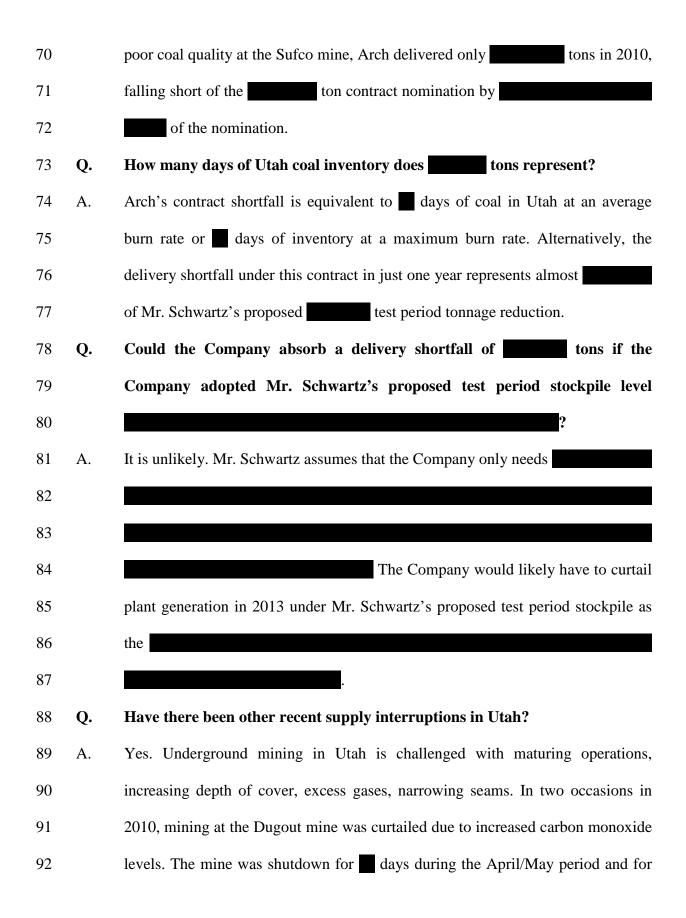
1	Q.	Are you the same Cindy A. Crane who submitted direct testimony in this
2		proceeding?
3	A.	Yes.
4	Q.	What is the purpose of your rebuttal testimony?
5	A.	The purpose of my rebuttal testimony is to:
6		• Rebut the testimony of Office of Consumer Services ("OCS") witness Mr.
7		Seth Schwartz regarding OCS's proposed disallowance of the Company's
8		Fuel Stock;
9		• Rebut the testimony of OCS witness Mr. Schwartz regarding adjustment
10		of the Company's coal inventory targets for the Utah plants;
11		• Rebut the testimony of OCS witness Mr. Randall J. Falkenberg regarding
12		fuel quality problems at the Bridger plant;
13		• Accept Utah Industrial Energy Consumer's ("UIEC") witness Mr. Mark T.
14		Widmer's adjustment regarding removal of Bridger Coal Company fines
15		and citations; and
16		• Accept Mr. Widmer and Mr. Falkenberg' adjustment relating to Bridger
17		plant's coal price and Mr. Widmer's adjustment to the Huntington plant
18		coal price;
19		• Update of the Company's coal costs to reflect contractual changes under
20		the Company's coal and transportation agreements; and
21		• Explain the acquisition of the Cottonwood coal leases from Arch Coal
22		Sales ("Arch") as part of the settlement agreement with Arch; and
23		• Discuss the increasing sulfur content of Utah coal reserves.

24	4 Fuel Stock Adjustment	
25	Q.	Please summarize the adjustment OCS witness Mr. Schwartz recommends to
26		fuel stock.
27	A.	Mr. Schwartz proposes to reduce Company fuel stock from
28		
29		
30	Q.	Which plant fuel stock balances did Mr. Schwartz adjust?
31	A.	Mr. Schwartz adjusted test period fuel stock levels for the Utah plants only.
32	Q.	Do you agree with OCS' adjustment?
33	A.	No, the Company disagrees with OCS' adjustment. The Company maintains that
34		test period fuel stock levels are both appropriate and reflect the current supply risk
35		for the Utah plants.
36	Q.	How did the OCS determine its test period inventory level for the Utah
37		plants?
38	A.	Mr. Schwartz determined an inventory level for the Utah plants by assessing how
39		much inventory the Company would need to have in inventory on June 30, 2012
40		
41		
42		. Mr. Schwartz analysis is also premised on the Company's coal
43		suppliers supplying their contractual obligation, up to too toos per year.
44	Q.	What are the problems with Mr. Schwartz's analysis?
45	A.	First, Mr. Schwartz has identified 10 days as a minimum inventory constraint for
46		the Utah plants Coal

