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June 26, 2014

#### **VIA E-FILING**

Dr. Burl W. Haar Minnesota Public Utilities Commission 121 7<sup>th</sup> Place East, Suite 350 St. Paul, MN 55101-2147

Re: Comments of Peabody Energy in Response to the June 16, 2014 "Notice of Comment Period on Agencies' Report" in the Matter of the Investigation into Environmental and Socioeconomic Costs Under Minn. Stat. 216B.2422, subd. 3; Docket No. E-999/CI-00-1636

Dear Dr. Haar:

Enclosed for filing are the comments of Peabody Energy Corporation in response to the June 16, 2014 "Notice of Comment Period on Agencies' Report" in the above-referenced docket.

We have served a copy of these comments on all parties on the service list. Please contact me at (703) 760-0750 or <a href="kcoddington@kmcllaw.com">kcoddington@kmcllaw.com</a> if you have any questions regarding this filing.

Respectfully submitted,

/s/ Kipp A. Coddington

Kipp A. Coddington

# STATE OF MINNESOTA BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

121 7<sup>th</sup> Place East, Suite 350 St. Paul, MN 55101-2147

Beverly Jones Heydinger	Chair
David C. Boyd	Commissioner
Nancy Lange	Commissioner
J. Dennis O'Brien	Commissioner
Betsy Wergin	Commissioner

In the Matter of the Investigation into Environmental and Socioeconomic Costs Under Minn. Stat. § 216B.2422, subd. 3

Docket No. E-999/CI-00-1636

PEABODY ENERGY CORPORATION'S WRITTEN COMMENTS

#### I. Overview

Peabody Energy Corporation ("Peabody"), through undersigned counsel, files these written comments in response to the Minnesota Public Utilities Commission's ("Commission")

June 16, 2014 "Notice of Comment Period on Agencies' Report" ("Notice") in the above-referenced Docket (the "Docket"). The Notice seeks comment on specific aspects of the June 10, 2014 "Comments of the Minnesota Department of Commerce, Division of Energy Resources and the Minnesota Pollution Control Agency" ("Agencies' Report") in the Docket. Prepared in fulfillment of the Commission's February 10, 2014 "Order Reopening Investigation and Convening Stakeholder Group to Provide Recommendations for Contested Case Proceeding" ("February 10, 2014 Order"), the Agencies Report, by its own terms, "serves as the joint

<u>recommendation of the Agencies</u> to the Commission." The Agencies' Report, in contrast, does not advance stakeholder recommendations as there were none due to the absence of consensus.

For the reasons stated below, including most notably the absence of consensus among stakeholders who participated in the Agencies' flawed stakeholder process earlier this year, Peabody urges the Commission not to adopt any of the Agencies' recommendations with respect to the Social Cost of Carbon ("SCC") but instead refer all SCC topics to the Office of Administrative Hearings. The outcome is the only approach that preserves the ability of Peabody to advance its substantive case while preserving all legally required procedural, due process, and evidentiary rights.

The Commission instead must adopt SCC values that reflect the benefits of CO<sub>2</sub>.

According to Peabody's expert, current indirect CO<sub>2</sub> benefits clearly outweigh any hypothesized costs by literally orders of magnitude; the benefit-cost ratios range up to more than 200-to-1. The expert also assessed the annual total monetary value of the direct CO<sub>2</sub> benefit for 45 crops over the period 1961-2011 and estimated that it cumulatively totaled \$3.2 trillion—increasing from \$19 billion in 1961 to over \$140 billion in 2010. The expert forecast that over the period 2012-2050, these CO<sub>2</sub> benefits would total \$9.8 trillion.

<sup>&</sup>lt;sup>1</sup> Comments of the Minnesota Department of Commerce, Division of Energy Resources and the Minnesota Pollution Control Agency, Docket No. E999/CI-00-1636, p. 1 (June 10, 2014).

#### II. Peabody's Comments

## A. The Commission Must Adopt the Social Benefits of Carbon.<sup>2</sup>

The SCC value adopted by the Commission must consider the benefits of CO<sub>2</sub>.

CO<sub>2</sub> is the basis of life on Earth; it facilitates plant growth and enhances agricultural productivity. It is the primary raw material utilized by plants to produce the organic matter out of which they construct their tissues, which subsequently become the ultimate source of food.

