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BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

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<p>IN THE MATTER OF THE APPLICATION OF ROCKY MOUNTAIN POWER FOR APPROVAL OF THE TRANSACTION TO CLOSE DEER CREEK MINE AND FOR A DEFERRED ACCOUNTING ORDER</p>	<p>) CASE NO. PAC-E-14-10)) DIRECT TESTIMONY OF) SETH SCHWARTZ) REDACTED))</p>
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ROCKY MOUNTAIN POWER

CASE NO. PAC-E-14-10

December 2014

1 agencies, interveners, and company management. I have testified as an expert
2 witness on coal markets and coal procurement practices in front of numerous state
3 public utility commissions as well as the Federal Energy Regulatory Commission
4 (“FERC”). My current resume is attached at Exhibit No. 8.

5 **Q. Have you previously testified regarding the coal mining operations and coal**
6 **procurement practices of PacifiCorp?**

7 A. Yes. I directed a study of the coal supply operations and fuel procurement
8 practices of PacifiCorp following the merger of Utah Power & Light and Pacific
9 Power & Light in 1991 on behalf of the seven state public service commissions
10 and FERC as well as an update, which was performed in 1995. This was a
11 comprehensive study of the management of the mining operations and coal supply
12 plan to all of PacifiCorp’s coal-fired power stations. I have also testified on behalf
13 of the Utah Office of Consumers Services in Docket No. 10-035-124 in 2011.

14 **Q. Do you have previous experience with the issues related to the multi-**
15 **employers pension plan and the National Bituminous Coal Wage Agreement**
16 **(“NBCWA”)?**

17 A. Yes. I have analyzed the costs and impacts of the NBCWA on the coal industry
18 and coal mining operations for over 30 years. I testified before the President’s
19 Commission on United Mine Workers of America Retiree Health Benefits (the
20 “Coal Commission”) in 1990, which led to the passage of the Coal Industry
21 Retiree Benefits Act of 1992. I have also testified in bankruptcy court on behalf of
22 Patriot Coal Company in 2013 regarding the costs of the NBCWA and the impact
23 on Patriot’s operations and its reorganization plans.

1 **PURPOSE AND SUMMARY**

2 **Q. What is the purpose of your testimony?**

3 A. My testimony describes the major issues involved in the Company's decision to
4 close the Deer Creek mine and replace the coal with a new long-term contract
5 supplied by Bowie Resources ("Bowie"). These issues include the rising costs of
6 continued operation of the Deer Creek mine as an employer under the NBCWA
7 and the market for Utah coal, which will replace the coal supply to the Utah
8 power plants.

9 **Q. What was the benefit to the Company's customers of the Company having its
10 own captive production of coal to supply the Utah plants?**

11 A. For many years, the Company has operated its own coal mines in Utah (Deer
12 Creek and previous mines) to supply the Utah power plants (Huntington, Hunter
13 and Carbon). The Company was able to operate its own mines at costs similar to
14 the costs of operation by commercial coal suppliers in the Utah market. Operating
15 its own mines had a number of benefits to the Company and its customers,
16 including:

- 17 1) Stable supply of coal meeting the plant requirements at reasonable costs;
18 2) Low coal transportation costs to deliver coal to the Huntington and Hunter
19 power plants;
20 3) Reduced exposure to swings in coal prices based on market conditions;
21 4) Leverage with commercial coal suppliers in negotiating coal purchase
22 contracts.

1 **Q. What changes have occurred that no longer make it advantageous for the**
2 **Company to maintain its own captive coal mining operations?**

3 A. In recent years, the value of having captive coal supply for the Utah plants has
4 declined while the costs of maintaining this captive supply have increased.

5 **Q. Why has the value of a captive coal supply declined?**

6 A. Historically, the Utah coal market has had limited supply relative to the potential
7 demand. There was a small number of economic coal mines and a large potential
8 market, including local power plants as well as shipments to power plants in the
9 Eastern U.S. and exports to overseas markets. The major change in recent years
10 has been the decline in demand for Utah coal. Utah coal is no longer demanded in
11 Eastern markets and several local power plants have announced plans to close in
12 the near future. As a result, there is now excess supply of coal on the Utah market,
13 and the concern of potential shortages and price spikes in the commercial market
14 is much less than in the past.

15 **Q. Why have the costs of maintaining a captive coal supply increased?**

16 A. The Deer Creek coal mine is approaching the end of its reserve life. As the mine
17 depletes, the cost of production is expected to rise and the coal quality is expected
18 to decline. In addition, the costs of continuing to be a signatory employer under
19 the NBCWA and a participant in the multi-employer pension plan of the United
20 Mine Workers of America (“UMWA”) have substantially increased in recent years
21 and have a large risk of increasing much more in the future.

22 **Q. Please describe how your testimony is organized.**

23 A. First, I discuss the reasons for the increased cost to the Company of its continued

1 production and participation in the pension plan and the growing risk of higher
2 costs in the future. Second, I discuss the changes in the market for Utah coal and
3 the costs and benefits of purchasing coal from commercial suppliers compared to
4 continued captive coal production.

5 **INCREASED COST AND RISK OF PARTICIPATION IN THE**
6 **UMWA 1974 PENSION PLAN AND TRUST**

7 **Q. Please describe the UMWA 1974 Pension Plan and Trust.**

8 A. The UMWA 1974 Pension Plan and Trust (“1974 Pension Trust”) is a multi-
9 employer pension plan established to provide retirement benefits to eligible mine
10 workers who retire, who become disabled and to the eligible surviving spouses of
11 mine workers. The UMWA 1950 Pension Trust was merged into the 1974 Pension
12 Trust in 2007. The 1974 Pension Trust provides pension benefits to retired
13 members of the UMWA who are eligible based upon their years of signatory
14 service (work for a company which was a signatory of the NBCWA) regardless of
15 the identity of their former employer. As a multi-employer plan, eligible retirees
16 receive benefits from the 1974 Pension Trust based upon their qualifying
17 signatory service, regardless of whether their former employer is currently in
18 business or making payments to the 1974 Pension Trust.

19 **Q. Who are the signatory employers?**

20 A. The signatory employers are companies who have signed the current or previous
21 National Bituminous Coal Wage Agreement (“NBCWA”). Signatory employers
22 also include companies who have signed separate agreements with the UMWA
23 which incorporate the terms of the NBCWA (so-called “me too” agreements) and

1 are signatory to the terms of the 1974 Pension Trust agreement.

2 **Q. What is the National Bituminous Coal Wage Agreement?**

3 A. The NBCWA is negotiated between the Bituminous Coal Operators Association
4 (“BCOA”) and the United Mine Workers of America (“UMWA”). The NBCWA
5 governs the terms of employment of the hourly workers of the signatory
6 companies, including pay, benefits, work rules and retirement benefits. The
7 current 2011 NBCWA was effective on July 1, 2011 and will expire December 31,
8 2016.

9 **Q. Is Energy West a signatory of the current NBCWA?**

10 A. No. Energy West has not signed the 2011 NBCWA. The UMWA employees of
11 Energy West (at the Deer Creek mine and the Hunter Preparation Plant) have been
12 working without a contract since the last contract expired on January 2, 2013.

13 **Q. Is Energy West still required to make contributions to the 1974 Pension
14 Trust?**

15 A. Yes. While the last labor contract has expired, Energy West is still required to
16 contribute to the 1974 Pension Trust. Based upon prior court rulings,¹ as a
17 previous signatory to the 1974 Pension Trust documents, Energy West is obligated
18 to continue to contribute at the rates set by the NBCWA whether or not Energy
19 West is a signatory to successor NBCWA agreements.

20 **Q. How are contribution rates to the 1974 Pension Trust established?**

21 A. The contribution rates are established by agreement of the BCOA and the UMWA
22 in the NBCWA and its successor agreements. Energy West is bound to make

¹ See *Holland v. Freeman United Coal Mining Co*, 574 F. Supp. 2d 116 (2008), United States District Court, District of Columbia, Civil Action Nos. 07-0490 and 07-1050.

1 contributions at the rates established in the NBCWA.

2 **Q. What is the current contribution rate to the 1974 Pension trust?**

3 A. For the term of the 2011 NBCWA (from July 1, 2011 through December 31,
4 2016), the contribution rate was fixed at the rate of \$5.50 per hour worked for all
5 UMWA employees employed prior to January 1, 2012. This is a very substantial
6 cost to the signatory employers. The standard wage rate for the highest-paid
7 UMWA employee as of July 1, 2011 was \$25.415 per hour, so the contribution to
8 the 1974 Pension Trust is over 20 percent of the regular payroll rate.

