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October 26, 2017

Public Utility Commission of Oregon
Filing Center
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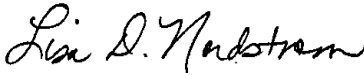
RE: UP ____ – In the Matter the Application of Idaho Power Company for an Order
Authorizing the Approval of the Purchase of an Ash Analyzer from PacifiCorp

Attention Filing Center:

Attached for filing is an electronic copy of Idaho Power Company's Application requesting an order authorizing approval of the purchase of an ash analyzer from PacifiCorp.

Please contact me at (208) 388-5825 or Regulatory Analyst Courtney Waites at (208) 388-5612 with any questions regarding this filing.

Very truly yours,



Lisa D. Nordstrom

LDN/kkt

Enclosures

1 **BEFORE THE PUBLIC UTILITY COMMISSION**
2 **OF OREGON**

3 **UP _____**

4 In the Matter of the Application of Idaho)
5 Power Company for an Order Authorizing)
6 Approval of the Purchase of an Ash) **APPLICATION**
7 Analyzer from PacifiCorp)
_____)

8 Pursuant to ORS § 757.485 and OAR 860-027-0025, Idaho Power Company (“Idaho
9 Power” or “Company”) seeks approval from the Public Utility Commission of Oregon
10 (“Commission”) for an order authorizing the purchase of the ThermoFisher Elemental
11 CrossBelt Analyzer (“EC analyzer”) from PacifiCorp.

12 **I. INTRODUCTION**

13 Bridger Coal Company (“BCC”), a joint venture between Idaho Energy Resources Co.
14 (“IERCo”) and Pacific Minerals, Inc. (“Pacific Minerals”), mines and supplies coal to the Jim
15 Bridger generating plant (“Jim Bridger plant”), located in Sweetwater County, Wyoming.
16 Idaho Power is the parent of IERCo and PacifiCorp is the parent of Pacific Minerals. The
17 Jim Bridger plant is owned by Idaho Power (one-third) and PacifiCorp (two-thirds). BCC is
18 located in southwestern Wyoming and consists of two principal operating units: a surface
19 operation and an underground operation. The coal from both operations is delivered to the
20 Jim Bridger plant.

21 Surface mining operations began in 1974 and underground operations began in 2004
22 to reduce the cost of fuel supplied to the Jim Bridger plant. The underground operation at
23 BCC mines a single coal seam through the use of a longwall retreat mining system as the
24 primary method of coal recovery, utilizing a shearing machine, face conveyor, and hydraulic
25 roof supports, along with other ancillary components assembled into a single mining system
26 operating simultaneously to extract coal on a continuous basis. The longwall technique is

1 one of the most efficient methods of underground coal mining and yields the highest
2 recovery of the in-place resource.

3 The Jim Bridger plant is designed to burn coal within specific parameters to maximize
4 generation output. Coal outside of these parameters may cause the plant to be de-rated
5 and will reduce generation output. When the thickness of the coal seams fall below a
6 longwall's minimum mining height, the longwall cut will include the rock overlying the coal,
7 significantly increasing the ash content of the coal. As the rock levels fall outside the specific
8 parameters, BCC may blend the underground product with surface operation coal that has
9 lower ash content to meet the plant's specific parameters and maximize generation output.

10 The Jim Bridger plant measures the ash content of the coal using a ThermoFisher
11 Coal Quality Monitor analyzer ("CQM analyzer"). The CQM analyzer is located at the
12 surface mine and provides real-time continuous data on total ash in the surface operation
13 coal. In addition, BCC operates a Scantech Coal Scan over the belt coal analyzer ("SCS
14 analyzer") at the underground mine. Currently, the SCS analyzer is not reliable and cannot
15 be recalibrated accurately due to a tonnage restriction on the North Wing conveyor. The
16 SCS analyzer is failing to provide the accuracy for the Jim Bridger plant blending
17 requirements, leaving shipments from the mine to the Jim Bridger plant vulnerable to being
18 reduced and/or potentially de-rating generation at the plant.