Of primary importance, the successful development and utilization of fossil fuels, which generate CO<sub>2</sub>, facilitated successive industrial revolutions, created the modern world, and enabled the high quality of life currently taken for granted. There is a strong causal relationship between world GDP and CO<sub>2</sub> emissions over the past two centuries and this relationship is forecast to continue for the foreseeable future. Peabody's expert compared these indirect CO<sub>2</sub> benefits to the draft federal estimated values. While the draft federal estimated values are of questionable validity, the expert compared the CO<sub>2</sub> costs and benefits (on a normalized per ton basis) using federal estimates and assumptions. The expert found that the current benefits clearly outweigh any hypothesized costs by literally orders of magnitude. The benefit-cost ("B-C") ratios range up to more than 200-to-1 (Figure 1 below).

incorporated by reference in its entirety.

<sup>&</sup>lt;sup>2</sup> This section is based upon *Bezdek*, *R.*, "*The Social Costs of Carbon? No, the Social Benefits of Carbon"* (*January 2014*) (available at http://americaspower.org/sites/default/files/Social Cost of Carbon.pdf). This study is hereby

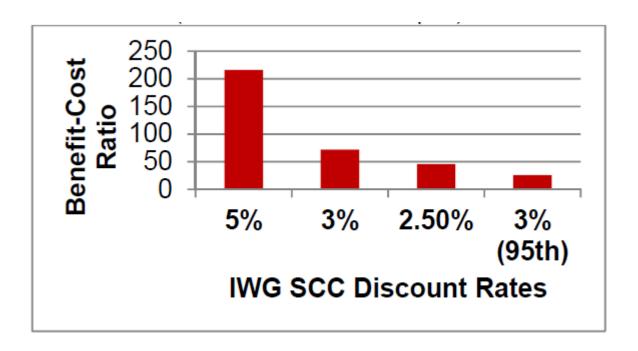


Fig. 1: 2010 CO<sub>2</sub> Benefit-Cost Ratios<sup>3</sup>

The expert utilized forecast data to estimate B-C ratios through 2040 and found that future benefits also greatly exceeded hypothesized costs by orders of magnitude: in the range of 40-to-1 to 400-to-1. To place these findings in perspective, normally B-C ratios in the range of 2-to-1 or 3-to-1 are considered favorable. Thus, the expert's main conclusion is that the benefits of CO<sub>2</sub> overwhelmingly outweigh estimated CO<sub>2</sub> costs no matter which SCC estimates or assumptions are used. In fact, the SCC estimates are relatively so small as to be in the statistical noise of the estimated CO<sub>2</sub> benefits.

The expert also assessed the annual total monetary value of the direct  $CO_2$  benefit for 45 crops over the period 1961-2011 and estimated that it cumulatively totaled \$3.2 trillion—

<sup>&</sup>lt;sup>3</sup> Sources: U.S. Energy Information Administration; U.S. Bureau of Economic Analysis; U.S. Interagency Working Group; Management Information Services, Inc.

increasing from \$19 billion in 1961 to over \$140 billion in 2010. The expert forecast that over the period 2012-2050, these CO<sub>2</sub> benefits would total \$9.8 trillion.

The Commission must adopt these values in this proceeding.

As support for these values, the Commission must consider the following facts.

✓ As reflected in Figure 2 below, the successful development and utilization of fossil fuels facilitated successive industrial revolutions, created the modern world, created the world's advanced technological society, and enabled the high quality of life currently taken for granted.

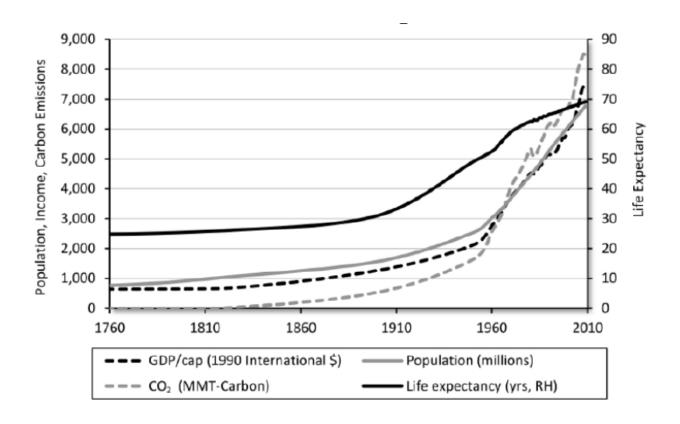


Fig. 2: Global Progress As Indicated by Trends in World Population, GDP Per Capita, Life Expectancy, and CO<sub>2</sub> Emissions from Fossil Fuels<sup>4</sup>

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<sup>&</sup>lt;sup>4</sup> Source: *Bezdek*, *Fig. EX-1*.

