

**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF
COLORADO**

Docket No. 11A-325E

IN THE MATTER OF THE APPLICATION OF PUBLIC SERVICE COMPANY OF
COLORADO FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND
NECESSITY FOR THE PAWNEE EMISSIONS CONTROL PROJECT

**NOTICE OF CHANGES IN THE COAL INDUSTRY
AND
IMPLICATIONS FOR THE PAWNEE EMISSIONS CONTROL PROJECT**

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I. INTRODUCTION

This Notice of Changes in the Coal Industry and Implications for the Pawnee Emissions Control Project, (hereafter “Notice of Changes”) is being filed to notify the Commission and other parties of significant changes in the coal industry that have occurred in recent months and which suggest that the prudent path is to reconsider making a \$250 million investment in pollution controls for the Pawnee coal plant.

This “Notice of Changes” is being filed after Xcel filed a “Semi-Annual Progress Report” on the Pawnee Emissions Control Project that was **not** filed at the request of the Commission. If Xcel chooses to withdraw its Semi-Annual Progress Report, then Ms. Glustrom will withdraw this Notice of Changes.

The following information is provided for consideration by Xcel, the Commission, and other interested parties:

II. BACKGROUND

This docket is related to the Application of Public Service Company of Colorado (“PSCo” or “Xcel” or the “Company”) for a Certificate of Public Convenience and Necessity (“CPCN”) for the Pawnee Emissions Control Project. “Pawnee” is a 505 MW coal plant located northeast of Denver in Brush, Colorado. It was built in 1981.

Hearings in this docket were held in October 2011. Statements of Position were due on October 28, 2011 and the Recommended Decision of the Administrative Law Judge, R11-1257, was mailed on November 22, 2011. The Commission’s decision granting the CPCN for the Pawnee Emission Control Docket, Decision C12-0159 was issued on February 14, 2012. The Commission decision denying Applications for Reargument,

Reconsideration and Rehearing (“RRR”), Decision C12-0345, was issued on April 3, 2012.

On September 20, 2012, Public Service Company of Colorado (“PSCo” or “Xcel” or the “Company”) submitted a “Semi-Annual Progress Report (Corrected)—Pawnee Emissions Control Project” through the Colorado Public Utilities Commission (“PUC” or “Commission”) “E-Filing” system.¹ This report was **not** provided at the request of the Commission and was submitted about 11 months after the record in this docket was closed in October 2011.

Xcel’s Semi-Annual Progress Report provided the following statement regarding the filing of the Report:

An issue of project status reporting arose in the various CPCN proceedings of whether the Company would be willing to provide reports to the Commission and interested parties updating them of the Company’s progress towards the completion of these projects. We indicated our willingness to do so and specified the information that we intended to report. Although the Commission has declined to require us to provide these reports, **we believe that these reports provide useful information and that by providing this information now, we may lessen concern in subsequent rate cases regarding the costs of these projects.** (Xcel Semi-Annual Progress Report (Corrected) Pawnee Emission Control Project, September 20, 2012, page 1. Emphasis added.)

As noted by Xcel, the Commission did not ask for these semi-annual progress reports for the Pawnee Emission Control docket, but Xcel believes that filing these

¹ An earlier version of the Semi-Annual Progress report was filed on August 14, 2012, but apparently another party (who was not identified) contacted Xcel and objected to the way the report was presented. The Corrected version was subsequently filed on September 20, 2012. The Notice filed on September 20, 2012 described the situation as follows:

Public Service Company of Colorado filed its Semi-Annual Progress Report in this and other Clean Air Clean Jobs Act implementation proceedings on August 14, 2012. In response to these filings, a party contacted us informally and expressed the view that certain of our characterizations in the report of the Commission’s actions in these proceedings were in its view inaccurate. We agreed we would file corrected versions of our reports to address its concerns.

reports “may lessen concern in subsequent rate cases regarding the costs of these projects.” In short, it appears that Xcel may be trying to “pave the way” for future cost recovery by filing these unrequested semi-annual progress reports after the close of the record in this docket.²

Importantly, as discussed below, there are very significant changes occurring in the U.S. coal industry. As the entity managing the Pawnee Emission Control Project, Xcel should be monitoring these changes in the coal industry and taking a hard look at whether spending approximately \$250 million on pollution controls for the Pawnee coal plant with the intent to keep it operating until 2041 is a prudent action given what is now known about the U.S. coal industry and the cost of producing coal and the implications of these changes for ratepayers (and shareholders) who could be held responsible for paying for the Pawnee Emissions Control Project and/or for future fuel costs for the Pawnee coal plant.

III. RECENT CHANGES IN THE COAL INDUSTRY

Many changes have occurred in the U.S. coal industry since the Commission issued its decision on Applications for Rehearing, Reargument and Reconsideration, C12-0345 on April 3, 2012. These changes call into serious question whether Xcel will be able to acquire a reasonably priced supply of coal for the Pawnee coal plant until the expected retirement date of 2041.

² In C12-0345, the Commission noted that when Xcel comes to the Commission for cost recovery, Xcel “will enter into that proceeding with a general presumption of prudence regarding its expenditures.” (C12-0345, ¶ 11, page 3)

In short, given information that Xcel either knows or should know at this point, it is increasingly clear that attempting to keep the Pawnee coal plant operating until 2041 is not likely to be a prudent course of action. These recent changes in the US coal industry (including rising production costs, declining margins, serious financial distress and bankruptcy for a top coal producer) are summarized below.

A. Patriot Coal Filed for Bankruptcy on July 9, 2012

Patriot Coal, one of the largest thermal coal companies in the eastern United States, was formed from the spin-off of coal assets and operations of Peabody Energy in West Virginia and Kentucky.³ The Articles of Incorporation for Patriot Coal were signed on May 10, 2007.⁴ While Patriot Coal's stock (ticker symbol PCQCX) traded for over \$80 a share in June 2008,⁵ a variety of debt and other financial problems, including the inability to refinance debt due in 2013, led to the serious erosion of stock value for Patriot Coal and Patriot's filing for bankruptcy on July 9, 2012.