19 **II. THERMOFISHER ELEMENTAL CROSSBELT ANALYZER**

20 In 2015, PacifiCorp ceased operations at the Deer Creek mine, located in Emery
21 County, Utah, and commenced reclamation activities. Sitting idled at the Deer Creek mine
22 is the EC analyzer. The EC analyzer is designed to mount around an existing conveyor belt
23 and analyze the composition of the coal on the belt in real-time, measuring and reporting
24 ash and sulfur. The EC analyzer unit was installed at Deer Creek in August 2013 at a cost
25 of \$296,700 and used until January 2015. Due to the unreliability of the SCS analyzer at
26

1 the underground mine, BCC is requesting the purchase, relocation, and installation of the
2 idle EC analyzer from the Deer Creek mine to the BCC mine.

3 If the transaction is approved, BCC will install the EC analyzer immediately
4 downstream from the truck dump station #2 ("TDS #2") stockpile, which is approximately six
5 miles upstream from the existing CQM analyzer located at the surface mine. This will allow
6 the EC analyzer to measure the coal quality of all underground mine coal, including coal
7 shipped directly to the plant and coal stockpiled on TDS #2 stockpile, providing the needed
8 accuracy for plant blending requirements. The installation of the EC analyzer will allow for
9 early detection and flexibility in adjusting to coal quality variances. In addition, the EC
10 analyzer can also be used to recalibrate the existing analyzers without having to exceed
11 tonnage restrictions on the North Wing conveyor. The increased accuracy will allow for
12 more precise blending and reduce rehandling of high ash coal. As of July 31, 2017, BCC
13 had spent approximately \$126,000 year-to-date rehandling and shipping high ash from the
14 underground mine to the Jim Bridger plant due to the lack of reliability in the current
15 analyzer.

16 BCC solicited fair market value appraisals for the EC analyzer and selected two
17 companies from a recommended list of appraisers. The two companies returned very
18 similar fair market values for the EC analyzer based on its time in service. BCC views the
19 average of the two appraisals, \$29,850, to be the fair market value. See Attachments 1 and
20 2 for a copy of the appraisals and Attachment 3 for BCC's evaluation of the appraisals.
21 Under the proposal, BCC will purchase the EC analyzer from PacifiCorp at the fair market
22 value, \$29,850. The relocation and installation to the BCC mine will cost an estimated
23 \$66,793, bringing BCC's total cost of the EC analyzer project to \$96,643. Idaho Power's
24 share of the cost is \$32,214 ($\$96,643 \times 33.33$ percent).

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III. REASON FOR THE PROPERTY TRANSACTION

Pursuant to ORS § 757.485(1), no public utility shall, directly or indirectly, purchase, acquire or become the owner of any of the stocks or bonds or property utilized for utility purposes and having a value in excess of \$10,000 of any other public utility unless authorized so to do by the Public Utility Commission. The purchase, relocation and installation of the EC analyzer by BCC will not adversely affect IERCo, Idaho Power or its customers. The addition of the EC analyzer will more accurately determine the quality of the underground mine coal. The increased accuracy will allow for more precise blending and reduce rehandling of high ash coal. In fact, the Company expects the purchase and utilization of the EC analyzer at BCC to result in lower overall cost of production at the Jim Bridger plant over time due to the maximization of generation output and the reduction of high ash content coal rehandling and shipping costs. This cost reduction benefit will flow to Idaho Power’s customers in the form of reduced coal fuel expenses as compared to what would have otherwise existed. Absent the EC analyzer, BCC leaves the coal shipments vulnerable to being reduced and/or de-rating generation at the plant. The purchase of the EC analyzer is expected to reduce the cost of production at the Jim Bridger plant and will provide a more reliable and accurate coal supply resulting in lower overall costs to Idaho Power and its customers.