✓ As shown in Figure 3, population and economic growth will remain the key drivers behind increasing energy requirements.

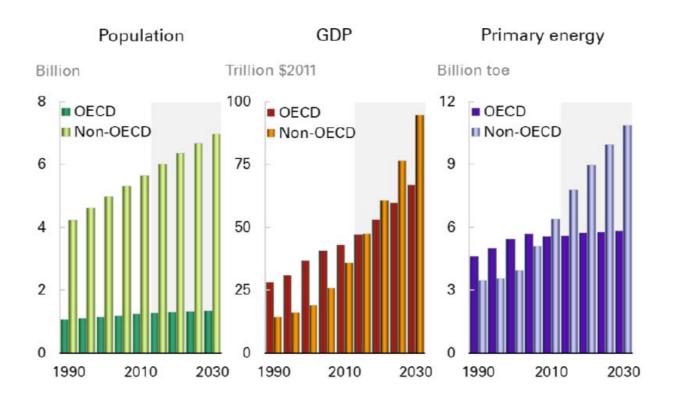


Fig. 3: Forecast of World Population, GDP, an Energy Growth 2030<sup>5</sup>

<sup>&</sup>lt;sup>5</sup> Source: *Bezdek, Fig. EX-2*.

✓ In the long term, as shown in Figure 4, the EIA reference case projects that fossil fuels will continue to provide 75-80% of the world's energy.

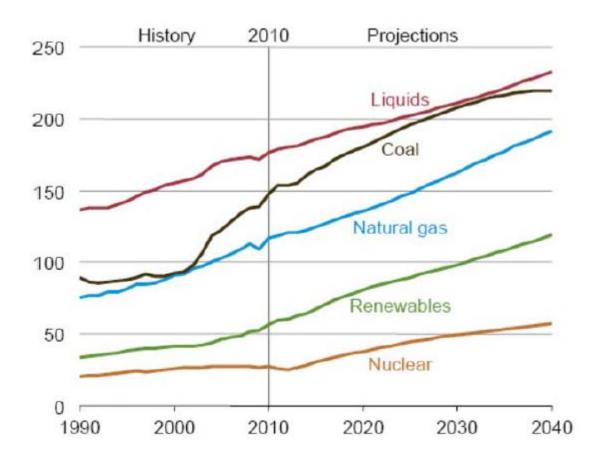


Fig. 4: World Energy Consumption By Fuel Type (Quads)<sup>6</sup>

<sup>&</sup>lt;sup>6</sup> Source: *Bezdek, Fig. EX-3*.

✓ Coal is the world's fastest growing energy source and over the past decade, in absolute terms, has increased as much as all other fuels combined; its recoverable resources are many times larger than natural gas or oil, or even of natural gas and oil combined, as reflected in Figure 5.

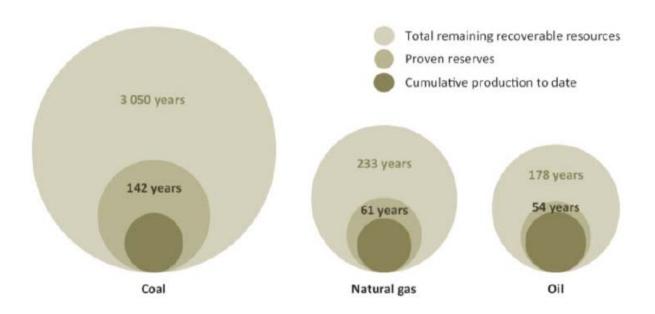


Fig. 5: Fossil Energy Resources By Type<sup>7</sup>

<sup>&</sup>lt;sup>7</sup> Source: *Bezdek, Fig. EX-4*.

✓ Electricity has created, shaped, and defined the modern world, economic growth and electricity usage are closely correlated, electricity enables people to live longer and better, and as shown in Figure 6, the United Nations links electricity consumption to quality of life.