In early October 2012, Patriot's stock price is valued at less than 20 cents/share, Standard and Poors gives Patriot Coal a corporate rating of D, it is uncertain whether the company will come out of bankruptcy or whether it will be liquidated,⁶ it is the subject of

³ For Peabody's announcement of the completion of the spin-off of West Virginia and Kentucky coal assets and operations to form Patriot Coal, see <http://www.prnewswire.com/news-releases/peabody-energy-completes-spin-off-of-patriot-coal-corporation-58523057.html>

⁴ For the date of the filing of Articles of Incorporation for Patriot Coal Company see <http://phx.corporate-ir.net/phoenix.zhtml?c=216060&p=irol-govhighlights>

⁵ For Patriot Coal stock trading over \$80/share in June 2008, see for example <http://www.reuters.com/finance/stocks/chart?symbol=PCXCQ.PK>

⁶ For a discussion of the Patriot Coal bankruptcy, including the corporate rating of D, see <http://www.reuters.com/article/2012/08/16/idUSWNA364920120816?type=companyNews>

class action lawsuits alleging violations of various securities laws,⁷ and the retirement and health care benefits of former employees are uncertain.⁸

Below is a five year view of Patriot's stock price showing the almost total loss of value in Patriot Coal stock as of October 2012.

Patriot Coal Stock Price October 2007-October 2012

<http://www.reuters.com/finance/stocks/chart?symbol=PCXCQ.PK>



B. Alpha Natural Resources—a Key Supplier to the Pawnee Coal Plant—Also Has Serious Financial Problems

Alpha Natural Resources—one of the top three US coal companies—owns the Eagle Butte mine in Wyoming which has historically been a primary supplier of coal to Xcel's Pawnee coal plant in Brush. Alpha Natural Resources also owns the Belle Ayr mine in Wyoming that has historically been a primary supplier of coal to Xcel's Comanche coal plants in Pueblo. The Eagle Butte and Belle Ayr mines have changed

⁷ For a summary of class action lawsuits see <http://www.reuters.com/finance/stocks/PCXCQ.PK/key-developments>

⁸ For the concern about retirement and health benefits of former Peabody/Patriot Coal employees, see <http://www.courierpress.com/news/2012/aug/28/patriot-herp/>

hands three times in the last decade—driven in part by rising production costs and falling profits. In 2004, the German RAG group sold these two mines to Foundation Coal. In 2009, Foundation Coal sold the mines to their current owner, Alpha Natural Resources.⁹

Coal contracts and prices for the Pawnee coal plant are shown in Attachment 1. Coal costs are in Column T in cents/MMBTU. From Attachment 1, it can be seen that while Xcel is purchasing some coal for the Pawnee coal plant from the Buckskin Mine in Wyoming, most of the coal for Pawnee is coming from the Eagle Butte mine owned by Alpha Coal (a subsidiary of Alpha Natural Resources).

While Xcel is able to obtain coal from other mines in the Powder River Basin, the issues that are affecting Alpha Natural Resources—one of the largest US coal mining companies¹⁰--are also affecting many US coal companies. As with Patriot coal, the coal is becoming more difficult to access, production costs are rising, margins are thinning, equipment is aging, debt is looming and stock prices are falling—and falling dramatically.

As US coal becomes more difficult to access, the cost of producing a ton of coal increases and this typically erodes profit margins and in a growing number of cases leads to negative margins—or losses for every ton of coal produced.

⁹ For the history of the ownership of the Eagle Butte and Belle Ayr mines, see the Answer Testimony of Leslie Glustrom in the 11A-869E 2011 Xcel Resource Plan docket and the Exhibits accompanying that testimony.

¹⁰ Here is how Alpha Natural Resources described itself in a recent press release:¹⁰

