4.

- a. Please describe the Wyoming DEQ requirements and rules that require final reclamation of the Bridger surface mine by 2021 in the two and three unit operation scenarios. Please provide the assumed closure date(s).
- b. Please explain why PacifiCorp assumes that reclamation costs must be recovered prior to the completion of reclamation.
- c. In the two or three unit operation scenario, what assumption does PacifiCorp make with respect to the recovery of any net rate base for the generation units that are closed or retired in 2015?

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a. In both the two-unit and three-unit operation, the draglines cease uncovering coal in 2013 and are diverted to final reclamation. Coal is recovered from the former surface mine areas by highwall mining extraction through 2017 and the underground mine produces coal through 2037. Highwall mining (which negates further surface mine development) further establishes that surface mining development is no longer economic and that "the earliest possible reclamation program" for areas not part of the underground mine can be initiated.

**Reclamation Requirements** 

The Wyoming Statutes and the Environmental Protection Performance Standards promulgated by the Wyoming Department of Environmental Quality, Land Quality Division establish requirements for final reclamation for coal mining operations. Wyoming Statutes Title 35 – Public Health and Safety, Chapter 11 – Environmental Quality, Article 4 – Land Quality, 35 -11-402 Establishment of Standards (a) (iii) establishes reclamation regulations requiring "a time schedule encouraging the earliest possible reclamation program consistent with orderly and economic development of the mining property;"

The performance standards established by the Wyoming Department of Environmental Quality, Land Quality Division Chapter 4 – Environmental Protection Performance Standards for Coal Mining Operations include:

Section 2 - General Environmental Protection Performance Standards,

(b) Backfilling, grading and contouring.

(i) Rough backfilling and grading shall follow coal removal as contemporaneously as possible based upon the mining conditions. The operator shall include within the application for a permit to mine a proposed schedule for backfilling and grading with supporting analysis.

(k) Time schedule:

(i) Reclamation must begin as soon as possible after mining commences and must continue concurrently until such time that the mining operation is terminated and all of the affected land is reclaimed. If conditions are such that final reclamation procedures cannot begin until the mining operation is completed, this must be explained in the reclamation plan. A detailed time schedule for the mining and reclamation progression must be included in the reclamation plan. This time schedule shall:

(A) Apply to reclamation of all lands to be affected in the permit area;

- (B) Designate times for backfilling, grading, contouring and reseeding;
- (C) Be coordinated with a map indicating the areas of progressive mining and reclamation;
- (D) Establish reclamation concurrently with mining operations, whenever possible. If not possible, the schedule shall provide for the earliest possible reclamation consistent with the orderly and economic development of the property; and
- (E) If the Administrator approves a schedule where reclamation follows the completion of mining, describe the conditions which will constitute completion or termination of mineral production.

### Mine Permit

All mining operations are required to have an approved Permit to Mine which is administered by the Wyoming Department of Environmental Quality, Land Quality Division. The mine permit requires the mining operation to submit a reclamation plan as described in the Wyoming Statutes Title 35 – Public Health and Safety, Chapter 11 – Environmental Quality, Article 4 – Land Quality, 35 -11-406 Application for permit; generally; denial; limitations (b) (i). This section states that "The application shall include a mining plan and reclamation plan dealing with the extent to which the mining operation will disturb or change the lands to be affected, the proposed future use or uses and the plan whereby the operator will reclaim the affected lands to the proposed future use or uses...". Bridger Coal operates under the approved Permit to Mine #338-T6. The five-year permit term is 2007 through 2012.

The mine and reclamation plan in the current permit supports the economic life of the operation as known at the time of term submittal. The permit includes a reclamation plan that specifies reclamation grading yardage in periodic increments. The permitted mine and reclamation plan shows that surface mining concludes in 2024 and that reclamation is completed in 2028, within five years. Reclamation is expected to occur at

> an expedient rate once surface mine coal production ceases. Failure to proceed with final reclamation in expedient manner is subject to fines and administrative orders.

> <u>Reclamation Requirements in two and three unit surface closure scenarios</u> Final reclamation grading in the proposed plan starts in 2012 as coal production begins to transition from the surface mining equipment to highwall mining recovery. This plan is based on a levelized equipment schedule for continuous, non-overtime grading and topsoil placement that emulates the time-frame for final reclamation that exists in the approved mine permit. Final reclamation is conducted during the two phases: (i) post the surface and highwall mining (2012- 2021) and (ii) post underground mining.

> (i) <u>Post Surface Mine Reclamation</u>: In this phase, reclamation is done in surface mine disturbed areas that are not in the vicinity of the still operating underground mine. Both draglines are scheduled to perform reclamation grading along with production excavation in 2012 and 2013. In 2014 and 2015 the draglines support the highwall mining operation and conduct reclamation grading, with the percentage of grading time increasing during the period. From 2016 to 2020 the draglines are scheduled full-time in reclamation grading.

The mobile equipment fleets (loaders-trucks, dozers, scrapers) begin part time reclamation work in 2012, transition to full-time in 2013 and finish in 2021. Two truck-loader fleets are used for coal production, and reclamation grading and topsoil replacement. Three Caterpillar D11 class dozers and three Caterpillar 657 class scrapers are scheduled for reclamation grading.

- (ii) <u>Post Underground Mine Reclamation</u>: In this phase, reclamation is done in disturbed areas that are available after the underground mine ceases production in 2037. Final reclamation grading and topsoil replacement begins in 2038 and concludes in 2043.
- b. Per Bridger Coal Company's mine permit and existing laws, Bridger Coal Company is required to perform final mine reclamation. In January 1989, Bridger Coal Company, Pacific Minerals Inc, Idaho Energy Resources, PacifiCorp and Idaho Power Company executed the Reclamation Fund Agreement establishing a dedicated final reclamation trust fund to meet the costs of final mine reclamation. Per the coal supply agreement between PacifiCorp, Idaho Power and Bridger Coal Company, contributions to the trust are included as a cost of mining coal. Reclamation expense has historically been recognized on an accrual basis for accounting and recovered on an

> accrual basis for ratemaking in the jurisdictions in which PacifiCorp serves. To do otherwise would potentially expose the Company and customers to a disproportionately large portion of a mine's reclamation costs at the time reclamation begins and similarly expose the Company and its customers to counterparty non-performance under the coal sales agreement.

c. If any of the Jim Bridger generating units were to retire earlier, the remaining rate base would continue to be recovered from customers following appropriate regulatory requirements and processes. In the current proceeding, the next best alternative to the installation of emission control equipment is to convert Jim Bridger generating units 3 and 4 to gas-fired facilities, rather than retire the two units.