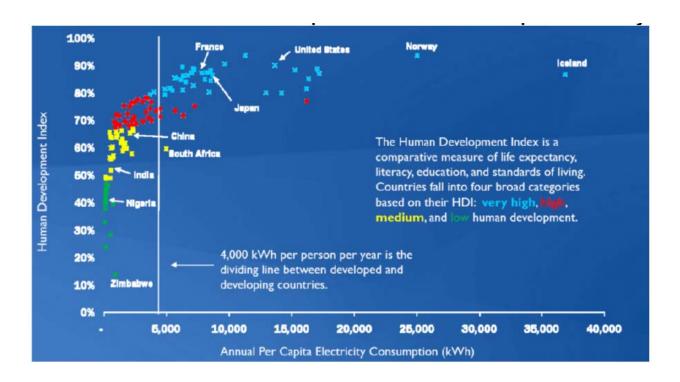


Fig. 6: The UN Human Development Index and Per Capita Electricity Usage<sup>8</sup>

<sup>&</sup>lt;sup>8</sup> Source: *Bezdek*, *Fig. EX-5*.

✓ Electrification will be increasingly important in the 21<sup>st</sup> Century, and world electricity consumption is forecast to double within four decades as electricity supplies an increasing share of the world's total energy demand, as reflected in Figure 7; however, an adequate, reliable, and affordable electricity supply is essential; pricing carbon is not the way to achieve those goals.

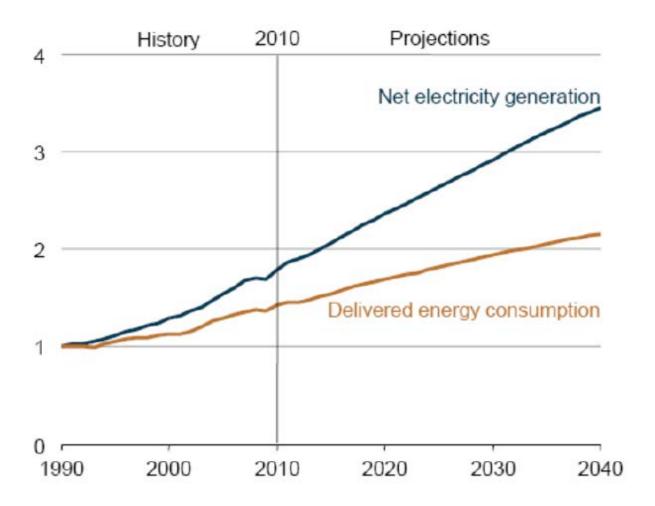


Fig. 7: Growth in World Total Electricity Generation and Total Delivered Energy Consumption (Index, 1990 = 1)<sup>9</sup>

<sup>&</sup>lt;sup>9</sup> Source: *Bezdek*, *Fig. EX-6*.

✓ Coal is currently the world's predominant fuel used for electricity generation and is forecast to remain so for at least the next three decades, as reflected in Figure 8.

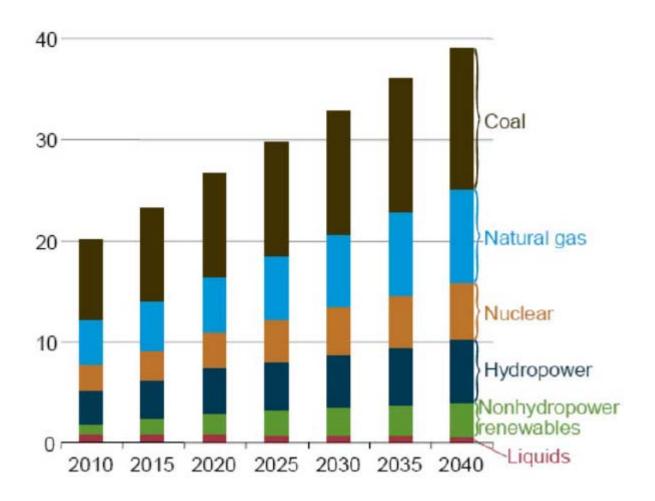


Fig. 8: World Net Electricity Generation by Energy Source, 2010-2040 (Trillion kWh)<sup>10</sup>

<sup>&</sup>lt;sup>10</sup> Source: *Bezdek, Fig. EX-7*.

✓ Increasing energy costs are highly regressive, since they hurt the poor, low income families, and seniors living on fixed incomes much more than the affluent; expenditures for essentials such as energy consume larger shares of budgets of low-income families than they do for those of more affluent families, as shown in Figure 9.