IV. COMPLIANCE WITH OAR 860-027-0025(1) FILING REQUIREMENTS

Pursuant to the requirements of OAR 860-027-0025(1), Idaho Power represents as follows:

A. The Exact Name and Address of the Utility’s Principal Business Office.

Idaho Power Company, 1221 West Idaho Street (83702), P.O. Box 70, Boise, Idaho 83707-0070.

1 **B. The State in Which Incorporated, the Date of Incorporation, and the Other**
2 **States in Which Authorized to Transact Utility Operations.**

3 Idaho Power was incorporated under the laws of the state of Maine on May 6, 1915,
4 and migrated its state of incorporation from the state of Maine to the state of Idaho effective
5 June 30, 1989. It is qualified as a foreign corporation to do business in the states of Oregon,
6 Nevada, Montana, and Wyoming in connection with its utility operations. Idaho Power is
7 authorized to provide retail electric service in Idaho and Oregon.

8 **C. Name and Address of the Person on Behalf of Applicant Authorized to**
9 **Receive Notices and Communications in Respect to the Applications.**

10 The name and address of the persons authorized on behalf of Idaho Power to receive
11 notices and communications in respect to this Application are:

12	Lisa D. Nordstrom, Lead Counsel	Regulatory Dockets
13	Idaho Power Company	Idaho Power Company
14	1221 West Idaho Street (83702)	1221 West Idaho Street (83702)
15	P.O. Box 70	P.O. Box 70
16	Boise, Idaho 83707	Boise, Idaho 83707
17	Telephone: (208) 388-5825	dockets@idahopower.com
18	Facsimile: (208) 388-6936	
19	lnordstrom@idahopower.com	

20 **D. The Names, Titles, and Addresses of the Principal Officers.**

21 As of March 1, 2017, the names, titles, and addresses of the principal officers of Idaho
22 Power are as follows:

23	<u>Name</u>	<u>Title</u>
24	Darrel T. Anderson	President and Chief Executive Officer
25	Brian Buckham	Sr. Vice President and General Counsel
26	Jeff S. Glenn	Vice President of Information Technology and Chief Information Officer
27	Lisa A. Grow	Sr. Vice President and Chief Operating Officer
28	Patrick A. Harrington	Corporate Secretary
29	Steven R. Keen	Sr. Vice President, Chief Financial Officer and Treasurer

1	Lonnie G. Krawl	Sr. Vice President of Administrative Services and Chief Human Resources Officer
2		
3	Jeffrey L. Malmen	Sr. Vice President of Public Affairs
4	Tess R. Park	Vice President of Power Supply
5	Ken Petersen	Vice President, Controller and Chief Accounting Officer
6	N. Vern Porter	Vice President of T&D Engineering and Construction and Chief Safety Officer
7		
8	Adam J. Richins	Vice President of Customer Operations and Business Development
9	Tim E. Tatum	Vice President of Regulatory Affairs

10 The address of all of the above officers is:

11 1221 West Idaho Street (83702)
12 P.O. Box 70
13 Boise, Idaho 83707-0070

14 **E. A Description of the General Character of the Business Done and to Be
15 Done, and a Designation of the Territories Served, by Counties and
16 States.**

17 Idaho Power is an electric public utility engaged principally in the generation, purchase,
18 transmission, distribution, and sale of electric energy in a 24,000 square mile area over
19 southern Idaho, and in the counties of Baker, Harney, and Malheur in eastern Oregon. A
20 map showing Idaho Power's service territory is on file with the Commission as Exhibit H to
21 Idaho Power's application in Docket No. UF 4063.