9 **Q. Why is the contribution rate so expensive?**

10 A. Because of the nature of the multi-employer plan and the fact that the number of
11 contributing employers has been declining over time. In a multi-employer plan,
12 the current employers are not making contributions based upon the cost of
13 providing pensions to their own current and future retirees. The pensions for all
14 eligible UMWA retirees (and surviving spouses) are included in the Trust and the
15 contributions from current employers are supposed to be set at the level needed to
16 pay for all of the eligible retirees, not just the individual employer's retirees.

17 In the case of the coal industry, UMWA coal production and employment
18 has been declining over time. Because the cost of coal production with UMWA
19 employees has been greater than the cost of production with non-union employees
20 (due to wage rates, very high benefit costs, and lower productivity due to UMWA
21 work rules), no new coal mines developed since the 1980s have signed the
22 NBCWA. As existing UMWA mines have depleted and closed, the number of
23 active UMWA employees and coal production from UMWA mines has declined.

1 Former signatory employers have closed and some have filed bankruptcy. As the
2 coal production and contributions from signatory employers have declined, the
3 cost of contributions for the remaining employers has escalated rapidly.

4 **Q. What has happened to the amount of coal production by companies who are**
5 **contributing to the 1974 Pension Trust?**

6 A. Just prior to the passage of the Coal Industry Retiree Benefit Act of 1992 (which
7 was a Federal law designed to address the funding shortfalls for UMWA retiree
8 medical benefits), signatory coal production was 285 million tons in 1991.² The
9 level of signatory UMWA production had been declining from a peak of 423.7
10 million tons in 1970, when signatory production was almost 70 percent of total
11 U.S. coal production. Since the passage of the 1992 Coal Act, signatory coal
12 production has fallen sharply as companies have closed UMWA coal mines and
13 have gone out of business. From 1998 to 2013, signatory coal production has
14 fallen by two-thirds, from 217 to 76 million tons, as shown on Exhibit No. 9.
15 Signatory coal production is on pace to fall again in 2014, with mine closures
16 announced in Alabama and West Virginia.

17 **Q. Please provide a history of the contribution rates to the 1974 and 1950**
18 **Pension Trusts.**

19 A. The historical contribution rates from 1975 to 2014 to the 1974 and 1950 Pension
20 Trusts are shown on Exhibit No. 10. The contribution rates to the 1950 Pension
21 Trust were set in dollars per ton produced, but the exhibit shows the rates
22 converted to equivalent dollars per hour worked. The contributions to the 1950

² US House of Representatives, Committee on Ways and Means, "Development and Implementation of the Coal Industry retiree Health Benefit Act of 1992", page 130.

1 Pension Trust ceased in 1987 after the 1950 Pension Trust was fully funded. The
2 1950 Pension Trust was merged into the 1974 Trust in 2007. The contribution rate
3 to the 1974 Pension Trust was in the range of \$0.60 - \$1.20 per hour worked
4 (including the equivalent contribution rate per ton) from the plan inception
5 through 2001. In the 2002 NBCWA, the contribution rate was reduced to zero.
6 However, a substantial deficit in the Trust required a resumption of contributions
7 in the 2007 NBCWA at the rate of \$2.00 per hour, growing to \$5.00 per hour by
8 the end of the contract. In the 2011 NBCWA, contribution rates were fixed at
9 \$5.50 per hour for the term of the contract through the end of 2016.

10 **Q. What has happened to the financial condition of the 1974 Pension Trust?**

11 A. The financial condition of the 1974 Pension Trust has deteriorated dramatically
12 since the start of the 2007 NBCWA. At the valuation date of June 30, 2006, the
13 market value of the assets was \$6.0 billion and the present value of the vested
14 benefits was \$7.1 billion, for a deficit of \$1.1 billion (the value of the unfunded
15 vested benefits). However, as shown on Exhibit No. 11, the deficit has
16 skyrocketed since 2006 to \$5.5 billion as of the last valuation date of June 30,
17 2013.

18 **Q. What are the causes of the large increase in the deficits in the 1974 Pension**
19 **Trust?**

20 A. It has been a combination of an increase in the present value of the vested benefits
21 and a decline in the market value of the plan assets. The present value of the
22 vested benefits has increased from \$7.1 billion on June 30, 2006 to \$9.6 billion on
23 June 30, 2013 due to benefit increases and changes in actuarial assumptions,

1 principally the lower interest rate used to discount future benefits to a present
2 value (this change is due to lower interest rates and expected earnings for the plan
3 assets). The market value of the plan assets has fallen from \$6.0 billion on June
4 30, 2006 to \$4.1 billion on June 30, 2013 due to the decline in the market value of
5 the plan investments in 2008 and 2009 and the fact that benefit payments have
6 exceeded contributions and investment earnings.

7 **Q. How do Company contributions to the 1974 Pension Trust compare to the**
8 **cost of benefits?**

9 A. For the most recent year ended June 30, 2013, total contributions were \$121.5
10 million (including \$6.2 million of withdrawal payments), while the cost of
11 benefits paid and plan expenses were \$609.6 million. The annual income of the
12 plan assets is not enough to fund the difference between the employer
13 contributions and the cost of the benefits. In the most recent year, the earnings and
14 market appreciation of the plan investments were \$377.1 million, so the value of
15 the plan assets declined by over \$100 million. The decline in the value of the plan
16 assets would have been even larger except for the fact that the return on plan
17 assets was \$62.4 million greater than expected. As the value of the plan assets is
18 depleted to pay the current benefits, the earnings on the plan assets will decline
19 further, exacerbating the shortfall.

20 **Q. What is the impact of the funding deficit on the amount of future**
21 **contributions by employers like Energy West to the 1974 Pension Trust?**

22 A. Under the federal Pension Protection Act of 2006 (“PPA”), the actuary for a
23 multi-employer pension plan must certify the funded status of a plan annually. For

1 the plan year beginning July 1, 2011, the actuary for the 1974 Pension Trust
2 certified that the plan was in “seriously endangered status” for the first time. The
3 PPA requires that BCOA and the UMWA adopt a funding improvement plan to
4 avoid a funding deficiency for any plan year and improve the plan’s funded status
5 by at least 20 percent over a 15-year period.³ The funding improvement plan was
6 adopted on May 25, 2012 and was updated on April 26, 2013. The funding
7 improvement plan will require contributions by participating employers to more
8 than double in 2017 (after the end of the current NBCWA) to \$13.20 per hour and
9 continue to increase rapidly to a rate of \$26.00 per hour by 2022 and remain at
10 this level thereafter.⁴ The 1974 Pension Trust’s financial condition has further
11 deteriorated and it is now considered to be in “critical” status for plan year
12 beginning July 1, 2014. A new “rehabilitation plan” will be required to be adopted
13 no later than May 2015 which will likely require even higher future contribution
14 rates.

15 **Q. What would be the likely impact of this required increase in contributions on**
16 **the cost of production for the contributing employers?**

17 A. The required increase would have a substantial increase in costs for the signatory
18 employers. Production at signatory UMWA mines has already been declining
19 steadily as shown on Exhibit No. 9. The cost for contributions to the 1974 Pension
20 Trust at \$26.00 per hour worked would equal about \$7.00 per ton at the average
21 UMWA mine. This increase would make more UMWA mines uneconomic and
22 likely to close.

³ Annual Funding Notice from the Trustees of the UMWA Health and Retirement Funds, October 25, 2013.

⁴ This schedule assumes no cuts in benefits. If benefits were cut to the maximum extent permitted by law, the contribution rate would rise to \$24.90 per hour by 2022 instead of \$26.00.

1 **Q. What would be the impact on the financial status of the 1974 Pension Trust if**
2 **more UMWA mines were to close?**

3 A. It is likely that the 1974 Pension Trust would enter what is popularly known as a
4 “death spiral”, where declining production would force the remaining producers
5 to contribute at even higher hourly rates, which would in turn force more mines to
6 close. The remaining signatory employers would likely close their UMWA mines
7 and seek to withdraw from the 1974 Pension Trust.

8 **Q. How can an employer limit its exposure to the future costs of the 1974**
9 **Pension Trust?**

10 A. The only way for a current signatory employer to limit the future financial
11 obligations to the 1974 Pension Trust is to close its UMWA operations (laying off
12 all UMWA employees) and withdraw from the Trust. Previous court rulings have
13 held that the existing signatory employers must continue to make contributions to
14 the 1974 Pension Trust at the rates established under the NBCWA even if the
15 employer is no longer a signatory to the agreement.