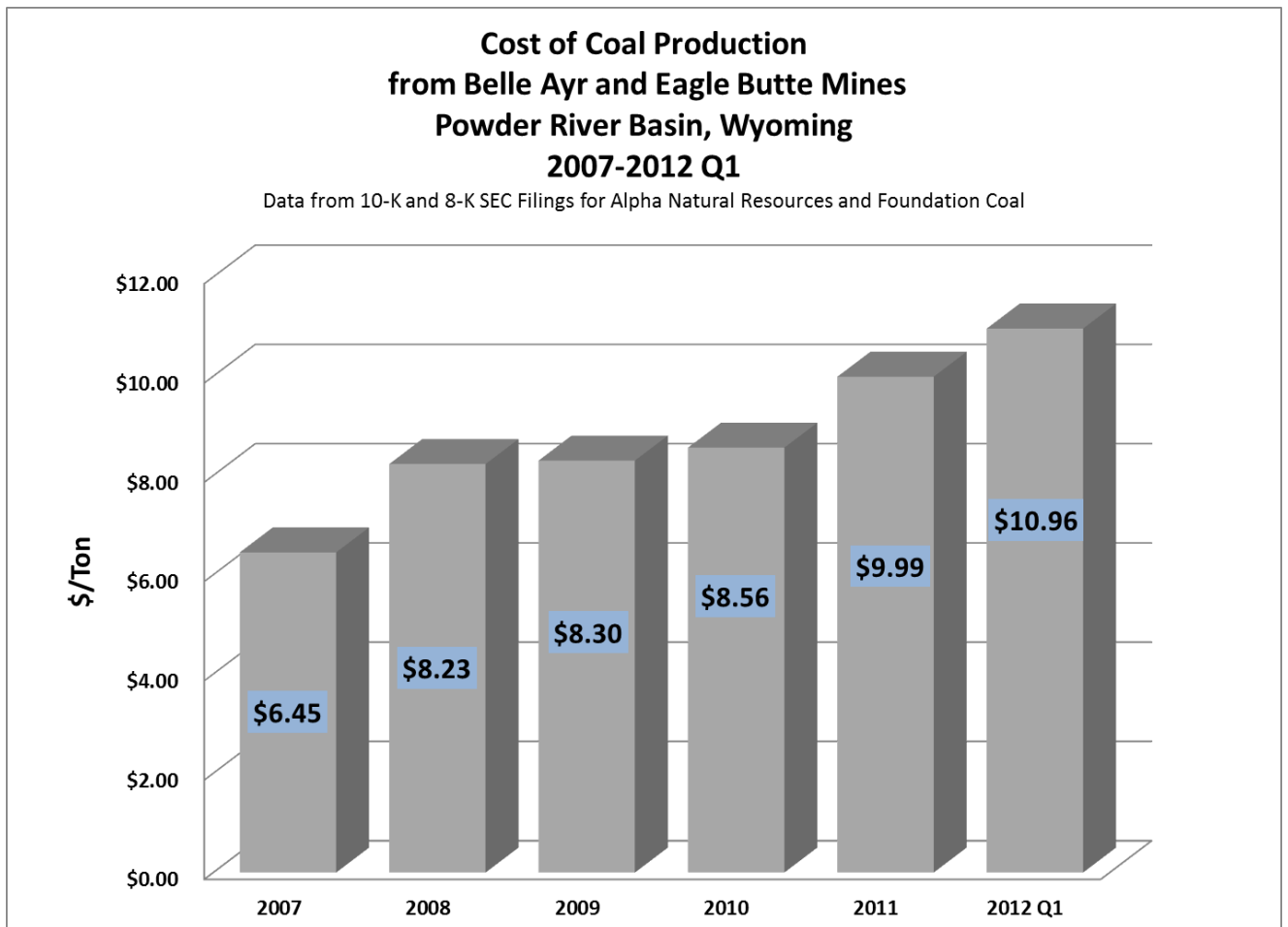
About Alpha Natural Resources

With \$7.1 billion in total revenue in 2011, Alpha Natural Resources ranks as America's second-largest coal producer by revenue and third-largest by production. Alpha is the nation's largest supplier of metallurgical coal used in the steel-making process and is a major supplier of thermal coal to electric utilities and manufacturing industries.

The description of Alpha Natural Resources is found in the Strategic Repositioning Statement of September 2012 found at <http://aln.client.shareholder.com/releasedetail.cfm?ReleaseID=707455>.

For the Eagle Butte and Belle Ayr mines in Wyoming, owned by Alpha Natural since mid-2009, the cost to mine a ton of coal has been rising steadily from \$6.45 per ton to \$10.96 in 2012 Quarter 1 as shown in the bar graph below.¹¹ These rising production costs lead to both a higher cost of coal for Xcel’s plants and declining margins for Alpha Natural Coal, as discussed below.

Cost of Production for Key Powder River Basin Mines Supplying Xcel’s Pawnee and Comanche Plants



¹¹ Production cost for coal from the Belle Ayr and Eagle Butte mines can be tracked in the quarterly and annual filings of Foundation Coal and Alpha Natural Resources found at <http://aln.client.shareholder.com/index.cfm> For more details, see the Answer Testimony of Leslie Glustrom in the 11A-869E and the accompanying exhibits.

As production costs rise, sales price must also rise or the coal company’s profits will be eroded or eliminated. In the case of the Pawnee coal plant, the cost of coal has risen significantly between 2007 and 2011 as shown below. Cost of coal for the first seven months of 2012 are shown in Attachment LWG-1 (in Column T in cents/MMBTU) and are generally in the range of \$1.30-\$1.40/MMBTU—another significant increase.

The trend in rising production costs for coal is likely to keep driving coal costs up for the Pawnee coal plant. Currently, Xcel does not have any incentive to worry about these rising coal costs because they pass fuel costs through to customers under the Electric Commodity Adjustment (“ECA”), but ratepayers cannot be expected to continue to pay the cost of coal—no matter how high it gets from now until 2041—the planned retirement date for the Pawnee coal plant.

**Cost of Coal for Xcel’s Pawnee Coal Plant in Brush Colorado
2007 and 2011**

Pawnee Coal Plant	Cost of Coal
2007	\$1.02/MMBTU ¹²
2011	\$1.20/MMBTU ¹³

As the cost of producing a ton of coal has increased in recent years, Alpha Natural’s profit margins have been generally declining and in the last 18 months, the profit margin on mining eastern coal has become negative—that means Alpha Natural has been losing money on coal it mines in the eastern US.

¹² Cost of coal for the Pawnee coal plant in 2007 provided in response to Discovery Request LWG 3-7 in Docket 07A-447E. This response is attached to the Answer Testimony of Leslie Glustrom in that docket.

¹³ Cost of coal for the Pawnee coal plant in 2011 provided by Xcel in response to Discovery Request LWG 1-6 in the 11A-869E docket.

Production cost and sales price for eastern and western coal for Alpha Natural were reported in Alpha Natural’s 2012 Quarter 2 report¹⁴ as follows:

**Production Cost and Sales Price for Alpha Natural Resources
Eastern and Western Coal
First Half of 2012**

Alpha Natural Resources First Half of 2012	Eastern Coal	Western Coal
Coal Production Cost¹⁵	\$77.01/ton	\$10.99/ton
Coal Sales Price¹⁶	\$66.29/ton	\$12.96/ton
Profit Margin Per Ton of Coal¹⁷	-\$10.72/ton	\$1.97/ton

As can be seen above, the cost to produce a ton of eastern coal has been higher than the price the coal can be sold for, meaning Alpha Natural Resources has been losing money on each ton of eastern coal it has mined. The same was true for 2011—with it costing more to mine a ton of eastern coal than Alpha Natural could sell it for.¹⁸ No for-profit company can be expected to continue to mine coal at a loss for very long.

In the case of western coal produced by Alpha Natural Resources , the 2012 first half profit margin of less than \$2/ton (highlighted in yellow) is not very large. In 2010,

¹⁴ Alpha Natural’s annual and quarterly financial reports are available from the ANR website at the following link <http://alnr.client.shareholder.com/index.cfm>

¹⁵ 2012 first half production cost for Alpha Natural Resources is reported on page 50 of the 2012 Q2 financial report found at <http://alnr.client.shareholder.com/index.cfm>.