47 quality would be marginal at inventory levels this low due to high ash content. 48 The increase in ash content is the result of reclaiming rock which is part of the 49 stockpile base. Supplying the coal plants with a high blend of rock will result in 50 plant restrictions due to opacity, ash handling and coal mill capacity. 51 the Company's coal plants would be 52 placed at considerable supply risk with only a 10 day minimum stockpile. 53 Second, a central tenet of Mr. Schwartz proposed reduction in stockpile 54 levels is that "the Company can purchase up to tons per year under its 55 other contracts with other Utah coal suppliers." The Company agrees with Mr. 56 Schwartz that under the terms of its coal supply agreements, the Company has the tons. The Company disagrees, however, that a 57 right to nominate up to 58 nomination ensures actual receipt of coal. Mr. Schwartz does not discern between 59 the Company's contractual right to the coal supply and the probability of actual 60 delivery by the seller. Essentially, Mr. Schwartz proposes to substitute a paper 61 agreement for physical coal in inventory. What circumstances would cause coal suppliers to deliver less than their 62 **Q**. 63 contract commitment? 64 There are a variety of reasons a coal supplier may curtail or under-deliver its A. contract deliveries such as geologic conditions, extended longwall moves, 65 66 equipment failure, Mine Safety and Health Administration (MSHA) mandates and coal quality. For instance, in 2010 the Company nominated 67 tons under 68 its long-term agreement with Arch Coal Sales for Sufco and Dugout coals. Due to 69 extended longwall moves, high carbon monoxide levels at the Dugout mine and

#### Page 3 - Rebuttal Testimony of Cindy A. Crane - REDACTED



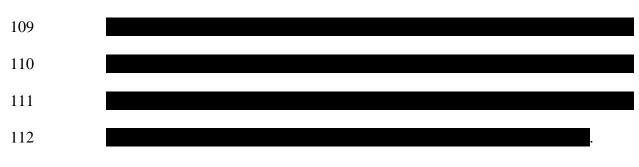
93 days during the June/September period.

In 2008 and 2009, UtahAmerican Energy's West Ridge mine operation was curtailed several times due to a series of bounces.<sup>1</sup> MSHA subsequently mandated a change to the mine's roof control plan which reduced production. Prior to the West Ridge interruptions, UtahAmerican Energy's Crandall Canyon was shuttered in 2007 following a catastrophic coal outburst when roofsupporting pillars failed.

100 The Company's plants are dependent upon all longwall operated mines. 101 As these recent events suggest, the supply risk associated with these longwall 102 operations is increasing.

103 Q. Please explain the inventory targets for the Utah plants per the Company
 104 Coal Inventory Policies and Procedures dated September 30, 2010.