16 **Q. What happens when an employer withdraws from the 1974 Pension Trust?**

17 A. Under the terms of the Employee Retirement Income Security Act (“ERISA”), an
18 employer must pay withdrawal liability equal to its proportionate share of the
19 unfunded vested benefits as of the last valuation date. The employer’s liability is
20 calculated based upon its share of the contributing hours worked over the
21 preceding five years times the total unfunded vested benefits.

1 **Q. What is the withdrawal liability for Energy West if it closes the Deer Creek**
2 **mine?**

3 A. Based upon the last valuation date of June 30, 2013, the Company had an
4 estimated withdrawal liability of \$125,615,617 if it had withdrawn from the 1974
5 Pension Trust prior to June 30, 2014. This valuation is an estimate provided by the
6 Trustees at the request of Energy West, based upon the unfunded benefits of \$5.4
7 billion and the Company's share of the total signatory hours worked over the last
8 five years of 2.32 percent. A new valuation of the unfunded vested benefits and
9 the withdrawal liability as of June 30, 2014 has not been prepared by the Trustees
10 at this time, so the current withdrawal liability is not known for certain.

11 **Q. How would the withdrawal liability be paid?**

12 A. The withdrawn employer has the obligation to make annual payments equal to the
13 highest contribution rate (in dollars per hour) over the previous 10 years times the
14 highest average annual contribution base units (annual signatory hours worked
15 over the highest 3-year period in the previous 10 years). The withdrawn employer
16 also has the option to make the withdrawal payment in a lump sum in lieu of the
17 annual payments. Annual payments would continue indefinitely until the 1974
18 Pension Trust has satisfied all of its obligations to beneficiaries.

19 **Q. What has happened to the calculation of the withdrawal liability of Energy**
20 **West over recent years?**

21 A. After learning of the funding deficit in September 2010, Energy West has
22 requested that the Trustees provide a calculation of its withdrawal liability
23 annually. In that time, the withdrawal liability has increased from \$85.9 million to

1 \$125.6 million, as shown on Exhibit No. 13. The reason for the increase in
2 liability has been the increase in the unfunded vested benefits in the Trust, as
3 described earlier. The share of signatory hours worked by Energy West has been
4 stable over this period.

5 **Q. What is likely to happen to Energy West's withdrawal liability if the**
6 **Company delays withdrawal until a future date?**

7 A. It is highly likely that Energy West's withdrawal liability will continue to rise
8 significantly.

9 **Q. Why?**

10 A. The amount of coal produced by other signatory companies is certain to decline as
11 other companies close uneconomic coal mines. As a result, the share of signatory
12 hours worked by Energy West will increase, so Energy West's share of the
13 withdrawal liability will be higher. Further, the lower amount of production will
14 reduce the annual contributions to the Trust, increasing the unfunded deficit.
15 Finally, it is possible that some of the other signatory companies will be unable to
16 continue to make contributions or withdrawal payments due to their weak
17 financial condition, which would leave a greater share of the liability with Energy
18 West.

19 **Q. What is likely to happen to Energy West's withdrawal payment obligation if**
20 **it delays withdrawal until after 2016?**

21 A. If Energy West withdraws prior to 2017, the highest contribution rate which
22 would be multiplied by the annual hours worked would be \$5.50 per hour. Based
23 on the latest funding improvement plan, the contribution rate will increase to at

1 least \$13.20 per hour, which would more than double the annual withdrawal
2 payment. The annual payment obligation is likely to increase significantly in 2017
3 after the 2011 NBCWA expires.

4 **Q. Why do you expect coal production by other UMWA mines to decline in the**
5 **future?**

6 A. Several large UMWA mines have already closed in 2014 in Alabama, Virginia and
7 West Virginia. Producers have provided WARN Act⁵ notices at a number of other
8 mines and these are likely to close in the near future. Weak prices for
9 metallurgical coal have jeopardized the viability of several other large mines
10 which have disproportionately more employees, due to difficult mining
11 conditions. Further, the remaining mines will become much less economic when
12 the large increase in contributions to the 1974 Pension Trust starts in 2017.

13 **Q. Who are the signatory coal producers contributing to the 1974 Pension**
14 **Trust?**

15 A. I have calculated the signatory coal production by parent company in 2013, which
16 is presented in Exhibit No. 14. The largest coal producer was Consol Energy (its
17 subsidiaries Consolidation Coal and McElroy Coal). Consol sold these mines in
18 late 2013 to Murray Energy, the parent company of Ohio Valley Resources,
19 another signatory producer. The combination makes Murray Energy the largest
20 signatory producer, with over 45 percent of all of the 2013 production, all from
21 six highly-productive mines. Excluding Energy West, there were only six other
22 signatory coal producers in 2013.

⁵ The Worker Adjustment and Retraining Notification Act, which requires 60 days advance notice prior to layoffs which exceed 50 employees.

1 **Q. Who is the second-largest signatory coal producer?**

2 A. The second-largest signatory producer was Patriot Coal (including its subsidiaries
3 Eastern Associated Coal, Highland Mining and others). Patriot filed for Chapter
4 11 bankruptcy in 2012, citing high operating costs and long-term liabilities,
5 especially associated with the NBCWA. Patriot emerged from Chapter 11 in late
6 2013, but has continued to lose money. In 2014, Patriot has closed or idled two of
7 its remaining UMWA mines and given WARN notice at another mine. In its
8 bankruptcy, Patriot announced that it had reached an agreement with the UMWA
9 to limit its future contributions, although the terms were not made public.

10 **Q. What is the financial condition of the other signatory coal producers?**

11 A. The next-largest signatory coal producers were subsidiaries of Walter Energy and
12 Alpha Natural Resources. In 2014, Walter closed the large North River UMWA
13 mine. Walter is highly-leveraged due to a large acquisition of Western Coal in
14 2011 at the peak of the metallurgical coal market and is now in precarious
15 financial condition. Walter's debt has been trading at about 50 percent of its face
16 value and its common stock has fallen to only five percent of its peak value in
17 2011. Alpha also incurred a large debt in a 2011 acquisition of Massey Energy
18 and its common stock is also just five percent of its peak value in 2011. Alpha has
19 announced the closure of its remaining signatory Virginia mines at Dickenson-
20 Russell Coal Company and has stopped development at its large Emerald mine.
21 The next-largest producer, Cliffs Natural Resources, has two UMWA mines, both
22 producing metallurgical coal, and has reported losses at these mines since they
23 were purchased in 2007. Cliffs has recently announced its intention to sell these

1 mines and exit the coal business. Finally, Mechel idled all of the UMWA mines at
2 its Bluestone Coal subsidiary this year. Mechel has also announced its intention to
3 sell its coal mines and its credit rating has fallen to a point where bankruptcy is
4 likely.

5 **Q. Based on these conditions, what do you expect is likely to happen if Energy
6 West continues to operate the Deer Creek mine?**

7 A. It is likely that the cost of operating the Deer Creek mine will increase
8 significantly after 2016 as the contribution rates to the 1974 Pension Trust are
9 increased. Further, there is a significant possibility of a national strike by the
10 UMWA in 2017 in an attempt to spur Congress to provide funding for the Pension
11 Trust. Finally, when the Deer Creek mine is closed after depletion of its coal
12 reserves, Energy West's withdrawal liability is expected to be much higher due to
13 the increased contribution rates under the Funding Improvement Plan.

14 **Q. Is it possible that some events in the future will cause the cost to Energy West
15 to decline?**

16 A. Unforeseen events are always possible. The UMWA is actively lobbying Congress
17 to provide federal funding for the 1974 Pension Trust. This does not appear likely
18 given the budget deficit and is not an event the Company can count on. The value
19 of the Trust's investment assets could increase faster than projected by the
20 actuaries, however, this is unlikely given the current deficit which is depleting the
21 assets.

1 **Q. Why should the Company withdraw now instead of waiting for Congress to**
2 **fund the deficits in the 1974 Pension Trust?**

3 A. It would be very risky for the Company to hope that Congress will bail out the
4 1974 Pension Trust, as any federal action is uncertain. What is certain is that the
5 cost to the Company will continue to rise if it does not withdraw from the Trust.

6 **The Market for Utah Coal and the New Coal Supply**

7 **Contract to Replace Deer Creek**

8 **Q. If the Company does not continue to produce coal at Deer Creek, how will it**
9 **supply its Utah coal-fueled power plants?**

10 A. The Company has the choice of producing its own captive coal or supplying the
11 Utah plants from coal purchased in the commercial market. Thus, the decisions
12 facing the Company are whether to operate or close the Deer Creek mine and, if it
13 is closed, whether to replace the coal on the commercial market under a new long-
14 term contract at the present time or to purchase coal on the short-term market in
15 the future. The factors to consider in these decisions include the expected cost of
16 purchasing coal relative to producing coal, the current and expected future coal
17 market conditions, and the reliability of supply of coal at a quality which can be
18 consumed by the Utah plants.