¹⁶ 2012 first half sales price for Alpha Natural Resources is reported on page 51 of the 2012 Q2 financial report found at <http://alnr.client.shareholder.com/index.cfm> .

¹⁷ The profit margin is the sales price minus the production cost. In the case of eastern coal, the profit margin is negative, meaning Alpha Natural loses money on each ton mined.

¹⁸ For 2011 ANR cost of eastern coal production (\$80.09/ton) see page 69 in the ANR 2011 Annual Report. For the 2011 ANR sales price for eastern coal (\$66.92) see page 67 in the ANR 2011 Annual Report available at <http://alnr.client.shareholder.com/index.cfm> .

Alpha Natural's profit margin on western coal was over \$2/ton with a sales price of \$10.95/ton and a production cost of \$8.56/ton.¹⁹ Alpha Natural's production cost for western coal between 2010 and the first half of 2012 has gone up more than the sales price and Alpha Natural's already slim margins on producing a ton of western coal have been narrowed.

As will be discussed below, the margins on the Black Thunder coal mine—the largest US coal mine—are currently approximately \$1/ton—a very thin profit margin on mining a ton of coal. Again—if coal can't be mined at a profit, it is unlikely that for-profit companies will continue to mine significant amounts.

The declining and disappearing profit margins for coal mining companies has very serious implications for Xcel's investment in the emission control systems for the Pawnee coal plant. It would **not** be wise (i.e. prudent) to make \$250 million in investment in the Pawnee emission controls only to find that the suppliers of coal have such thin or negative margins that they have decided to shut production of the coal mines (or attempt to significantly increase coal prices)—as has been happening regularly for eastern coal.

It can be seen right now from reviewing the financial statements of the coal companies that providing reasonably-priced coal to the Pawnee coal plant until the expected retirement date of 2041 could easily become problematic.

Declining and disappearing profit margins are the fundamental issues that are and will very likely be affecting the coal industry—and coal price and availability for Xcel—in the coming years and decades.

The writing is on the wall—and it is in red....

¹⁹ For 2010 ANR sales price for western coal, see page 64 of the 2010 Annual 10-K report. For the 2010 ANR production cost for western coal, see page 65 of the 2010 Annual 10-K report for ANR. The report from the ANR website was not downloading, so the 2010 ANR Annual Report was downloaded from <http://files.shareholder.com/downloads/ALNR/2076043997x0xS1140361-11-12105/1301063/filing.pdf>

Xcel should be very careful about trading short term profits from investment in the Pawnee emissions control project for long term failure as these fundamental trends make coal more expensive and less available in coming years.

When coal can't be mined at a profit, not very much of it will be mined. This will leave Xcel's investments in coal at a high risk for becoming stranded and ratepayers **cannot** be counted on to pay off all of Xcel's ill-advised investments in coal.²⁰

Rising production costs and declining profit margins have affected Alpha Natural Resources balance sheet and financial outlook as summarized below.

While Alpha Natural Resources stock (ticker symbol ANR) traded above \$100/share in July 2008, in early October 2012, Alpha Natural's stock is trading below \$10/share.²¹ Below is a chart of Alpha Natural Resources stock prices for the last five years.

Alpha Natural Resources Stockprice Ocotober 2007-October 2012

<http://www.reuters.com/finance/stocks/chart?symbol=ANR>



²⁰ In addition to the quarter of a billion dollars that Xcel is planning on investing in the Pawnee coal plant, it has recently spent approximately \$1 billion on the Comanche coal plants in Pueblo, Colorado and plans on spending about \$90 million on the Hayden coal plants west of Steamboat Springs, Colorado.

²¹ At close of business on Friday October 26, 2012, Alpha Natural Resources stock was \$8.71/share. <http://www.reuters.com/finance/stocks/overview?symbol=ANR>

As with Patriot Coal which declared bankruptcy in July 2012, Alpha Natural Resources has seen its stock price plummet in the last year. In addition, Alpha Natural has reported significant losses since late 2011 as follows:²²

Recent Losses Reported by Alpha Natural Resources (“ANR”)

2011 Year End	\$677.4 million net loss
2012 Quarter 1	\$29.2 million net loss
2012 Quarter 2	\$2.2 billion net loss (yes, billion....)²³

As of October 19, 2012, Alpha Natural was reporting negative Earnings Per Share (“EPS”), negative Return on Investment (“ROI”) and negative Return on Equity (“ROE”), as follows:²⁴

Alpha Natural Resources Key Financial Statistics Reported October 26, 2012

<http://www.reuters.com/finance/stocks/overview?symbol=ANR>

EPS:	-13.36
ROI:	-21.27
ROE:	-43.57

²² Year end and quarterly results available from 10-K and 10-Q filings for Alpha Natural Resources at <http://alnr.client.shareholder.com/index.cfm>. The 2011 net loss is from page 60 of the Alpha Natural Resources 10-K. 2012 Q1 net loss is on page 2 of that quarter’s 10-Q. 2012 Q2 net loss is on page 1 of that quarter’s 10-Q.

²³ The \$2.2 billion in losses in 2012 Q2 for Alpha Natural included losses due to restructuring and impairments. After adjustment, the loss for 2012 Q2 was \$72 million. ANR’s reporting of 2012 Q2 results explains the adjustments like this:

Alpha Natural Resources, Inc. (NYSE: ANR), a leading U.S. coal producer, reported a second quarter loss of \$2.2 billion or \$10.14 per diluted share, compared with a loss of \$50 million or \$0.32 per diluted share in the second quarter of 2011. Excluding impairment and restructuring charges, expenses related to the Upper Big Branch (UBB) mine, net amortization of acquired intangibles, changes in fair value and settlement of derivative instruments, merger-related expenses, certain other items, and related tax impacts of these items and other discrete tax items, the second quarter adjusted net loss was \$72 million or \$0.33 per diluted share, compared to adjusted net income of \$152 million or \$0.97 per diluted share last year. (Emphasis added.)