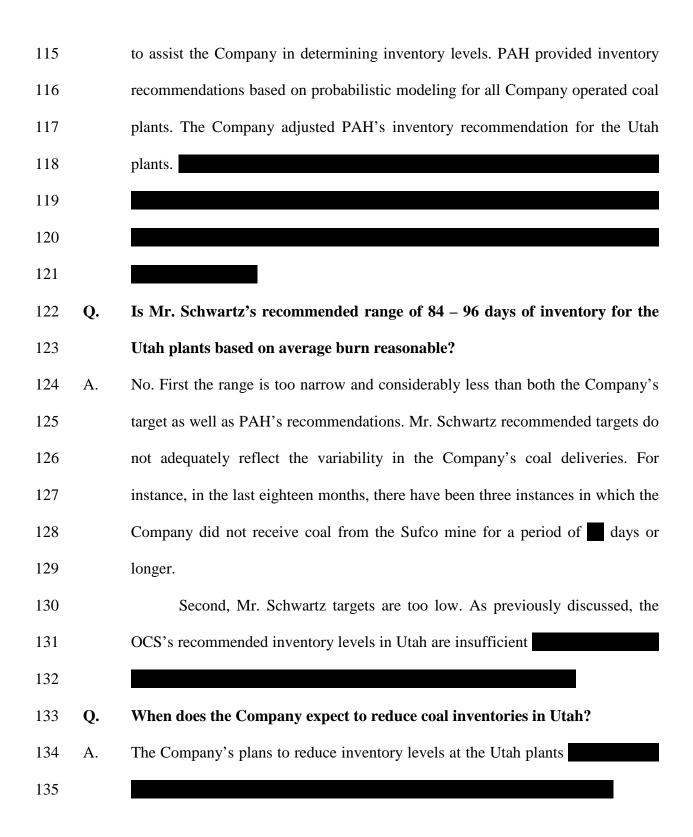
A. The Company has established both a collective short-term and long-term
inventory target for the Utah plants. While coal inventories in Utah initially
increased as a result of the coal acquired from Arch under the Electric Lake
settlement, the Company's current target is necessary



#### 113 Q. Are the Company's coal inventory targets for the Utah plants excessive?

114 A. No. The Company retained the consulting firm of Pincock, Allen and Holt (PAH)

<sup>&</sup>lt;sup>1</sup> Bounce is the sudden outburst of coal and rock that occur when stresses in a coal pillar, left for support in underground workings, cause the pillar to rupture without warning, sending coal and rock flying with explosive force.



136	Q.	Please summarize the Company's position regarding OCS witness Mr.
137		Schwartz proposed disallowance of the Company's fuel stock?
138	A.	The Company's position is that the Commission should reject the OCS's
139		proposed rate base disallowance. Mr. Schwartz has arbitrarily
140		adjusted Utah inventory levels without appropriately considering the Company's
141		risk associated with supply.
142	Q.	Please summarize the Company's position regarding OCS witness Mr.
143		Schwartz proposed inventory targets?
144	A.	The Company maintains that the Company's inventory targets are appropriate for
145		the Utah plants
146		
147		
148	Bridg	ger Outage Rate
149	Q.	Please explain OCS' proposal related to Bridger plant outage rates.
150	A.	OCS's proposal to adjust the Bridger plant outage rate includes several
151		components. As Mr. Falkenberg states with respect to Adjustment 21.6, Bridger
152		Outage Rate on page 51 of his testimony:
153 154 155 156		I recommend the Commission reduce the outage rates used for Bridger to remove the extra output lost resulting from liquidated damage payments, impute improved fuel quality and reduce error outage to match the NERC averages.
157		The Company disagrees with OCS's adjustment. Mr. Falkenberg's issues of
158		contractor's failure to complete outage work on time and excessive outages due to
159		employee errors at the Bridger plant have been addressed in the testimony of
160		Company witness Mr. Gregory N. Duvall.

- 161 Q. How much of OCS' Adjustment 21.6, Bridger Outage Rate, relate to low
  162 quality coal?
- A. Mr. Falkenberg's Adjustment 21.6 Bridger Outage Rate of \$529,402 (total
  Company basis) includes approximately \$381,000 for low coal quality or
  \$164,000 on a Utah allocated basis.
- Q. Has Mr. Falkenberg previously proposed an adjustment to net power cost for
   Bridger plant de-rations due to Bridger coal quality?
- A. Not in a regulatory proceeding in Utah. However, Mr. Falkenberg has proposed a
  similar adjustment in most of the Company's other jurisdictions and the proposed
  adjustment has been rejected in Idaho, Docket PAC-E-10-07, and Washington,
  Docket UE-100749.
- 172 **Q.** Please explain OCS's proposal related to low quality of coal.
- A. OCS argues that the quality of fuel at the Bridger plant has resulted in an
  unnecessarily high number of de-rations at the plant. OCS argues that additional
  net power costs resulting from fuel quality problems at the Bridger plant should
  be disallowed.
- 177 Q. Do the Bridger Coal Company and the Bridger power plant have established
  178 coal quality targets?
- A. Yes. Both Bridger Coal Company and the Bridger plant have established coal
  quality targets for heat value, ash, sulfur, sodium, etc. Through vigorous blending,
  both the Bridger mine and the Bridger plant minimize quality variations that
  undermine optimal plant performance. Although Bridger Coal does attempt to
  deliver a consistent product, at times it is limited by the size and quality of the

184 mine stockpiles and physical logistics. Bridger mine's surface operation 185 historically delivered a consistent coal blend through mining of coal in multiple 186 exposed seams. The development of the underground mine and the scaling back 187 of the surface operation has resulted in increased blending requirements, greater 188 unpredictability in coal deliveries and the potential for extended periods of high 189 ash coal production.