19 **Q. Please provide an overview of the Utah coal market.**

20 A. The Utah coal market is part of the broader Rockies coal region, which includes
21 coal produced in the states of Utah and Colorado as well as parts of Wyoming,
22 Montana and New Mexico. This region includes coals produced in various coal
23 basins, with some degree of overlapping sales among the coal basins in these

1 states. Utah coal is produced in several different coal fields (including active
2 operations in the Wasatch Plateau, Book Cliffs and Alton coal fields) which
3 compete with each other in the marketplace.

4 **Q. Where is Utah coal sold?**

5 A. The largest market for Utah coal is at power plants and industrial customers
6 located in Utah or nearby states (including Nevada, California and Idaho) where
7 Utah coal has a transportation advantage over other potentially competitive
8 sources of coal. Utah coal used to be sold to Eastern coal markets but those sales
9 have virtually disappeared.

10 **Q. Why have sales to markets in the Eastern U.S. declined?**

11 A. In part, because of lower demand for coal in the Eastern U.S., but also because
12 Utah coal has become less competitive over time with other sources of similar-
13 quality coal (bituminous, low-sulfur) delivered to Eastern customers, such as
14 Rockies coal from the states of Colorado and Montana as well as coal from
15 Appalachia. Sales of Utah coal to Eastern power plants have fallen from 3.8
16 million tons in 2008 to near zero (5,152 tons) in 2013.

17 **Q. What are the other markets for Utah coal mines?**

18 A. The major market for Utah coal is at local power plants and industrial customers.
19 In 2013, sales of Utah coal to power plants in Utah, Nevada and California were
20 13.2 million tons, down from 18.2 million tons in 2008. PacifiCorp purchased 7.3
21 million tons for its Utah plants in 2013. The other major markets are the large
22 Intermountain Power Project (“IPP”) power plant in Utah, the North Valmy and
23 Reid Gardner power plants in Nevada, several cogeneration plants in California,

1 and a number of industrial customers in Utah, Nevada, California, and Idaho. In
2 2013, Utah coal sales to these other power plants were about 5.9 million tons
3 (including 5.2 million to IPA) and sales to industrial consumers were 2.6 million
4 tons. In addition, some Utah coal (about 0.7 million tons in 2013) is exported to
5 overseas markets through ports in California.

6 **Q. What is likely to happen to demand for Utah coal at these other local**
7 **markets?**

8 A. The demand for Utah coal will decline at other local power plants because most of
9 these plants have announced dates when they will close. The Reid Gardner power
10 plant will close units 1-3 at the end of 2014 and the remaining unit at the end of
11 2017. PacifiCorp will close the Carbon power plant in 2015. NV Energy's most
12 recent Integrated Resource Plan, filed in 2013, reflects retirement dates for the
13 North Valmy units in 2021 and 2025.⁶ All of the plants in California have
14 announced they will stop burning coal by the end of 2015. Finally, IPP has
15 announced it will stop burning coal after its contracts with the California
16 participants expire in 2027. At that point, PacifiCorp is likely to be the only
17 consumer of Utah coal in power plants, along with the industrial customers and
18 the export market.

19 **Q. Why has Utah coal become less competitive with other sources of similar**
20 **coal?**

21 A. Principally due to the depletion of coal mines in Utah over time and the increasing
22 costs to mine the remaining coal reserves. Utah coal production grew in the 1970s
23 and 1980s with the development of new mines to supply growing markets at local

⁶ NV Energy Northern Service Territory 2013 Integrated Resource Plan, Volume 11, page 144.

1 power plants, Eastern customers for low-sulfur bituminous coal and exports to
2 Asia. Production from these mines peaked in 1996 at close to 28 million tons per
3 year. Production remained fairly steady over the next decade, but has declined
4 since then as lower-cost coal reserves at the older mines were depleted. As shown
5 on Exhibit No. 15, total Utah coal production has declined significantly over the
6 last 8 years, falling from 26.0 million tons in 2006 to 16.6 million tons in 2013.

7 **Q. What has happened to coal production by mine in the state of Utah?**

8 A. Utah coal production by mine for the years 2006 - 2013 is shown on Exhibit No.
9 15. The Aberdeen, Crandall Canyon and Bear Canyon #3 mines have depleted and
10 closed. The Emery and Horizon mines have been closed for economic reasons.
11 Production has declined at the large Sufco, Dugout Canyon, West Ridge and Deer
12 Creek mines due to depletion of reserves and more difficult mining conditions.
13 Two new mines have been developed to partially replace the decline from existing
14 mines: the Lila Canyon mine and the Coal Hollow mine in southern Utah (which
15 is the only surface mine in Utah).

16 **Q. What is the outlook for Utah coal supply?**

17 A. The supply of Utah coal will continue to decline. Two of the large remaining coal
18 mines, West Ridge and Deer Creek, are facing depletion and closure in the near
19 future. West Ridge is expected to close in 2016. Deer Creek would deplete all of
20 its remaining reserves in 2019, but is being closed earlier. Arch Coal, the former
21 owner of Canyon Fuels (which was sold to Bowie Resources in 2013), reported
22 limited reserve life at both the Dugout Canyon and Skyline mines, although these
23 lives could be extended with new coal leases. While Murray Energy is planning to

1 replace the depleting West Ridge mine with the Lila Canyon mine, the closure of
2 the Deer Creek mine will significantly reduce the supply of Utah coal.

3 **Q. How much coal does PacifiCorp need to supply its Utah power plants?**

4 A. Historically, PacifiCorp has consumed between 7.1 and 8.4 million tons per year
5 of Utah coal at its Hunter, Huntington and Carbon power plants (this includes the
6 coal consumed at the Hunter plant for the share not owned by PacifiCorp). With
7 the closure of the Carbon power plant in 2015, the projected coal requirements for
8 the Hunter and Huntington plants is projected to be about 7.3 million tons per
9 year.

10 **Q. With the closure of the Deer Creek mine, what will be the likely sources of
11 coal to supply the Hunter and Huntington power plants?**

12 A. The Hunter and Huntington plants can only deliver coal by truck and are not
13 located near a railroad. The economics of coal transportation make truck delivery
14 over long distances expensive, and the economic sources of coal for these plants
15 will likely be limited to the five nearby coal mines which can deliver coal by
16 truck within a radius of less than 70 miles. These mines are the Sufco, Skyline
17 and Dugout Canyon mines owned by Bowie Resources, the Castle Valley mine
18 owned by Rhino Energy, and the Lila Canyon mine owned by Murray Energy
19 (which is replacing the depleting West Ridge mine). These mines are likely to
20 produce 13 - 15 million tons per year through 2018, with about half of the coal
21 supplying the PacifiCorp power plants.

22 **Q. What is the outlook for Utah coal supply after 2019?**

23 A. The supply of Utah coal is uncertain after 2019. Based upon the current assigned

1 reserves, the Skyline and Dugout Canyon mines would likely be closed in this
2 time period. While Bowie has announced plans to lease additional coal reserves
3 and maintain production, these plans could change based upon market conditions
4 and the ability to obtain these coal leases. It is possible that Utah coal supply
5 could be significantly smaller in this time period.

6 **Q. What is likely to happen to the market price of Utah coal after the Deer
7 Creek mine is closed?**

8 A. The Deer Creek mine has supplied a large share of the Utah market, producing 15
9 percent - 20 percent of total Utah coal over recent years. The closure of the Deer
10 Creek mine will result in PacifiCorp replacing about 2.6 million tons per year
11 from other Utah coal suppliers (3.2 million tons of production less the reduced
12 demand due to closing the Carbon plant). This is likely to result in an increase in
13 the market price for Utah coal in the near term.

14 **Q. Does your company (EVA) prepare a regular forecast of coal market prices?**

15 A. Yes, EVA has been preparing forecasts of U.S. coal market prices for over 30
16 years. We publish regular forecasts of U.S. coal supply, demand and prices for
17 short-term (3 years) and long-term (25 years) markets. Many participants in the
18 U.S. coal markets subscribe to our price forecasts, including power companies,
19 coal producers, coal transportation companies and investors in the coal industry.
20 We call our coal market forecast reports "COALCAST".

21 **Q. How frequently do you publish your COALCAST forecast of coal market
22 prices?**

23 A. We publish our forecast of long-term coal prices once per year in September. We

1 publish our forecast of short-term market prices quarterly.