²⁴ For ANR’s reported EPS, ROI and ROE, see <http://www.reuters.com/article/2012/09/28/alpha-notes-idUSL1E8KSE4N20120928?type=companyNews>

On September 18, 2012, Alpha Natural reported a “Strategic Repositioning of the company that included cuts in production and miner lay-offs described as follows:

- A combination of mine and equipment idlings, production curtailments and mining out reserves will take place through early 2013, reducing annualized coal production and shipments by approximately 16 million tons. Approximately 40 percent of the reduction will come from higher-cost thermal coal operations in the East that are unlikely to be competitive for the foreseeable future. **And approximately half of the reduction will come from production curtailments in the Powder River Basin in order to match currently committed sales volumes.** The balance will be reduced production of lesser quality metallurgical coal.
- Between now and early 2013 operational adjustments will reduce approximately 1,200 positions from the current workforce of 13,100 employees. The first of the planned reductions commence today with the idling of eight mines in Virginia, West Virginia and Pennsylvania.²⁵ (Emphasis added.)

Importantly, approximately half of Alpha Natural’s production curtailments will come from the Powder River Basin—meaning from the Eagle Butte and Belle Ayr mines that have been historically important coal suppliers for Xcel’s Pawnee and Comanche coal plants in Colorado. These production cuts are another factor that could increase coal costs in the coming years.

On September 28, 2012, Alpha Natural offered \$500 million in senior unsecured notes²⁶ that are due on April 15, 2018.²⁷ The debt was priced at 9.75% and the proceeds were intended to be used in part to purchase \$350 million in debt that Alpha owed

²⁵ For Alpha Natural’s announcement of their “Strategic Repositioning” of September 18, 2012, see <http://alnr.client.shareholder.com/releasedetail.cfm?ReleaseID=707455>

²⁶ Alpha Natural reported about \$2.9 billion in long-term debt in its 2011 Annual 10-K Report, page 149 at http://files.shareholder.com/downloads/ALNR/2076043997x0x557093/a17ced96-90ef-46ed-8c34-811483d9fc91/Alpha_10K.pdf

²⁷ For ANR’s sale of \$500 million in debt due in April 2018, see <http://www.reuters.com/article/2012/09/28/alpha-notes-idUSL1E8KSE4N20120928?type=companyNews>

on 3.25% convertible notes that are due in 2015.²⁸ Even at this high interest rate, less than 20% of the notes were tendered.²⁹

Then on October 17, 2012, GMI ratings issued a warning about **the increased risk of bankruptcy** by Alpha Natural Resources, declaring that Alpha Natural poses an imminent danger to shareholders.³⁰ An excerpt from the article on the bankruptcy risk of Alpha Natural Resources is reproduced below.

These recent and thus far unsuccessful attempts to raise capital for debt relief present just the latest risk at **a company that's been flashing "imminent danger" signs since the fall of 2011**. A declining leverage ratio, increasing debt, and consistent legal problems collectively threaten to push Alpha Natural's ESG Rating of "D" into failing territory for long-term risk.

Based on financial statements, **Alpha Natural has continued to increase its risk of bankruptcy or financial distress**, according to GMI Ratings' Distress Model Score Trend. (Emphasis added.)³¹

**The writing is on the wall—
and it is in red.
Xcel (and the Colorado PUC) should be
paying close attention....**

²⁸ For the pricing and intended use of Alpha Natural's September 28, 2012 debt offering, see <http://www.reuters.com/finance/stocks/ANR/key-developments/article/2615287>

²⁹ For the results of the September 28, 2012 debt offering by Alpha Natural, see <http://www.sec.gov/Archives/edgar/data/1301063/000130106312000091/exhibitpressreleasealphate.htm>

³⁰ For the story on the GMI warning about increased risk for bankruptcy at Alpha Natural Resources see <http://www.businessinsider.com/alpha-natural-resources-inc-poses-imminent-danger-to-shareholders-2012-10>

³¹ Quote on bankruptcy risk at Alpha Natural Resources from <http://www.businessinsider.com/alpha-natural-resources-inc-poses-imminent-danger-to-shareholders-2012-10>

Alpha Natural and other coal producers are in serious financial trouble. Coal production costs are rising, profit margins are thinning and becoming negative, the coal companies are starting to “bleed” red ink.

The future of the large U.S. coal mining companies is very uncertain.

Proceeding with the emissions control project at the Pawnee coal plant is very likely to be seen as a mistake—and Xcel’s cost recovery will very likely be challenged in the coming years.

C. Arch Coal Inc —Owner of the Largest US Coal Mine, The Black Thunder Mine—Also Has Serious Financial Problems

Arch Coal Inc is one of the top three US coal companies as described below:³²

Arch Coal, Inc. (Arch) is a coal producer. During the year ended December 31, 2011, the Company sold approximately 156.9 million tons of coal, including approximately 5.5 million tons of coal it purchased from third parties, representing roughly 14% of the United States coal supply. It sells its coal to power plants, steel mills and industrial facilities.³³

Arch Coal is also the owner of the largest US coal mine—the Black Thunder in the Powder River Basin of Wyoming. In 2010, the Black Thunder coal mine produced over 116 million tons of coal—or over 10% of the US coal production of 1.084 billion tons.³⁴ As we will see below, the operating margins on production from the Black Thunder coal mine are currently in the neighborhood of \$1/ton—a very narrow margin after the effort that goes into mining a ton of coal.

³² In 2011, Arch Coal was the #2 coal company by production and the #3 company by revenue.