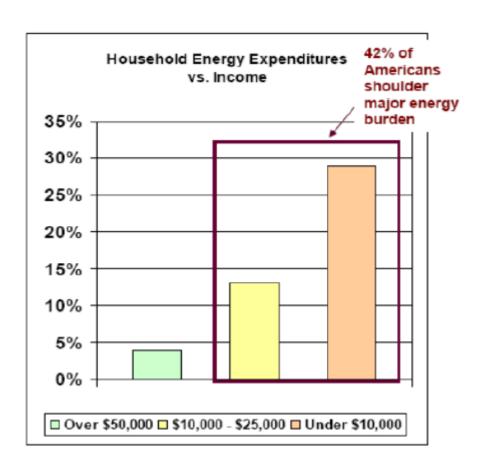


Fig. 9: Household Energy Expenditures vs. Income<sup>11</sup>

<sup>&</sup>lt;sup>11</sup> Source: *Bezdek, Fig. EX-8*.

✓ Being unable to afford energy bills can be harmful to human health, as shown in Figure 10.

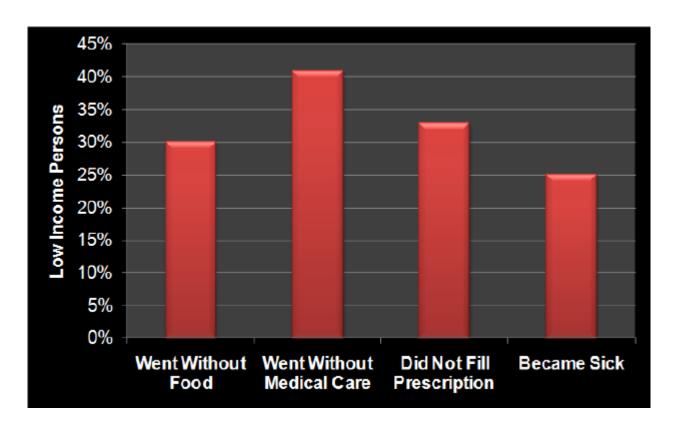


Fig. 10: Potential Health Impacts of Increased Energy Costs on Low Income Persons 12

<sup>&</sup>lt;sup>12</sup> Source: *Bezdek, Fig. EX-9*.

✓ There is a strong relationship between the economy and jobs, on the one hand, and the price of energy and electricity, on the other; economists who have analyzed the issue agree that the relationship is negative—increases in energy and electricity prices harm the economy and decreases in energy and electricity prices benefit the economy. This relationship is important because coal is the low-cost option for generating electricity, as shown in Figure 11.

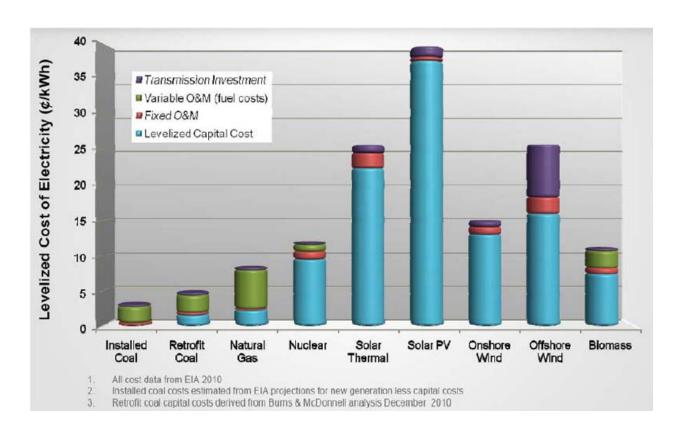


Fig. 11: Levelized Costs of Electricity by Generation Sources<sup>13</sup>

<sup>&</sup>lt;sup>13</sup> Source: Bezdek, Fig. EX-10.

✓ Peabody's expert has determined that a reasonable electricity elasticity estimate is -0.1, which implies that a 10% increase in electricity prices will result in a 1% decrease in GDP, as shown in Figure 12.