2 **Q. Have you provided your forecast of Utah coal market prices to PacifiCorp**
3 **for its use in this analysis?**

4 A. Yes. PacifiCorp has been a subscriber to our coal market price forecasts for a
5 number of years and we provided our latest forecast of Utah coal prices to
6 PacifiCorp in early September. This is the same forecast of market prices which
7 we publish for use by all of our subscribers.

8 **Q. What is your forecast of Utah coal prices?**

9 A. Our forecast of Utah coal prices is for coal with a heat content of 11,800 Btu per
10 pound loaded FOB rail in the area of Price, Utah. The 2014 long-term forecast is
11 shown on Exhibit No. 16. We estimate current market prices to be \$37 - \$38 per
12 ton. We project that these prices will increase to over \$42 per ton by 2016 due to
13 closures of Utah coal mines (Deer Creek and West Ridge). We project that Utah
14 coal prices will continue to rise over time, reaching \$46 per ton by 2020 and
15 reaching \$50 per ton by 2024.

16 **Q. Are these prices delivered to the Hunter and Huntington power plants?**

17 A. No, this is a forecast of market prices in the area of Price, Utah. To determine the
18 projected market price delivered to the Hunter and Huntington power plants, one
19 would need to add an estimate of the transportation costs from these mines to each
20 power plant.

21 **Q. Why do you project that Utah coal prices will continue to increase in the**
22 **future?**

23 A. The reasons for the increase in Utah coal prices in our forecast are mining cost

1 increases due to inflation in factor costs (labor, supplies, etc.) and depletion of
2 reserves requiring more difficult mining conditions.

3 **Q. Has EVA considered the potential impact of new regulations on carbon**
4 **dioxide emissions from existing power plants?**

5 A. The prospect for regulation of carbon dioxide emissions from existing power
6 plants is uncertain. The Environmental Protection Agency (“EPA”) has proposed
7 new regulations called the “Clean Power Plan”, which are scheduled to take effect
8 beginning in 2020. EPA’s public comment period closed on December 1, 2014,
9 and plans to issue final rules in June 2015. Following the final rules, each state
10 will have to prepare a State Implementation Plan (“SIP”) for approval by EPA.
11 The proposed regulations are already subject to litigation challenging EPA’s
12 statutory authority to implement the broad scope of the regulations, which would
13 affect not just emissions from existing power plants, but also the dispatch of these
14 plants, construction of renewable energy power plants and energy efficiency
15 programs. Given the uncertainty, EVA has prepared an alternate case forecast of
16 coal prices which would model the impacts of EPA’s proposed rules on coal
17 markets.

18 **Q. What is the projected impact of the proposed new carbon dioxide regulations**
19 **on EVA’s forecast of Utah coal markets and prices?**

20 A. Because many of the power plants using Utah coal are scheduled to retire by 2020
21 anyway without the new regulations, they are projected to have a modest impact
22 on the market for Utah coal. EVA projects that the principal impact will be the
23 acceleration of the projected retirement of the Intermountain power plant from

1 2027 to 2020. EVA forecasts that this would result in a lower market price for
2 Utah coal during this time period, but that the impacts will disappear by 2026.
3 The comparison between the forecast of Utah coal prices under the No Carbon
4 Case and the Carbon Case is shown on Exhibit No. 17.

5 **Q. In your opinion, is it prudent for PacifiCorp to enter into a long-term**
6 **contract for Utah coal to replace the supply from the Deer Creek mine prior**
7 **to closing the mine?**

8 A. Yes. The closure of mines in Utah, including the Deer Creek mine (whether
9 closed now or in 2019), will reduce the supply of coal in the Utah market and is
10 likely to result in higher coal market prices. If PacifiCorp were to wait to purchase
11 replacement coal until after closing the mine, it is likely that the Company would
12 pay higher prices for coal at that time.

13 **Q. As you are projecting there will be ample supply of Utah coal due to other**
14 **demand declining, why is it important for PacifiCorp to have a significant**
15 **portion of its coal purchased under long-term contract rather than just**
16 **purchase the coal on the market under short-term purchases?**

17 A. After the closure of the Deer Creek mine, there will be only three producers of
18 Utah coal: Bowie Resources, Murray Energy and Rhino Energy. Without the
19 Deer Creek mine, PacifiCorp would not be able to supply its coal demand without
20 purchasing large volumes from Bowie. This would give Bowie the ability to price
21 discriminate and charge PacifiCorp a higher price than the prevailing market price
22 for Utah coal to other customers. By committing all of its coal requirements at the
23 Huntington plant under a new long-term contract with Bowie at fixed prices,

1 PacifiCorp will continue to have competition among the remaining Utah coal
2 producers to supply the Hunter plant, preventing Bowie from being able to
3 exercise market power and charge higher prices.

4 **Q. What will be the impact of closing the Deer Creek mine on the coal price for
5 the Hunter plant after its existing long-term contract expires after 2019?**

6 A. The Deer Creek mine was scheduled to deplete and close by 2019 in any event.
7 Thus, closing the mine earlier will not affect the market price for the Hunter plant
8 after 2019.

9 **Q. Have you reviewed the Huntington CSA between PacifiCorp and Bowie
10 Resource Partners for the purchase of coal for the Huntington power plant?**

11 A. Yes.

12 **Q. Please summarize the principal terms of the new coal supply contract.**

13 A. The new coal supply contract with Bowie is to supply the coal requirements of the
14 Huntington power plant, with a minimum of [REDACTED] tons per year and a
15 maximum of [REDACTED] tons per year. The term of the contract is for 15 years from
16 2015 through 2029. The coal prices are fixed for every year of the contract, with
17 the price for the first [REDACTED] tons per year starting at \$ [REDACTED] per ton delivered to
18 Huntington in 2015, increasing in fixed amounts to reach \$ [REDACTED] per ton in the
19 last year of the contract. The price for all coal in any year in excess of [REDACTED]
20 tons is discounted at a price of \$ [REDACTED] per ton below the price for the first [REDACTED]
21 tons. The source of coal can be from Bowie's mines as well as from third-party
22 sources. The average coal quality specifications are [REDACTED]

23 [REDACTED]

1 **Q. How does the new Bowie contract price compare to your forecast of Utah**
2 **market prices?**

3 A. I have evaluated the new Bowie contract price and compared it to our forecast of
4 Utah coal market prices on a delivered basis to the Huntington power plant at the
5 same [REDACTED] per pound heat content. To adjust EVA's market price forecast to
6 an equivalent basis, I have added the typical transportation cost from the Savage
7 Coal Terminal to the Huntington power plant, which is estimated to be about
8 \$[REDACTED] per ton in 2014, escalating through 2029. I adjusted the market price
9 forecast on a delivered basis to equal the same heat content of [REDACTED] per
10 pound. I did not make a further adjustment for the fact that the Bowie contract is
11 for lower-sulfur coal [REDACTED] than EVA's forecast (1.0 percent sulfur).
12 For the Bowie contract, I used the delivered price stated in the contract, with the
13 contract volumes and transportation cost adjustment as projected by the Company.

14 **Q. What was the result of your analysis?**

15 A. The projected delivered market price compared to the fixed prices under the
16 Bowie contract are shown on Exhibit No. 18. The 2015 delivered price of the
17 Bowie contract starts at \$[REDACTED] per ton, which is very similar to our forecast of
18 delivered coal prices. EVA's projection of Utah coal prices is that they will
19 escalate at a much faster rate than the very low price escalation rate fixed in the
20 Bowie contract ([REDACTED] annual escalation rate through 2029 plus truck
21 transportation adjustments). As a result, we project that the new Bowie contract
22 price will be significantly below the market price over the term of the contract.

1 **Q. Based upon your review, do you believe it was prudent for the Company to**
2 **enter into the new long-term coal contract with Bowie?**

3 A. Yes.

4 **Q. Why?**

5 A. The new contract provides a secure supply of local Utah coal which will meet the
6 full requirements of the Huntington power plant and replace the coal which would
7 have been supplied by the Deer Creek mine. The initial delivered price is at the
8 current market price for similar coal and the price escalation terms over the life of
9 the contract are very favorable to PacifiCorp and well below our forecast of future
10 coal market prices. The coal quality is attractive, as it is very low sulfur, which
11 will reduce plant operating costs. PacifiCorp has included provisions in the Bowie
12 contract which would protect it against being obligated to continue to purchase
13 coal in the event that new government laws, rules or regulations affected the
14 ability to consume at least [REDACTED] tons per year of coal at the Huntington power
15 plant.