³³ The description of Arch Coal is from <http://www.reuters.com/finance/stocks/companyProfile?symbol=ACI>

³⁴ For the production of coal from the Black Thunder mine, see Table 9 in the Energy Information Administration 2010 Annual Coal Report (the most recent Annual Coal report available) at <http://www.eia.gov/coal/annual/pdf/table9.pdf>

As with other coal companies, Arch Coal is reporting³⁵ significant losses with a 2012 Quarter 2 net loss of \$436 million and adjusted net loss of \$22 million.³⁶

The Company is reporting negative Earnings Per Share (“EPS”), negative Return on Investment (“ROI”) and negative Return on Equity (“ROE”), as follows:³⁷

Arch Coal Inc. Key Financial Statistics Reported October 26, 2012

<http://www.reuters.com/finance/stocks/overview?symbol=ACI>

EPS: -1.50

ROI: -3.47

ROE: -9.48

With over 100 million tons out of total sales of approximately 150 million tons sold per year, the Black Thunder is not only the largest coal mine in the US it is far-and-away the largest coal mine that Arch Coal operates. Coal sales price and cost information for Arch Coal’s Powder River Basin operations (which includes the Black Thunder mine and the much smaller Coal Creek mine³⁸) are shown below from Arch’s announcement of its 2012 Q2 results.

³⁵ Financial reports for Arch Coal can be found at <http://investor.archcoal.com/phoenix.zhtml?c=107109&p=irol-IRHome>

³⁶ Arch Coal’s 2012 Q2 results were summarized as followed by the Company

ST. LOUIS, July 27, 2012 -- Arch Coal, Inc. (NYSE: ACI) today reported a net loss of \$436 million, or \$2.05 per diluted share, in the second quarter of 2012. Excluding acquired sales contract amortization, exit costs arising from announced mine closures, goodwill impairment charges, one-time financing fees for debt restructuring initiatives and the related tax impacts of these items, Arch's second quarter 2012 adjusted net loss was \$22 million, or \$0.10 per diluted share, compared with net income of \$76.6 million, or \$0.44 per diluted share, a year ago. <http://investor.archcoal.com/phoenix.zhtml?c=107109&p=irol-newsarticle&ID=1719434>

³⁷ For EPS, ROI and ROE numbers for Arch Coal see <http://www.reuters.com/finance/stocks/overview?symbol=ACI>

³⁸ In 2010 Coal Creek produced about 11.4 million tons of coal. See Table 9 in the EIA Annual Coal Report

Arch Coal Inc Results Powder River Basin Coal—Reported 2012 Q2

<http://investor.archcoal.com/phoenix.zhtml?c=107109&p=irol-newsarticle&ID=1719434>

(According to Arch, “Amounts reflected in this table have been adjusted for certain transactions.”)

Arch Coal Inc	2012 Q2	2012 Q1	2011 Q1
Powder River Basin Coal			
Millions of Tons Sold	21.8	27.2	28.0
Average Sales Price Per Ton	\$13.65	\$13.87	\$13.70
Total Operating Cost Per Ton³⁹	\$12.71	\$12.75	\$12.26
Operating Margin Per Ton	\$0.94⁴⁰	\$1.12	\$1.44

While there isn't any “red ink” in the above table for Arch Coal's Powder River Basin coal operations, there are a number of warning signs including:

- A significant drop in production in 2012 Q2 both from 2012 Q1 and 2011 Q2.
- A very narrow operating margin of approximately \$1/ton on Arch Coal's Powder River Basin coal sales. (See yellow highlighting above and accompanying footnote.)

The cuts in production and the thinning profit margins shown in the table above include the Black Thunder mine which is this country's largest coal mine. If the profit margin on this mine thins further or becomes negative, the source of over 10% of our country's coal in 2010 could see further production cuts or the idling of the mine.

<http://www.eia.gov/coal/annual/pdf/table9.pdf>

³⁹ According to Arch Coal's announcement, “Operating cost per ton includes depreciation, depletion and amortization per ton.”

⁴⁰ During review of this filing, Arch Coal filed its third quarter results with an operating margin per ton for its Powder River Basin coal mines of \$1.24/ton. Arch's 2012 Q3 results are available here <http://investor.archcoal.com/phoenix.zhtml?c=107109&p=irol-newsarticle&ID=1750543>

These trends of increased production costs, thinning profit margins and reduced coal production are largely driven by the geology of US coal deposits and these trends are **not** likely to be affected by who becomes President or any change in EPA regulations.

Increasing production costs for coal and thinning profit margins are largely driven by the underlying geology of US coal deposits and the fact that most of the easily accessible coal in this country has already been mined.

These trends are not likely to be changed by the outcome of any Presidential election or battle over environmental regulations. Increasing production costs and thinning margins are the result of geology—not politics—and no politician—not even the President--can change the geology of US coal deposits.

Any utility that is making a large investment in coal plants should be watching these trends in coal production costs and thinning profit margins carefully to avoid making a large investment in a power plant that it will be hard to supply with fuel for the next 3-5 decades.

As with Patriot Coal and Alpha Natural Resources, stock prices for Arch Coal have fallen dramatically in recent months. While Arch Coal's stock traded above \$70/share in June 2008, in early October 2012, shares of Arch Coal have been trading for less than \$10/share.⁴¹ Below is a graph of Arch Coal stock prices for the last five years.

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⁴¹ As of close of business on October 26, 2012, Arch Coal Inc stock traded for \$8.09.

Arch Coal International (“ACI”) Stock Price October 2007-October 2012

<http://www.reuters.com/finance/stocks/overview?symbol=ACI>



As with Patriot Coal and Alpha Natural, Arch has sought new debt in order to pay off existing debt. Unlike Patriot and Alpha Natural, Arch has been successful in the near term, taking out a new \$1.4 billion in debt in order to pay off existing debt and other corporate expenses.⁴² After this decision to issue new debt to pay off existing debt, Arch has been described by an industry analyst as in the land of the walking dead:

Arch Coal ([ACI](#)), meanwhile, looks to live in the land of the walking dead.

Arch is the second largest U.S. coal producer and has assets in every U.S. coal producing basin. Sales for 2012 will be over of \$4 billion.