#### 190 Q. Has Bridger Coal quality changed with underground mining?

A. Yes, the majority of the plant's fuel quality de-rations have been attributed to high
ash content associated with the Bridger underground operation. Bridger Coal
Company and the Bridger plant have established 13 percent as a maximum for ash
content necessary for optimal plant performance. Prior to underground mining,
the mine consistently delivered the Bridger plant coal with a maximum of 13
percent ash. With the advent of underground mining, however, the calculated ash
content has at times exceeded the 13 percent ash target.

### 198 Q. Does the Company routinely blend for ash content at its other locations 199 where coal is produced from underground mining?

A. Yes. All of the coal produced in Utah is currently from underground mining. All of these mines, at times, produce coal that does not meet contract specifications. Coal stockpiling and blending facilities at the Hunter and Huntington plants enable the Company to mix these coals as necessary to provide the power plants with a consistent coal quality. These facilities allow the Company to efficiently and economically segregate, stockpile, and reclaim underground coal based on a particular coal quality. There is not a similar coal blending facility at the Bridger

#### Page 9 - Rebuttal Testimony of Cindy A. Crane - REDACTED

207 plant.

# Q. Would coal costs be impacted by decreasing production from the Bridger underground operation and increasing production from the surface operation to reduce ash content?

A. Yes. Increasing surface production at the expense of the underground production
would likely result in lower ash coal content, but higher fuel costs since the
incremental cost of the surface operation is greater than the decremental cost of
the underground operation.

## Q. Does OCS adjust average Bridger plant coal costs for the increased costs of the surface operation?

A. No. OCS incorrectly assumes that average costs at the Bridger plant would remain the same regardless of the Bridger underground production. OCS inappropriately imputes an adjustment to net power cost, but ignores the reduced coal costs that result from the favorable economics associated with underground mining. Or to frame it differently, they fail to include a corresponding increase to their adjustment for increased costs of surface mine operations.

### Q. Please identify the efforts the Company has made to reduce coal quality restrictions.

A. The Company has spent considerable time identifying quality parameters that
 result in optimized plant performance for its thermal fleet. Bridger mine and
 Bridger plant personnel routinely discuss coal deliveries and quality and coal
 deliveries are often adjusted daily.

## Q. Are additional modifications being made to the fuel handling system and blending capabilities at Bridger Coal Company?

A. Yes. The mine previously enlarged the stockpile footprint at the truck dump station, TDS-2 and has requested the Wyoming Department of Environmental Quality (WDEQ) to issue a permit allowing for further expansion of this site. Bridger Coal expects the WDEQ to issue a permit by the end of the year. The permit would allow the mine to expand the capacity of this truck dump station with an additional 500,000 tons of sealed inventory capacity.

237 This expansion would allow the mine to further segregate coal produced 238 by the underground mine, store higher ash coal and minimize the variability of the 239 ash content in deliveries to the Jim Bridger plant. Additionally, Bridger Coal has 240 completed preliminary engineering and design of an upgrade to truck dump 241 station TDS-2. This upgrade will allow Bridger Coal to feed or reclaim coal 242 stockpiled at truck dump station TDS-2 directly back to the conveyor system 243 rather than being hauled by truck to another dump station, ultimately improving 244 coal blending.

Q. Please summarize the Company's position regarding OCS's adjustment to
reduce net power costs by approximately \$381,000 on a system basis or
\$164,000 on a Utah allocated basis due to fuel quality restrictions at the
Bridger plant.