16 **Q. Does this conclude your direct testimony?**

17 A. Yes, it does.

Case No. PAC-E-14-10
Exhibit No. 8
Witness: Seth Schwartz

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

ROCKY MOUNTAIN POWER

Exhibit Accompanying Direct Testimony of Seth Schwartz

Resume of Seth Schwartz

December 2014

RESUME OF SETH SCHWARTZ

EDUCATIONAL BACKGROUND

B.S.E. Geological Engineering, Princeton University, 1977

PROFESSIONAL EXPERIENCE

Current Position

Seth Schwartz is the President and co-founder of Energy Ventures Analysis. Mr. Schwartz directs EVA's coal and power practice and manages the COALCAST Report Service. The types of projects in which he is involved are described below:

Fuel Procurement

Assists utilities, industries and independent power producers in developing fuel procurement strategies, analyzing coal and gas markets, and in negotiating long-term fuel contracts.

Fuel Procurement Audits

Audits utility fuel procurement practices, system dispatch, and off-system sales on behalf of all three sides of the regulatory triangle, i.e., public utility commissions, rate case intervenors, and utility management.

Coal Analyses

Directs EVA analyses of coal supply and demand, including studies of utility, industrial, export, and metallurgical markets and evaluations of coal production, productivity and mining costs.

Natural Gas Analyses

Evaluates natural gas markets, especially in the utility and industrial sectors, and analyzes gas supply and transportation by pipeline companies.

Expert Testimony

Testifies in fuel contract disputes and rate cases, including arbitration, litigation and regulatory proceedings, regarding prevailing market prices, industry practice in the use of contract terms and conditions, market conditions surrounding the initial contracts, and damages resulting from contract breach.

Acquisitions and Divestitures

Assists companies in acquisitions and sales of reserves and producing properties, both in consulting and brokering activities. Prepares independent assessments of property values for financing institutions.

Prior Experience

Before founding Energy Ventures Analysis, Mr. Schwartz was a Project Manager at Energy and Environmental Analysis, Inc. Mr. Schwartz directed several sizable quick-response support contracts for the Department of Energy and the Environmental Protection Agency. These included environmental and financial analyses for DOE's Coal Loan Guarantee Program, analyses of air pollution control costs for electric utilities for EPA's Office of Environmental Engineering and Technology, Energy Processes Division, and technical and economic analysis of coal production and consumptions for DOE's Advanced Environmental Control Technology Program.

Publications

Crerar, D.A., Susak, N.J., Borcsik, M., and Schwartz, S., "Solubility of the Buffer Assemblage Pyrite + Pyrrhotite + Magnetite in NaCl Solutions from 200° to 350°", Geochimica et Cosmochimica Acta (42)1427-1437, 1978.

Case No. PAC-E-14-10
Exhibit No. 9
Witness: Seth Schwartz

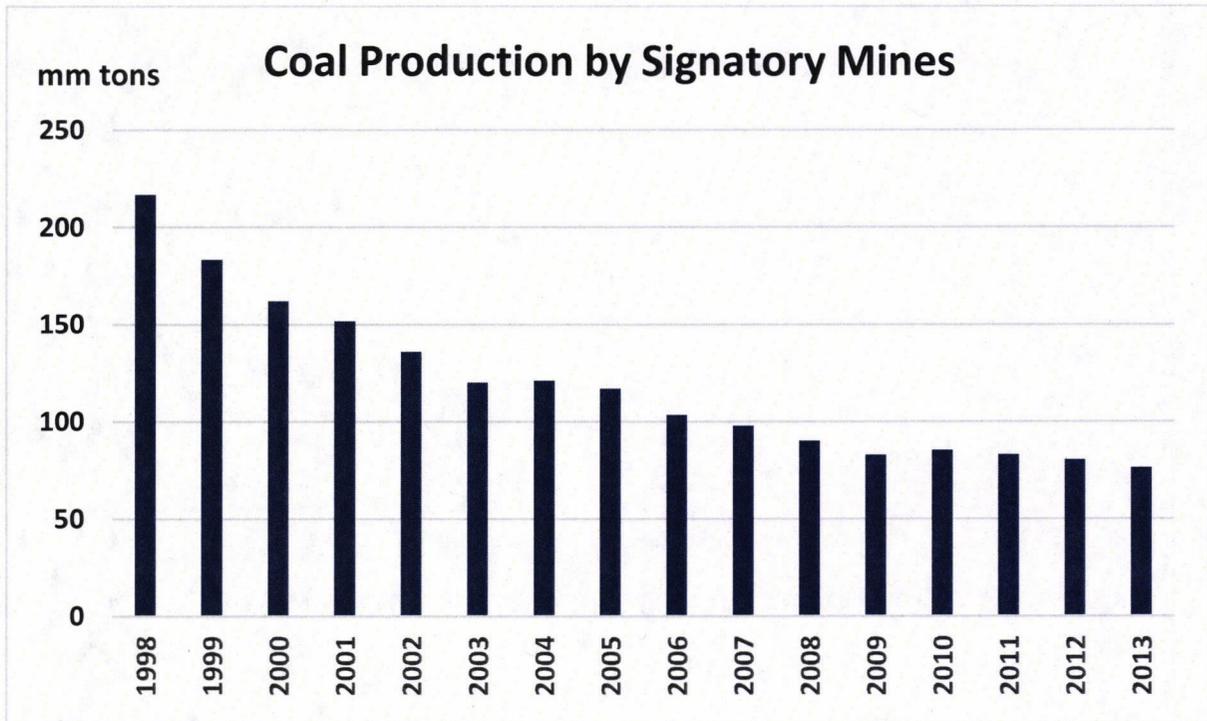
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

ROCKY MOUNTAIN POWER

Exhibit Accompanying Direct Testimony of Seth Schwartz

Coal Production by Signatory Mines

December 2014



Source: U.S. Energy Information Administration Form EIA-7A and Mine Safety and Health Administration Form 7000-2, analyzed by EVA.

Case No. PAC-E-14-10
Exhibit No. 10
Witness: Seth Schwartz

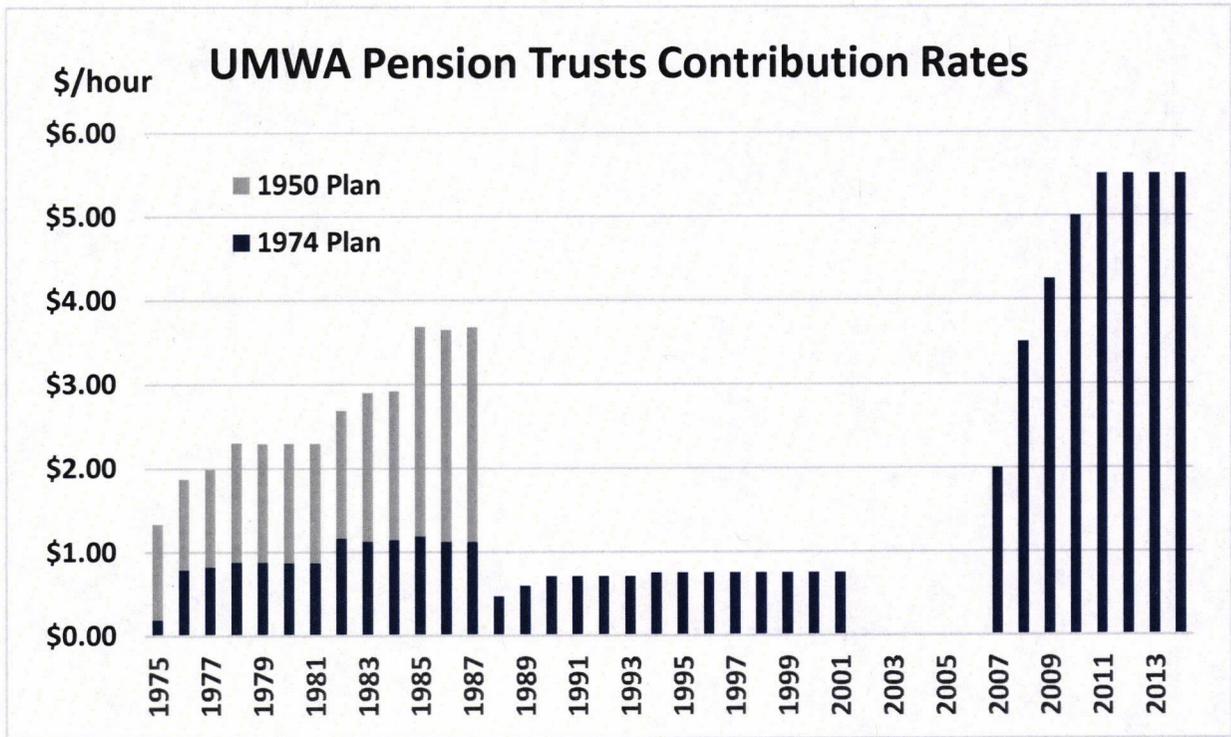
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UMWA Pension Trusts Unfunded Vested benefits