22 **F. A Statement, as of the Date of the Balance Sheet Submitted With the
23 Application, Showing For Each Class and Series of Capital Stock: Brief
24 Description; the Amount Authorized (Face Value and Number of Shares);
25 the Amount Outstanding (Exclusive of Any Amount Held in the Treasury);
26 Amount Held as Reacquired Securities; Amount Pledged; Amount
Owned By Affiliated Interests; and Amount Held in Any Fund.**

27 Idaho Power requests the Commission waive the requirements of OAR 860-027-
28 0025(1)(f) because this transaction does not involve the issuance of securities. A grant of
29 this waiver will not impede the Commission's analysis of this Application.

1 **G. A Statement, as of the Date of the Balance Sheet Submitted With the**
2 **Application, Showing for Each Class and Series of Long-Term Debt and**
3 **Notes: Brief Description (Amount, Interest Rate and Maturity); Amount**
4 **Authorized; Amount Outstanding (Exclusive of Any Amount Held in the**
 Treasury); Amount Held as Reacquired Securities; Amount Pledged;
 Amount Held By Affiliated Interests; and Amount in Sinking and Other
 Funds.

5 Idaho Power requests the Commission waive the requirements of OAR 860-027-
6 0025(1)(g) because this transaction does not involve the issuance of securities. A grant of
7 this waiver will not impede the Commission’s analysis of this Application.

8 **H. Whether the Application Is for Disposition of Facilities by Sale, Lease, or**
9 **Otherwise, a Merger or Consolidation of Facilities, or for Mortgaging or**
10 **Encumbering Its Property, or for the Acquisition of Stock, Bonds, or**
 Property of Another Utility, Also a Description of the Consideration, If
 Any, and the Method of Arriving at the Amount Thereof.

11 This Application requests approval of the purchase, relocation and installation by BCC
12 of the EC analyzer from PacifiCorp. The total cost of the EC analyzer project is \$96,643,
13 which is the sum of the fair market value including relocation and installation costs, of which
14 Idaho Power’s share is \$32,214. The Company expects the purchase and utilization of the
15 EC analyzer at BCC to result in a lower overall cost of production at the Jim Bridger plant
16 over time due to the maximization of generation output and the reduction of high ash content
17 coal rehandling and shipping costs.

18 **I. A Statement and General Description of Facilities to Be Disposed of,**
19 **Consolidated, Merged, or Acquired from Another Utility, Giving a**
20 **Description of Their Present Use and of Their Proposed Use After**
21 **Disposition, Consolidation, Merger, or Acquisition. State Whether the**
 Proposed Disposition of the Facilities or Plan for Consolidation, Merger,
 or Acquisition Includes All the Operating Facilities of the Parties to the
 Transaction.

22 The subject property consists of the EC analyzer as set forth in subsection (h) above.

23 **J. A Statement by Primary Account of the Cost of the Facilities and**
24 **Applicable Depreciation Reserve Involved in the Sale, Lease, or Other**
25 **Disposition, Merger or Consolidation, or Acquisition of Property of**
26 **Another Utility. If Original Cost Is Not Known, an Estimate of Original**
 Cost Based, to the Extent Possible, Upon Records or Data of the
 Applicant or Its Predecessors Must Be Furnished, a Full Explanation of

1 **the Manner in Which Such Estimate Has Been Made, and a Statement**
2 **Indicating Where All Existing Data and Records May Be Found.**

3 Please refer to Exhibit J, which demonstrates the cost of the facilities by primary
4 account.

5 **K. A Statement as to Whether or Not Any Application With Respect to the**
6 **Transaction or Any Part Thereof, Is Required to Be Filed With Any Federal**
7 **or Other State Regulatory Body.**

8 Idaho Power is not required to file an application for approval from any other federal
9 or state regulatory body with respect to the transaction.