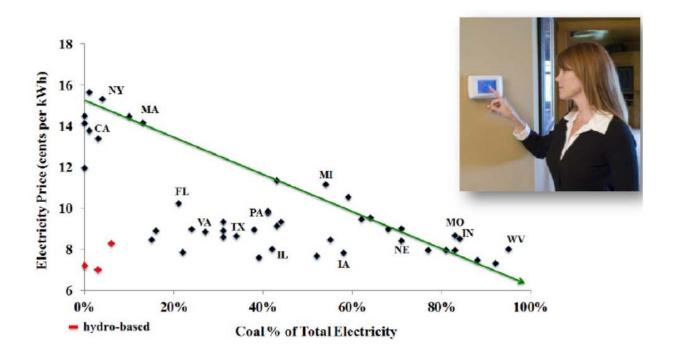


Fig. 12: Relationship Between Coal Generation and State Electricity Prices 14

### **B.** Background on the Stakeholder Process

In its February 10, 2014 Order deciding to reopen its investigation into "the appropriate range of externality values for . . .  $CO_2$ ," the Commission concluded only that there was "an adequate basis to consider updating or expanding the environmental cost values" for molecules such as  $CO_2$ . The Commission did not, in contrast, commit to actually updating the relevant

<sup>&</sup>lt;sup>14</sup> Source: Bezdek, Fig. EX-11.

<sup>&</sup>lt;sup>15</sup> February 10, 1014 Order, p. 4 (emphasis added).

externality values or otherwise prejudging the outcome of its decision to merely reopen its investigation into SCC considerations.

Prior to issuing its February 10, 2014 Order, the Commission solicited public comment on a variety of issues, including the "scope of the issues" to be considered if the proceeding were to be reopened. As the Commission itself concluded, the resulting "comments <u>reflected no clear consensus</u> on the appropriate scope of the investigation" and related matters. Because of the lack of consensus on these critical topics, the Commission indicated that it would Because of

seek additional input concerning the scope and conduct of the investigation, and whether to retain an expert. The Commission will ask the Department and the PCA to convene a stakeholder group, and will ask them to provide the stakeholder group's recommendations about whether the investigation should address other issues—including whether to investigate the costs of methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>)—and the need for a possible role of an expert, if the Commission were to retain one.

As requested by the Commission, the Agencies convened a stakeholder meeting on April 24, 2014, with Peabody in attendance. <sup>19</sup> Shortly before and again at the stakeholder meeting, the Agencies made available a document entitled "Potential Scenarios for Investigation".

<sup>&</sup>lt;sup>16</sup> *Id*.

<sup>&</sup>lt;sup>17</sup> *Id.* (*emphasis added*). The February 10, 2014 Order reflected the Commission's tally that nine entities were generally opposed to reopening the investigation, versus four entities generally in favor. *Id. p.* 2.

<sup>&</sup>lt;sup>18</sup> *Id.* (emphasis added).

<sup>&</sup>lt;sup>19</sup> Public notice of the stakeholder meeting was made on April 1, 2014. *Minnesota Department of Commerce and Pollution Control Agency, Stakeholder Group Public Meeting Notice (April 1, 2016).* 

of Externality Costs from Electric Generation Unit Emissions" ("Scenario Document"). <sup>20</sup> The Scenario Document identified eight questions for the stakeholders to consider; the first five addressed scope and process issues and the remaining three addressed the role of an expert consultant(s), if one were to be retained.

The stakeholder meeting could be described as unusual from procedural and substantive perspectives. For starters, the Agencies revealed that the Scenario Document was prepared in consultation with unidentified third parties and through a process that remains hidden from public scrutiny. The entire thrust of the stakeholder process—*i.e.*, seeking public comment on how the Agencies can better develop their case to ultimately harm certain business interests—tended to suppress, not encourage, public input. Indeed, it remains unclear if the mere act of speaking at the stakeholder meeting or thereafter filing public comments constituted implicit consent by that party to the entire proceeding and its outcome. It was separately odd for the government agencies to seek input on their retention of a consultant that presumably would represent the government's views only—perhaps even emerging as the de-facto expert for the proceeding—with the result that the stakeholders would be deprived of their rights to present their own experts.

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<sup>&</sup>lt;sup>20</sup> Potential Scenarios for Investigation of Externality Costs from Electric Generation Unit Emissions (April 17, 2014).

<sup>&</sup>lt;sup>21</sup> Those third parties remain unidentified, although the Agencies, in their June 10, 2014 report, revealed that the scenarios "were developed based on extensive research into the peer-reviewed literature on the economics of air emissions as well as consultations with several experts on the economics of air pollution from academia, the United States Environmental Protection Agency (EPA), economic consulting firms and from an energy wholesaler." *Agencies' Report*, p. 2.