December 2014



Source: National Bituminous Coal Wage Agreements: 1974 - 2012

Case No. PAC-E-14-10
Exhibit No. 11
Witness: Seth Schwartz

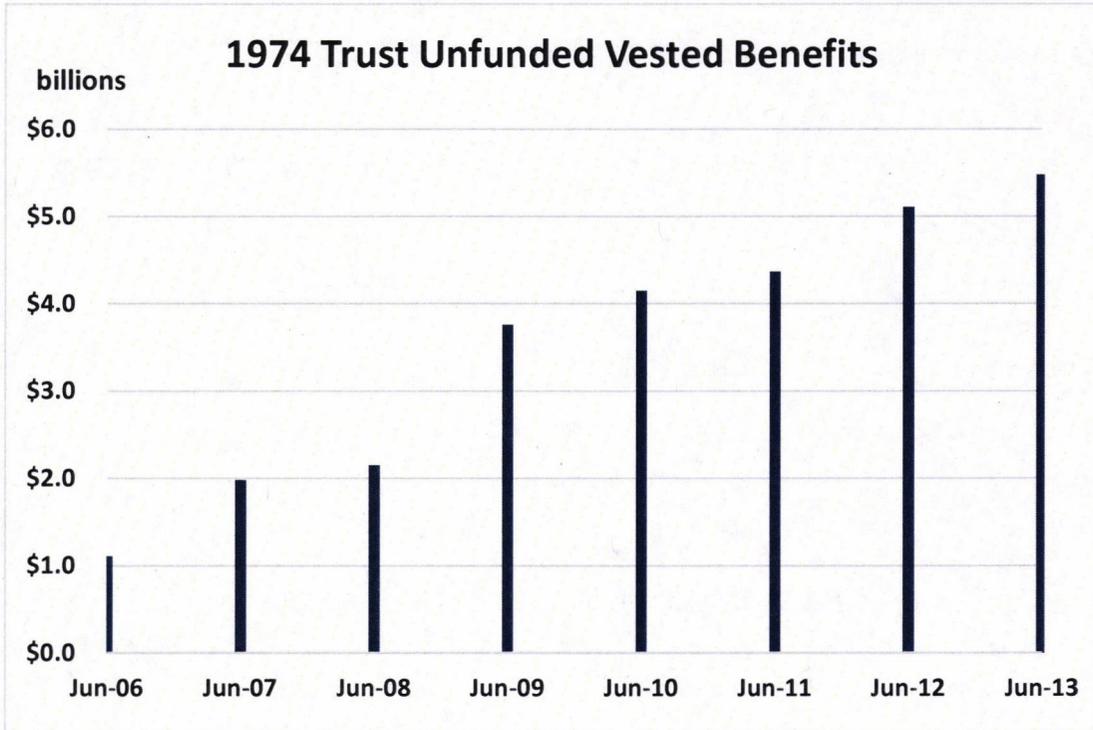
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

ROCKY MOUNTAIN POWER

Exhibit Accompanying Direct Testimony of Seth Schwartz

1974 Trust Unfunded Vested Benefits

December 2014



Source: Mercer, Actuarial Valuation Reports of the UMWA 1974 Pension Plan

Case No. PAC-E-14-10
Exhibit No. 12
Witness: Seth Schwartz

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

ROCKY MOUNTAIN POWER

Exhibit Accompanying Direct Testimony of Seth Schwartz

2013 Signatory Coal Production

December 2014

2013 Signatory Coal Production

Parent Company	1000 Tons
Consol Energy	29,174
Patriot Coal	11,749
Alpha Natural Resources	9,721
Walter Energy	9,468
Murray Energy	5,550
Cliffs	4,684
Pacificorp	2,810
Mechel Bluestone	1,829
Drummond	<u>1,329</u>
	76,315

Case No. PAC-E-14-10
Exhibit No. 13
Witness: Seth Schwartz

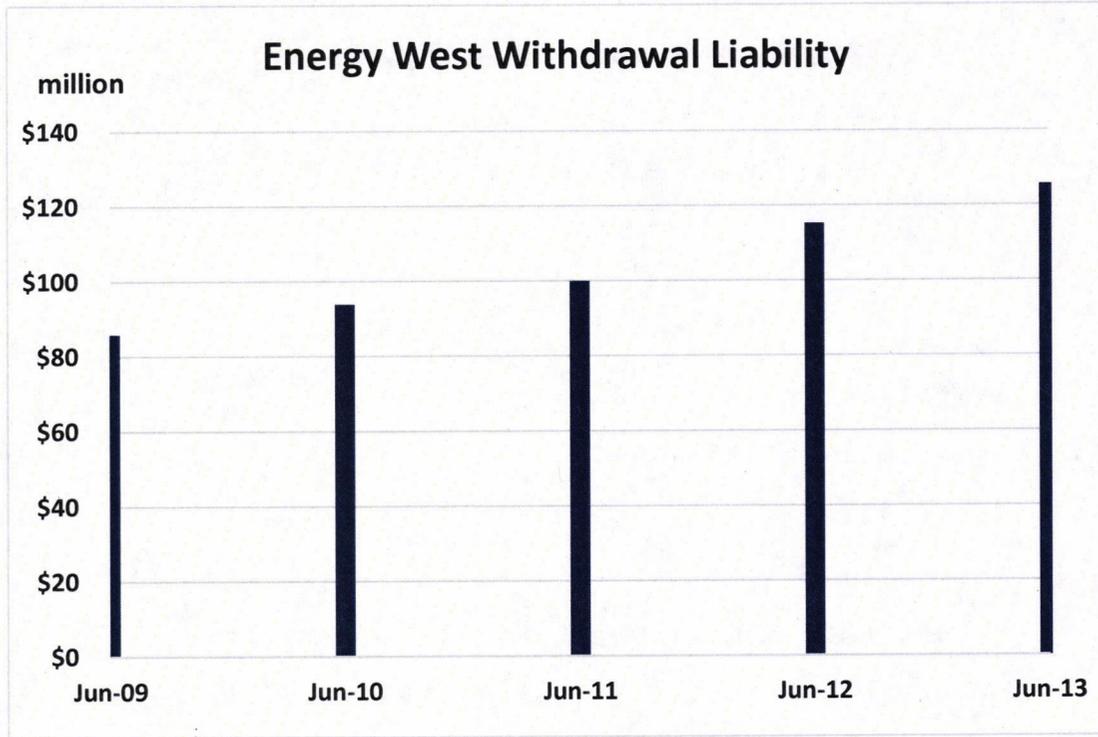
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

ROCKY MOUNTAIN POWER

Exhibit Accompanying Direct Testimony of Seth Schwartz

Energy West Withdrawal Liability

December 2014



Source: Letters to Energy West from the UMWA Health and Retirement Funds: 2010 – 2014

Case No. PAC-E-14-10
Exhibit No. 14
Witness: Seth Schwartz

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

ROCKY MOUNTAIN POWER

Exhibit Accompanying Direct Testimony of Seth Schwartz

Utah Coal Production by Mine

December 2014

Utah Coal Production by Mine (1000 tons)

Company	Mine	Type	2006	2007	2008	2009	2010	2011	2012	2013
Alton Coal	Coal Hollow	S	-	-	-	-	-	403	570	741
America West	Horizon	U	256	233	229	194	272	370	210	-
Bowie/Canyon Fuel	Dugout Canyon	U	4,387	3,826	4,145	3,291	2,461	2,395	1,516	561
Bowie/Canyon Fuel	Skyline	U	1,647	2,533	3,120	2,718	2,805	2,948	1,894	2,729
Bowie/Canyon Fuel	Sufco	U	7,908	6,712	6,946	6,748	6,398	6,498	5,650	5,960
Consol Energy	Emery Mine	U	1,054	1,026	1,050	1,238	999	-	-	4
Hiawatha Coal	Bear Canyon #3	U	27	-	-	-	-	-	-	-
Murray Energy	Crandall Canyon	U	605	402	-	-	-	-	-	-
Murray Energy	So Crandall Canyon	U	759	-	-	-	-	-	-	-
Murray Energy	Lila Canyon	U	-	-	-	-	72	156	304	257
Murray Energy	Aberdeen	U	2,089	1,045	242	-	-	-	-	-
Murray Energy	Pinnacle	U	8	-	-	-	-	-	-	-
Murray Energy	West Ridge	U	3,022	4,255	3,809	3,063	3,326	3,566	2,409	2,629
Pacificorp	Deer Creek	U	3,748	3,685	3,878	3,833	2,954	3,143	3,295	2,810
Rhino Energy	Castle Valley #4	U	509	588	946	633	-	572	997	876
			26,018	24,307	24,365	21,718	19,288	20,051	16,847	16,568