10 **L. The Facts Relied Upon by Applicants to Show that the Proposed Sale,**
11 **Lease, Assignment, or Consolidation of Facilities, Mortgage or**
12 **Encumbrance of Property, or Acquisition of Stock, Bonds, or Property of**
13 **Another Utility Will Be Consistent With the Public Interest.**

14 The purchase of the EC analyzer by BCC will not adversely affect IERCo, Idaho Power
15 or its customers. The Company expects the purchase and utilization of the EC analyzer at
16 BCC to result in a lower overall cost of production at the Jim Bridger plant over time due to
17 the maximization of generation output and the reduction of high ash content coal rehandling
18 and shipping costs. These cost reduction benefits will flow to Idaho Power's customers in
19 the form of reduced coal fuel expenses as compared to what would have otherwise existed.
20 Absent the EC analyzer, BCC leaves the coal shipments vulnerable to being reduced and/or
21 de-rating generation at the plant. The purchase of the EC analyzer is expected to reduce
22 the cost of production at the Jim Bridger plant and will provide a more reliable coal fuel
23 supply resulting in lower overall costs to Idaho Power and its customers.

24 **M. The Reasons, in Detail, Relied Upon by Each Applicant, or Party to the**
25 **Application, for Entering into the Proposed Sale, Lease, Assignment,**
26 **Merger, or Consolidation of Facilities, Mortgage or Encumbrance of**
27 **Property, Acquisition of Stock, Bonds, or Property of Another Utility, and**
28 **the Benefits, If Any, to Be Derived by the Customers of the Applicants**
29 **and the Public.**

30 See Sections I, II and III and subsections (h) and (l) above.

1 **N. The Amount of Stock, Bonds, or Other Securities, Now Owned, Held or**
2 **Controlled by Applicant, of the Utility from Which Stock or Bonds Are**
3 **Proposed to be Acquired.**

3 Not applicable.

4 **O. A Brief Statement of Franchises Held, Showing Date of Expiration If Not**
5 **Perpetual, or, in Case of Transfer/Sale, that Transferee Has the Necessary**
6 **Franchises.**

6 Not applicable.

7 **V. COMPLIANCE WITH OAR 860-027-0025(2) FILING REQUIREMENTS FOR**
8 **IDAHO POWER COMPANY**

9 The following exhibits are submitted and by reference made a part of this Application:

10 **A. Exhibit A. Articles of Incorporation.**

11 A copy of Idaho Power’s Restated Articles of Incorporation, as amended on May 17,
12 2012, has heretofore been filed with the Commission in Docket UF 4278, reference to which
13 is hereby made.

14 **B. Exhibit B. Bylaws.**

15 A copy of Idaho Power’s Bylaws, as amended, has heretofore been filed with the
16 Commission in Docket UF 4214, reference to which is hereby made.

17 **C. Exhibit C. Resolution of Directors Authorizing Transaction.**

18 This transaction did not require approval from IERCo’s Board of Directors.

19 **D. Exhibit D. Mortgages, Trust, Deeds, or Indentures Securing Obligation of**

20 **Each Party.**

21 None.

22 **E. Exhibit E. Balance Sheet Showing Booked Amounts, Adjustments to**
23 **Record the Proposed Transaction and Pro Forma, With Supporting Fixed**
24 **Capital or Plant Schedules in Conformity With the Forms in the Annual**
25 **Report.**

25 The purchase, relocation and installation of the EC analyzer from PacifiCorp herein
26 will not materially affect Idaho Power’s balance sheet. Idaho Power respectfully requests

1 that the requirement to provide pro forma information be waived because the subject
2 transaction is not expected to materially affect Idaho Power's financial statements.

3 **F. Exhibit F. Known Contingent Liabilities.**

4 Idaho Power respectfully requests a waiver of this requirement because there are no
5 known contingent liabilities associated with this transaction.

6 **G. Exhibit G. Comparative Income Statements Showing Recorded Results
7 of Operations, Adjustments to Record the Proposed Transaction and Pro
8 Forma, in Conformity With the Form in the Annual Report.**

8 The purchase, relocation and installation of the EC analyzer from PacifiCorp will not
9 materially affect Idaho Power's income statements. For the reasons set forth above, Idaho
10 Power respectfully requests a waiver of these requirements.