Given these flaws in the stakeholder process, it perhaps comes as no surprise that the Agencies' Report documented no consensus on any of the topics presented to the stakeholders, including those pertaining to the SCC<sup>22</sup>:

There was no consensus regarding the process(es) to use to conduct the investigation, the scope of the investigation (specifically, whether other GHGs besides CO<sub>2</sub> should be included), whether an expert consultant(s) should be retained to conduct the investigation, and what the role of the consultant(s) would be should one be retained.

The absence of stakeholder consensus on any topic—specifically including all matters pertaining to the SCC—means that the Agencies in their report should have stopped at the sentence above, merely reporting that situation to the Commission. The Commission's February 10, 2014 order requested the Agencies to "convene a stakeholder group . . . and [thereafter] provide the stakeholder group's recommendations." The stakeholder group's recommendations should have been simply stated by the Agencies: there were none as no consensus was achieved.

Going beyond the limited charge presented to them by the Commission's February 10, 2014, the Agencies nonetheless presented the Commission with their <u>own</u> recommendations, not the stakeholders', including whether the draft federal estimated values for the SCC should be adopted<sup>24</sup>:

<sup>&</sup>lt;sup>22</sup> *Id.*, *p.* 3 (*emphasis added*).

<sup>&</sup>lt;sup>23</sup> February 10, 1014 Order, p. 5 (emphasis added).

<sup>&</sup>lt;sup>24</sup> Agencies' Report, p. 3.

In spite of this general lack of consensus, the Agencies considered all stakeholder input along with research and expert opinion in crafting this recommendation.

So stated, the Agencies' recommendation that the draft federal estimated values for the SCC be adopted is based on the following:

- ✓ *No public record of agency decisionmaking*. The Scenario Document is the only relevant document released by the Agencies to date. As discussed above, the Scenario Document was prepared based upon unknown and unchallenged input from unidentified parties.
- ✓ Lack of stakeholder consensus. The Agencies' Report is not a report of stakeholder consensus, as there was none. Instead, the Agencies' Report reflects the unchallenged views of two government agencies with unchallenged input from unknown third parties. Specifically as to the SCC, the Agencies' Report makes clear that it is the views of the two government agencies, not the stakeholders, when the recommendation is advanced that the draft federal estimated values be adopted. <sup>25</sup>
- ✓ "Research." The Agencies' Report states that it is based on "research." That research has
  not been made available to the public so has not been vetted through normal legal
  processes of due process, cross-examination, and notice-and-comment rulemaking.
- ✓ "Expert opinion." The Agencies' Report states that it is based on "expert opinion." That
  expert opinion has not been made available to the public so has not been vetted through
  normal legal processes of due process, cross-examination and notice-and-comment

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<sup>&</sup>lt;sup>25</sup> Id., p. 10 ("The following sections provide an overview of the SCC and the Agencies' rationale in recommending it for assigning externality values to CO<sub>2</sub> emissions"). The Agencies' Report later erroneously claims the SCC "evaluation criteria . . . were generally agreed to by stakeholders." *Id. p. 13*. There was no stakeholder consensus on any SCC issue, including evaluation criteria.

rulemaking. Peabody's expert intends to discuss the social benefits of carbon, a topic not discussed in the Agencies' Report.<sup>26</sup>

Even if all of these defects could be overlooked—and they cannot, as they go to the heart of this proceeding—the Agencies conceded as to the SCC that they (not the stakeholders) are recommending adoption of draft federal estimated values that, in return, remain unresolved and subject to substantial, ongoing public scrutiny<sup>27</sup>:

Those [federal SCC] <u>estimates</u> have been available for public comment in several proposed rulemakings since May of 2013, and the federal agencies <u>have already received comments that are under review</u>. The federal Office of Management and Budget held a three-month public comment period on the federal SCC that ended February 26, 2014. <u>It is expected that the federal agencies involved in the development of the SCC will issue a response to the public comments received some time this year.</u>

Upon this thin reed, the Commission now takes public comment for a mere ten days regarding whether it should adopt the draft federal SCC estimates.

#### **C. Substantive Comments**

Against this background, Peabody comments on the following areas of inquiry identified in the Notice:

<sup>&</sup>lt;sup>26</sup> Bezdek, R., "The Social Costs of Carbon? No, the Social Benefits of Carbon" (January 2014).

<sup>&</sup>lt;sup>27</sup> Agencies' Report, p. 11 (emphasis added and internal paragraph break deleted).

(1) Should the Commission adopt the Agencies' recommendation to use the federal SCC as the CO<sub>2</sub> value, not sending that issue to hearing? If so, should the Commission clarify whether it is adopting the SCC number or the underlying methodology used to calculate the number?