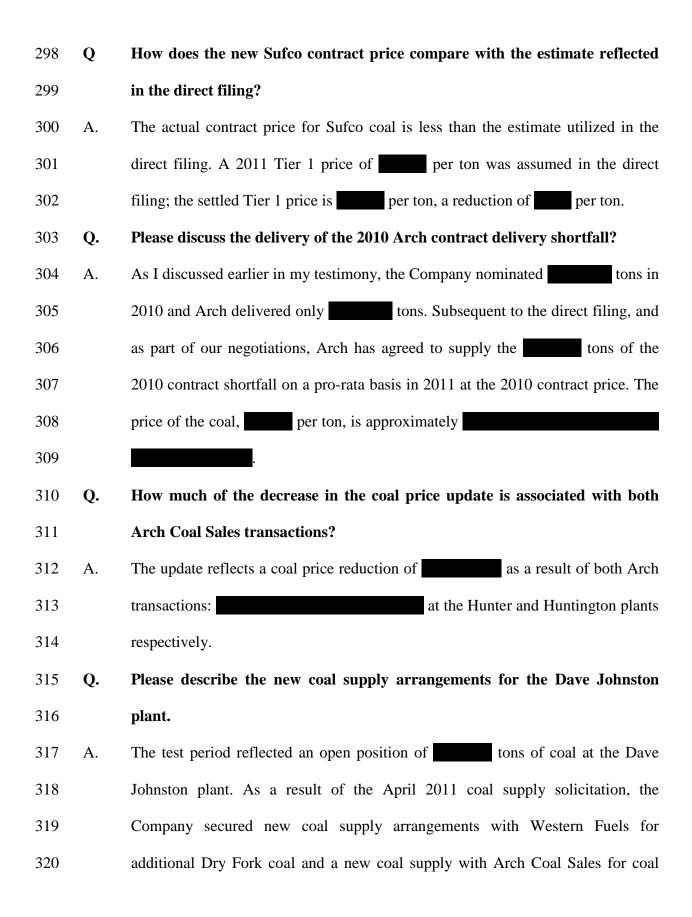
### A. The Company requests that the Commission reject OCS's adjustment. OCS inappropriately imputes an adjustment to net power cost and ignores the increase in coal costs that would result from increasing surface coal production and

- reducing underground coal production.
- 253 Bridger Coal Company Fines and Citations
- Q. Does the Company agree with UIEC's adjustment to Bridger plant fuel
   expense for Bridger fines and citations?
- A. Yes. The Company agrees to remove Bridger Coal Company fines and citations
  from test period expenses. An amount of \$298,087, on a total system basis, has
  been removed from Bridger plant fuel expense in the coal cost update included in
  the Company's rebuttal revenue requirement calculation.
- 260 **Coal Cost Update**

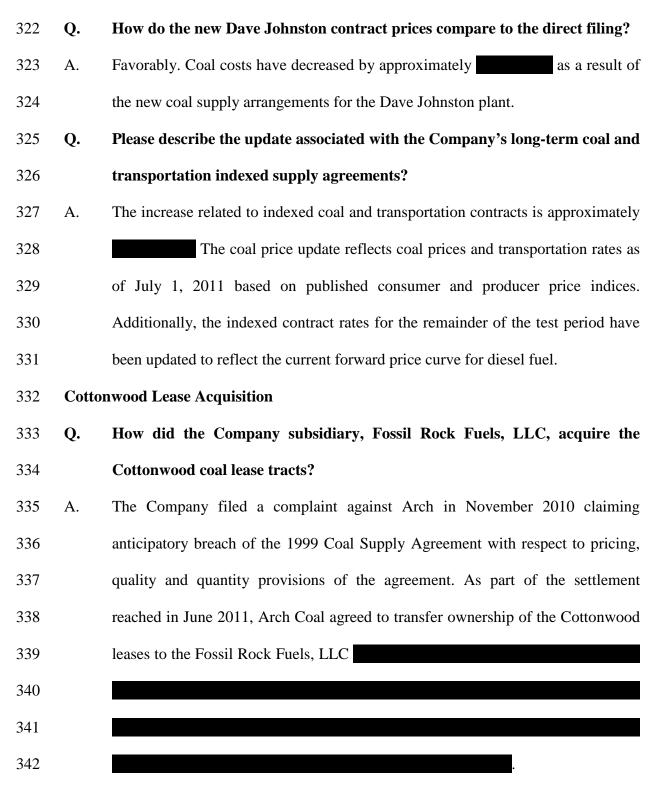
#### 261 Q. Please explain the coal cost update included in the Company's rebuttal filing.