Long term debt is \$4.4 billion. In a frantic second quarter move Arch completed a refinancing to push out maturities and eliminate covenants. Arch's next debt

⁴² Arch's issuance of \$1.4 billion in new debt in May 2012 was described as follows:

Arch intends to use the proceeds from the term loan to repurchase or redeem the outstanding Arch Western Finance \$450 million senior notes due 2013, repay borrowings under existing credit facilities, pay certain expenses associated with the transaction and for general corporate purposes.

See <http://www.reuters.com/finance/stocks/ACI/key-developments/article/2542520>

maturity is not due until 2016 for \$590 million. Beginning in 2018 maturities arrive annually.⁴³ (Emphasis added.)

Both Arch Coal and Alpha Natural Resources, the 2nd and 3rd largest US coal companies, are in serious financial shape driven in large part by increasing production costs and thinning or disappearing profit margins.

Any utility—including Xcel—would be foolish to make a large investment in coal plants at this point given what is now clearly known about the financial state of some of the largest US coal companies—including companies that have been important suppliers to Xcel.

D. Other US Coal Companies Are Generally Subject to the Same Geological and Financial Conditions that Are Affecting Arch Coal Inc. and Alpha Natural Resources

All US companies that are mining coal are generally subject to the same geological and financial trends that have been discussed above for Patriot Coal, Alpha Natural Resources and Arch Coal Inc. Many of these companies are either diversified in product (i.e. they mine things other than coal) or in location (i.e. they mine coal in locations outside of this country.)

While it is harder to glean statistics related to increasing production costs and narrowing profit margins for coal mining from the financial reports of these other more diversified companies, all efforts to mine US coal are generally subject to the same

⁴³ Quote from Seeking Alpha, September 2, 2012 available at <http://seekingalpha.com/article/841941-arch-coal-walking-dead>

geological and financial forces that are putting Patriot, Arch Coal and Alpha Natural Resources in such dire or precarious positions, as described above.

The geology of the coal in the Powder River Basin of Wyoming has been described in great detail by the United States Geological Survey (“USGS”) in its report USGS 2008-1202 available for free download at <http://pubs.usgs.gov/of/2008/1202/> .

For the geology of coal in other coal fields in the United States and an assessment of how much of this coal is likely economically recoverable, the USGS has undertaken the National Coal Resource Assessment (“NCRA”) with the results publicly available for free download at <http://pubs.usgs.gov/pp/1625f/>. As noted in Chapter D of the USGS NCRA, typically less than 20% of the coal resources in a coal field are expected to be economically recoverable.

Peabody Coal is the #1 US coal company⁴⁴—but it has a number of mines in Asia that favorably affect its financial status.⁴⁵ For example, in 2011 Peabody mined only about one-eighth as much coal in Australia as it did in the United States but its adjusted Earnings Before Income, Taxes and Depreciation and Amortization (“EBITDA”) from its Asian coal mining was greater than for the much greater volume of coal mined in the United States.⁴⁶ Once again, these financial results are an indication that profit margins on US coal mining are not large—and if these margins thin further or become negative, it

⁴⁴ For an overview of Peabody Energy see <http://www.peabodyenergy.com/>

⁴⁵ For a view of Peabody’s international coal presence see slide 19 in the Peabody PPT given at the Barclay’s conference September 2012 available from http://www.peabodyenergy.com/mm/files/Investors/IR%20Presentations/Barclays%200912%20v14%20SHOW_VERSION%202.pdf .

⁴⁶ In 2011, Peabody mined 25.3 million tons of coal from Australia and 203.9 million tons from US mines, but EBITDA revenues from Australia were \$1.19 billion and those from the US only \$1.17 billion. See page 23 in Peabody’s 2011 Annual Report found at <http://www.peabodyenergy.com/mm/files/Investors/Annual-Reports/PE-AR2011.pdf>

is not clear how much longer the coal companies will continue to mine coal for use by US thermal power plants⁴⁷ such as Xcel's Pawnee coal plant.

E. Several Coal Plants Have Declared Bankruptcy or Been Mothballed in the Last Year

Coal costs in the United States have been rising about 8% per year since 2004. (See Attachment 2). As the cost of coal has risen, it has become increasingly difficult for U.S. coal plants to operate economically.

a. AES Eastern Declared Bankruptcy Citing the Economics of Coal

In late 2011, AES Eastern declared bankruptcy after unsuccessfully trying to sell the Cayuga and Somerset coal plants in New York.⁴⁸ One of the factors affecting the New York coal plants was increased coal costs as noted below:

AES Eastern Energy and 13 affiliated entities—all wholly owned by AES Corp.—filed for bankruptcy in the U.S. Bankruptcy Court for the District of Delaware. The company's dire financial situation was brought about by a number of operational factors, it said, including “reduced power prices brought on by low natural gas prices, **increased costs for coal**, and significant costs for air pollution controls. As a result of these operational factors, the company did not have sufficient cash flow to service its debt.⁴⁹ (Emphasis added.)

The AES Eastern bankruptcy came on the heels of the AES Thames bankruptcy which was also the result in part of rising coal prices.

⁴⁷ There is considerable effort by the coal companies to expand export potential for US coal. While selling coal abroad may be good for the coal companies it won't help make reasonably priced coal show up at US coal plants such as Xcel's Pawnee coal plant.

⁴⁸ There are many media stories on the AES Eastern bankruptcy filing. One can be found at <http://www.powermag.com/POWERnews/4291.html>

⁴⁹ Quote from <http://www.powermag.com/POWERnews/4291.html>

AES subsidiary AES Thames last February filed for bankruptcy, closing its 181-MW Connecticut plant, citing high coal prices and costs.⁵⁰

b. Maryland Coal Plants Sold at a Loss

In summer 2012, the utility Exelon sold three coal plants as a result of a merger. Because the coal plants could not be sold for their value, the utility took a \$275 million pre-tax loss on the sale.⁵¹ Quotes from the Baltimore Business Reporter describing the transaction are below.