It is imperative that the Commission not adopt the Agencies' recommendation to use the draft federal SCC estimates as the CO<sub>2</sub> value. This issue must go to hearing as it is the core topic to be decided by the Commission in this proceeding. As described above, the Agencies' recommendation on this topic does not reflect stakeholder consensus, and even if it did, it was developed through an unusual process that received unscrutinized input from unidentified third parties.

If the Commission adopts the Agencies' recommendation as to the SCC, it will have deprived Peabody of its legally required procedural, due process, and evidentiary rights for the reasons stated above.

(2) If the Commission were to adopt the SCC, would that decision be effective immediately for use in resource plans and other relevant dockets? Would adopting of the SCC include updating it any time it is updated by the federal government?

If the Commission adopts the Agencies' recommendation as to the SCC, it will have deprived Peabody of its legally required procedural, due process, and evidentiary rights for the reasons stated above. Thus, this question is premature and may only be lawfully addressed in a hearing.

(3) Should the Commission specify that a damage value approach be used for developing externality values, as suggested at page 15 of the Agencies' report? Why or why not?

If the Commission adopts the Agencies' recommendation as to the SCC, including options regarding a so-called damage value approach, it will have deprived Peabody of its legally required procedural, due process, and evidentiary rights for the reasons stated above. Thus, this question is premature and may only be lawfully addressed in a hearing.

Under all circumstances, as Peabody intends to advance in the hearing, the social benefits of CO<sub>2</sub> must also be addressed. <sup>28</sup> A "benefit value" approach should be considered.

(4) Should the Commission endorse a particular model or modeling approach at this time?

If the Commission adopts the Agencies' recommendation as to the SCC, including options regarding particular modeling approaches, it will have deprived Peabody of its legally required procedural, due process, and evidentiary rights for the reasons stated above. Thus, this question is premature and may only be lawfully addressed in a hearing.

Under all circumstances, as Peabody intends to advance in the hearing, the social benefits of CO<sub>2</sub> must also be considered in the relevant model. <sup>29</sup>

<sup>&</sup>lt;sup>28</sup> Bezdek, R., "The Social Costs of Carbon? No, the Social Benefits of Carbon" (January 2014).

<sup>&</sup>lt;sup>29</sup> *Id*.

(5) Are there any other specific findings the Commission should make with respect to the scope of the Docket?

No. All SCC matters must be resolved in a hearing. It would be unlawful to decide them now for the reasons stated above.

#### III. Conclusion

The Commission instead must adopt SCC values that reflect the benefits of CO<sub>2</sub>.

According to Peabody's expert, current indirect CO<sub>2</sub> benefits clearly outweigh any hypothesized costs by literally orders of magnitude; the benefit-cost ratios range up to more than 200-to-1. The expert also assessed the annual total monetary value of the direct CO<sub>2</sub> benefit for 45 crops over the period 1961-2011 and estimated that it cumulatively totaled \$3.2 trillion—increasing from \$19 billion in 1961 to over \$140 billion in 2010. The expert forecast that over the period 2012-2050, these CO<sub>2</sub> benefits would total \$9.8 trillion.

It is imperative that the Commission not adopt the Agencies' recommendation to use the draft federal SCC estimates as the CO<sub>2</sub> value. This issue must go to hearing as it is the core topic to be decided by the Commission in this proceeding. The Agencies' recommendation on this topic does not reflect stakeholder consensus, and even if it did, it was developed through an unusual process that received unscrutinized input from unidentified third parties.

If the Commission adopts the Agencies' recommendation as to the SCC, it will have deprived Peabody of its legally required procedural, due process, and evidentiary rights.

All SCC matters must be resolved in a hearing. It would be unlawful to decide them now.

[Signature block on following page.]

# Respectfully submitted this 26th of June 2014.

# /s/ Kipp A. Coddington

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## Counsel for Peabody Energy Corporation

# **CERTIFICATE OF SERVICE**

The undersigned hereby certifies that I have this day served a true and correct copy of the foregoing **Peabody Energy Corporation's Written Comments** to all persons on the Official and Special Service Lists for this docket by electronic filing for those denoted as accepting electronic service and by first-class mail, postage prepaid, for those denoted as requiring paper service.

/s/ C. Max Zygmont Kazmarek Mowrey Cloud Laseter LLP