- A. Coal costs have been reduced by approximately million, on a total system basis, from the direct filing with approximately million of the decrease associated with reduced volumes and million of the decrease associated with lower coal prices.
- Q. Does the coal cost update include the price corrections for Bridger and
  Huntington plants?
- A. Yes. The update reflects the corrections previously communicated by the
  Company in response to DPU 4.39 and reflected in UIEC Adjustment 11.
- Q. What are the primary drivers of the million decrease in coal prices in this
  case?
- 272 A. The update includes:
- Settlement of the Company's 2011 price re-opener dispute with Arch Coal
  Sales for Sufco coal,

275		• Arch's agreement to deliver to the Company's coal plants the tons
276		of contract shortfall associated with 2010 contract deliveries,
277		• New coal supply agreements for the Dave Johnston plant,
278		• Removal of fines and citations for Bridger Coal and
279		• Update of coal and transportation costs to reflect actual July 2011 rates
280		and projected changes in contract indices.
281	Q.	Please explain the changes associated with the affiliate mines.
282	A.	With the exception of the removal of \$298,087 for Bridger Coal fines and
283		citations, and the correction noted by Mr. Widmer in UIEC Adjustment 11, coal
284		production and operating costs for Bridger Coal and Deer Creek have not changed
285		since the direct filing.
286	Q.	Please summarize the Company's settlement with Arch Coal Sales for the
286 287	Q.	Please summarize the Company's settlement with Arch Coal Sales for the Sufco mine coal supply.
	<b>Q.</b> A.	
287		Sufco mine coal supply.
287 288		Sufco mine coal supply. In June 2011, the Company entered into a settlement agreement with Arch Coal
287 288 289		Sufco mine coal supply. In June 2011, the Company entered into a settlement agreement with Arch Coal that:
287 288 289 290		Sufco mine coal supply. In June 2011, the Company entered into a settlement agreement with Arch Coal that: (a) provides for a third amendment to the existing coal supply agreement
287 288 289 290 291		Sufco mine coal supply. In June 2011, the Company entered into a settlement agreement with Arch Coal that: <ul> <li>(a) provides for a third amendment to the existing coal supply agreement ("CSA") extending it with modified terms through the first five-year</li> </ul>
287 288 289 290 291 292		Sufco mine coal supply. In June 2011, the Company entered into a settlement agreement with Arch Coal that: <ul> <li>(a) provides for a third amendment to the existing coal supply agreement ("CSA") extending it with modified terms through the first five-year extension period ending December 31, 2015;</li> </ul>
287 288 289 290 291 292 293		<ul> <li>Sufco mine coal supply.</li> <li>In June 2011, the Company entered into a settlement agreement with Arch Coal that:</li> <li>(a) provides for a third amendment to the existing coal supply agreement ("CSA") extending it with modified terms through the first five-year extension period ending December 31, 2015;</li> <li>(b) stipulates that the Company or its subsidiary will acquire the Cottonwood</li> </ul>
287 288 289 290 291 292 293 294		<ul> <li>Sufco mine coal supply.</li> <li>In June 2011, the Company entered into a settlement agreement with Arch Coal that:</li> <li>(a) provides for a third amendment to the existing coal supply agreement ("CSA") extending it with modified terms through the first five-year extension period ending December 31, 2015;</li> <li>(b) stipulates that the Company or its subsidiary will acquire the Cottonwood coal reserve leases (the "Cottonwood leases") from Arch Coal's subsidiary</li> </ul>



321 from the Coal Creek mine.