Exelon Corp. has agreed to sell three Maryland coal-fired power plants for \$400 million to a new company formed by Riverstone Holdings LLC, a \$22 billion private equity firm focused on energy.

Chicago-based Exelon (NYSE: EXC) will record a pre-tax loss of about \$275 million in the third quarter. That's the difference between the estimated sale price and the carrying value of the plants.⁵²

c. Largest Coal Plant in Ohio Put on Standby Due to Economics of Coal

Among the many coal plants being scheduled for retirement or cut backs⁵³ is the huge Sammis Coal Plant in Ohio.⁵⁴ What is especially remarkable about the idling of the Sammis coal plant is that it is the largest coal plant in Ohio—and the utility had just spent \$1.8 billion putting pollution controls on the plant. Quotes from the Wall Street Journal story describing the situation follow:

⁵⁰ Quote from <http://www.powermag.com/POWERnews/4291.html>

⁵¹ For the loss taken by Exelon on the sale of the Maryland coal plants see <http://www.bizjournals.com/baltimore/news/2012/08/09/exelon-to-sell-three-maryland.html>

⁵² Quotes from <http://www.bizjournals.com/baltimore/news/2012/08/09/exelon-to-sell-three-maryland.html>

⁵³ For an October 2012 discussion of possible coal plant retirements see the Brattle Group update at <http://www.brattle.com/documents/UploadLibrary/Upload1081.pdf>

⁵⁴ A Wall Street Journal story describing the situation with the Sammis coal plant in Ohio can be found at <http://online.wsj.com/article/SB10000872396390443696604577645713658834228.html>

- In its heyday, the giant W.H. Sammis power station was a workhorse, cranking out electricity around the clock. But [FirstEnergy Corp.](#) now plans to idle the coal-fired power plant on the Ohio River and run it only when there is exceptional need for electricity.
- FirstEnergy, based in Akron, Ohio, spent more than \$1.8 billion putting pollution controls on the seven-unit Sammis plant in Stratton, its largest generating station in Ohio, starting the work before the 2008 economic downturn.
- Even so, "if things don't pick up and electricity (profit) margins don't improve, the Sammis units won't run anymore," Mark Durbin, a First Energy spokesman, said of the plant, whose units were built between 1959 and 1971.⁵⁵

IV. PAWNEE COAL COSTS APPEAR TO BE RISING FASTER THAN PREDICTED BY XCEL

During the hearing in the 11A-325E docket, Xcel provided a projected coal cost for the Pawnee coal plant of \$1.30/MMBTU in 2012.⁵⁶ Actual delivered coal costs for the Pawnee coal plant through July 2012 (the last month currently available) are shown in Attachment 1.⁵⁷ Coal costs are in Column T in cents/MMBTU.⁵⁸ While final 2012 costs for Pawnee cannot be determined until the end of the year, most of the deliveries of coal to the Pawnee plant through the first seven months of 2012 were coming in above \$1.30/MMBTU. Xcel—and the Colorado PUC—should be asking what will coal cost 2 and 3 decades from now—and will there be coal companies willing to mine coal if they cannot make a profit.

⁵⁵ Wall Street Journal quotes on the Sammis Plant from <http://online.wsj.com/article/SB10000872396390443696604577645713658834228.html>

⁵⁶ For projected coal costs for the Pawnee coal plant, see Hearing Exhibit 13.

⁵⁷ Delivered fuel costs for most US power plants can be tracked through the "EIA 923" database. This is the source of the data in Attachment 1.

⁵⁸ For example a price of 133 in Column T equates to 133 cents/MMBTU or \$1.33/MMBTU.

V. SUMMARY

In addition to the numerous changes in the coal industry in 2012, there have been very serious indications of the seriousness of climate change including:

- The most destructive wild fires in Colorado’s history.⁵⁹
- A devastating drought affecting Colorado and large swaths of US agriculture producing region.⁶⁰
- A host of other extreme weather events including Hurricane Sandy which is threatening the eastern seaboard with up to a\$1 billion in damages as this filing is being edited.⁶¹

For these reasons, and many more, it is unconscionable to be investing in the Pawnee coal plant which will add large amounts of carbon dioxide to the atmosphere during its operation—carbon dioxide that will affect the climate of the planet for centuries, and even millenia⁶²-- with the intention of keeping it on line until 2041.

In addition to all the environmental and health reasons why it is unconscionable to be investing in the Pawnee coal plant (on top of the approximately \$1 billion that has been spent on the coal plants in Pueblo), it is just plain **STUPID** given what Xcel knows or should know about the recent developments in the US coal industry outlined in this filing.⁶³

⁵⁹ See for example http://www.denverpost.com/breakingnews/ci_20934144/colorados-most-destructive-wildfires-homes-destroyed

⁶⁰ See for example <http://www.ers.usda.gov/topics/in-the-news/us-drought-2012-farm-and-food-impacts.aspx>

⁶¹ See for example <http://www.cnn.com/2012/07/10/world/unusual-world-weather/index.html>

⁶² See the reports of the Intergovernmental Panel on Climate Change (“IPCC”) at www.ipcc.ch

⁶³ Ms. Glustrom recognizes that it is unusual to use text boxes and red ink when filing at the Colorado PUC, but she has been trying for the best part of a decade to get Xcel and the PUC to actually review the data that is in front of them regarding coal cost and supply issues. Now Ms. Glustrom is beginning to worry that once Xcel and the PUC Staff finally wake up to what is happening, that they will ask why she wasn’t more insistent in communicating the situation. The use of text boxes and red ink is intended to help Xcel and parties at the PUC start to pay attention to the evidence that is literally “right in front of us”—if we will just take the time to read it!!

In conclusion...

The writing is on the wall for the US coal industry—and it is in red.

Any utility (e.g. Xcel) planning to make a large capital investment should reconsider that investment, given the very real and very serious questions regarding the availability of reasonably-priced coal for US coal plants in the coming decades.

Respectfully submitted this 29th day of October 2012.

/s/Leslie Glustrom

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