Source: Mine Safety and Health Administration Form 7000-2 data, 2006 - 2013

Case No. PAC-E-14-10
Exhibit No. 15
Witness: Seth Schwartz

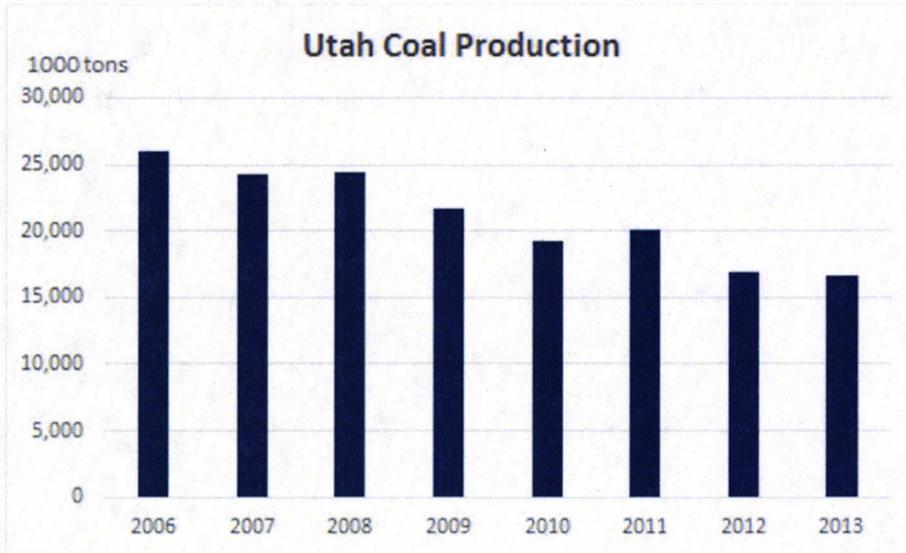
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

ROCKY MOUNTAIN POWER

Exhibit Accompanying Direct Testimony of Seth Schwartz

Utah Coal Production

December 2014



Source: Mine Safety and Health Administration Form 7000-2 data, 2006 - 2013

Case No. PAC-E-14-10
Exhibit No. 16
Witness: Seth Schwartz

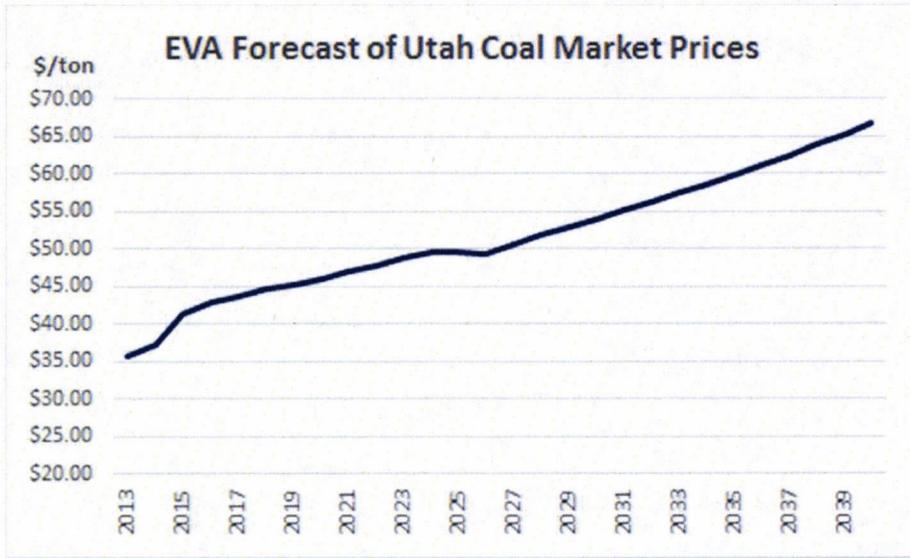
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

ROCKY MOUNTAIN POWER

Exhibit Accompanying Direct Testimony of Seth Schwartz

VA Forecast of Utah Coal Market Prices

December 2014



Source: Energy Ventures Analysis, COALCAST Long-Term Forecast Report, October 2014

Case No. PAC-E-14-10
Exhibit No. 17
Witness: Seth Schwartz

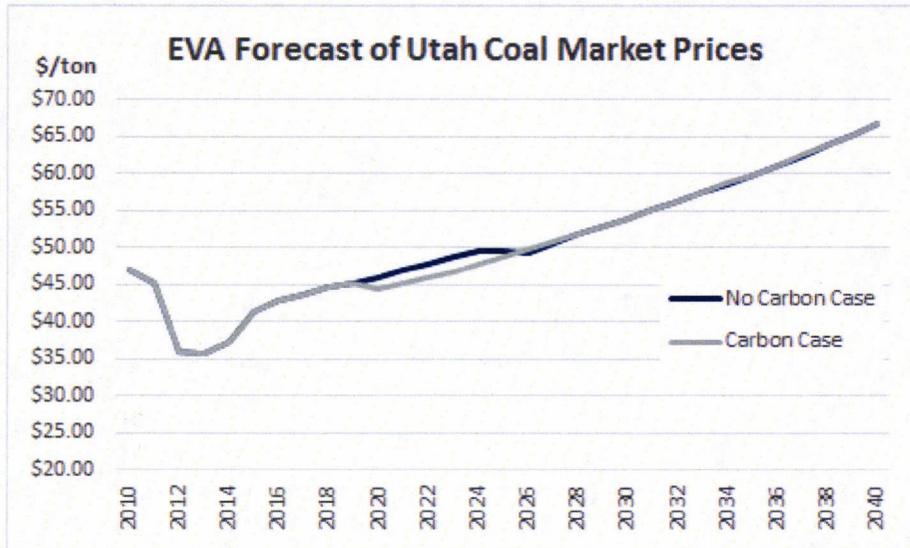
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

ROCKY MOUNTAIN POWER

Exhibit Accompanying Direct Testimony of Seth Schwartz

EVA Forecast of Utah Coal Market Prices (No Carbon)

December 2014



Source: Energy Ventures Analysis, COALCAST Long-Term Forecast Report, October 2014

Case No. PAC-E-14-10
Exhibit No. 18
Witness: Seth Schwartz

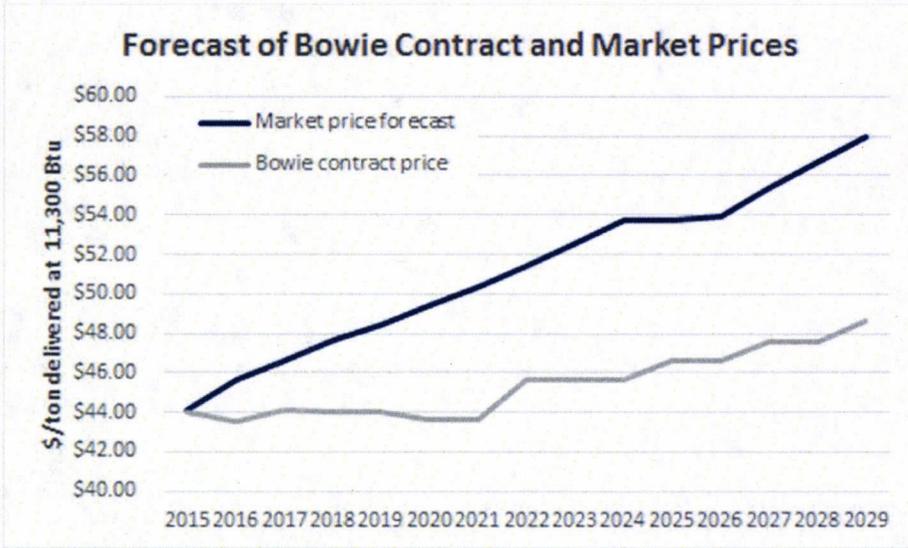
BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

ROCKY MOUNTAIN POWER

Exhibit Accompanying Direct Testimony of Seth Schwartz

Forecast of Bowie Contract and Market Prices

December 2014



Source: EVA analysis of Utah market prices delivered to Huntington and the Bowie contract