343	Q.	Is the Company proposing an adjustment to the test period rate base?
344	A.	Yes, the Company is proposing to adjust Plant Held for Future Use by
345		million. These reserves are integral to the Company's long term coal supply for
346		the Utah plants.
347	Q.	Where are the Cottonwood coal leases located and why are they strategic for
348		the Company?
349	А,	The Cottonwood coal leases are located adjacent to the Company's existing but
350		inactive Trail Mountain federal coal leases in Utah. The leases could be mined as
351		a replacement for the current Deer Creek mine which is projected to be depleted
352		, as a replacement to the current West Ridge coal supply
353		agreement expiring in 2014 and/or in lieu of Sufco coal during the second
354		extension period, 2016 -2020. Securing these leases affords the company and
355		customers benefits that will stem from
356		in the near term and ultimately replacement supply when the
357		Deer Creek mine depletes. The Company previously attempted to acquire the coal
358		leases in December 2007 during SITLA's lease auction; however, the Company
359		was outbid by Arch Coal subsidiary, Ark Land Company.
360	Utah	Coal reserves – Increasing sulfur content
361	Q.	Is the sulfur content of the Hunter plant's coal supplies projected to increase
362		in the future and was this one of the factors contributing to the scope of the
363		Company's investment in pollution control equipment?
364	A.	Yes and Yes. The Company is already experiencing an increase in sulfur content
365		in coal delivered to the Hunter plant. Furthermore, based upon discussions and

information provided by key mine operators in Utah, future coal supplies are
projected to have higher sulfur content. The Company's projection of Hunter
plant's average coal quality through 2020 was provided in confidential response
to UAE 14.1 and is included as Confidential Exhibit CAC-1R. As illustrated in
Exhibit CAC-1R, the weighted average sulfur content is projected to

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Although the coal quality data in the Exhibit CAC-IR represents annual averages, actual daily, weekly and monthly coal deliveries will have a much wider range of variability. The wide variations in the daily coal deliveries require extensive blending to ensure a consistent coal blend for the plant.

### 377 Q. Has the Company analyzed any data to independently verify these 378 contentions?

A. Yes. In confidential response to UAE 14.1, the Company provided a presentation
prepared by UtahAmerican Energy Inc. projecting future coal quality for West
Ridge and Lila Canyon mines. The Company currently has a long term coal
supply agreement with UtahAmerican Energy Inc. and is receiving coal from its
West Ridge mine,

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 Additionally, the Company received information from Arch Coal, the

 386
 largest producer of coal in Utah,

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**Q**.

391Hunter plant's coal supply?392A.Yes. The Company has a competitive contract with West Ridge mine for coal393deliveries to the Hunter facility through 2014 with coal sulfur content as described394above. Furthermore, information obtained from both UtahAmerican Energy Inc.

Will these high sulfur coal supplies become a significant portion of the

and Arch Coal indicates that future coal supplies within the cost competitive

- 396 market serving the Company's Utah facilities
- 397
- 398 Q. Is the Company contractually obligated to purchase its fuel from these
  399 sources or can it procure coal elsewhere?
- 400 A. Yes. The Company is contractually obligated to purchase coal from both
  401 UtahAmerican Energy Inc. and Arch Coal, at least currently through 2014 and
  402 2015 respectively. The Company has long term cost-competitive coal supply
  403 agreements with both companies. These two companies produce approximately
  404 seventy percent of the total Utah coal supply.
- 405 Q. Is the Company's Deer Creek mine
- 406
- 407 A. Yes, in early 2011 the Company's Deer Creek mine

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- Q. Does the Company's Deer Creek mine plans reflect further
- 411 ?
  412 A. Yes, the Company's Deer Creek mine plans and drilling program reflect that the
  413 mine is expected to
- 415 Q. Could the Company transport lower sulfur coal from mines in Wyoming or
  416 Colorado to avoid the rise in sulfur content from Utah coal sources?
- 417 Not in a cost effective way in the near future. None of the Company's Utah plants Α. 418 have rail access. All three of these plants receive coal from mines which are 419 located within a sixty-five mile radius. All coal delivered to the Hunter and 420 Carbon plants is delivered via coal haul trucks. The Huntington plant's primary 421 coal supply is delivered via a conveyor belt which connects the Company's Deer 422 Creek mine to the Huntington plant. The Company's plants were designed to 423 consume and were located near the coal resources located in both the Wasatch 424 Plateau and Book Cliffs coal fields. Transporting coal from Wyoming or 425 Colorado would require expensive plant modifications in order to receive, handle 426 and consume the coal from outside of the Utah Wasatch Plateau and Book Cliffs 427 coal fields and would prove uneconomic relative to local supplies.
- 428 **Q. Does this conclude your testimony**?

429 A. Yes.