11 **H. Exhibit H. Analysis of Surplus for the Period Covered by Income
12 Statements Referred to in G.**

13 The purchase, relocation and installation of the EC analyzer from PacifiCorp does not
14 materially affect Idaho Power's income statements and thus the Company respectfully
15 requests a waiver from this requirement.

16 **I. Exhibit I. Copy of Contract for Transaction and Other Written
17 Instruments.**

18 Included with this Application as Attachment 4 is a copy of the Capital Appropriation
19 Document between Idaho Power and PacifiCorp.

20 **J. Exhibit J. Copy of Each Proposed Journal Entry to Be Used to Record
21 the Transaction.**

21 Please refer to Exhibit J attached.

22 **K. Exhibit K. Copy of Each Supporting Schedule Showing the Benefits, If
23 Any, Which Each Applicant Relies Upon to Support the Facts Required
24 By (1)(L) of This Rule and Reasons as Required by (1)(M).**

24 Idaho Power relies upon this Application and the attached documentation to provide
25 support for OAR 860-027-0025(1)(l) and (1)(m).

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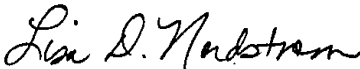
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VI. PRAYER FOR RELIEF

Idaho Power respectfully requests a Commission order approving the purchase, relocation and installation of the EC analyzer from PacifiCorp which is consistent with the public interest.

Dated this 26th day of October, 2017.

Respectfully Submitted,



Lisa D. Nordstrom, Lead Counsel, OSB #97352
On Behalf of Idaho Power Company
1221 West Idaho Street (83702)
P.O. Box 70
Boise, Idaho 83707
Telephone: (208) 388-5825
Facsimile: (208) 388-6936
E-Mail: lnordstrom@idahopower.com

Attachment 1
Appraisal
By John T. Boyd Company

**INDEPENDENT ASSET APPRAISAL
CROSSBELT ANALYZER**

Prepared For
BRIDGER COAL COMPANY (PACIFICORP)

By
John T. Boyd Company
Mining and Geological Consultants
Pittsburgh, Pennsylvania



Report No. 1618.102

JUNE 2017



John T. Boyd Company
Mining and Geological Consultants

Chairman
James W. Boyd

President and CEO
John T. Boyd II

Managing Director and COO
Ronald L. Lewis

Vice Presidents
Richard L. Bate
Robert J. Farmer
James F. Kvitkovich
Russell P. Moran
Donald S. Swartz
John L. Weiss
Michael F. Wick
William P. Wolf

Managing Director - Australia
Ian L. Alexander

Managing Director - China
Jisheng (Jason) Han

Managing Director - South America
Carlos F. Barrera

Managing Director - Metals
Gregory B. Sparks

Assistant to the President
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June 2, 2017
File 1618.102

Bridger Coal Company (PacifiCorp)
P.O. Box 68
1088 Nine Mile Road
Point of Rocks, WY 82942

Attention: Mr. Nathan Schnebeck
Associate Mine Engineer

Subject: Independent Asset Appraisal
CrossBelt Analyzer

Dear Sirs:

Presented herein is John T. Boyd Company's (BOYD) desktop appraisal of a CrossBelt coal analyzer that is intended to be relocated for use at PacifiCorp's Bridger Mine (Bridger), located in Sweetwater County, Wyoming. The date of appraisal is June 1, 2017.

We would like to acknowledge the cooperation of Bridger management in providing documentation and responding to questions and requests for information.

1.0 Background

The asset which is the subject of this appraisal is a Thermo Scientific Elemental CrossBelt Analyzer™ (ECA). The ECA unit is currently located at the closed Deer Creek Mine located in Emery County, Utah. The ECA unit was placed in service at Deer Creek in August 2013. It remained in operation until January 2015. Deer Creek Mine was controlled and operated by Energy West Mining Company, a subsidiary of PacifiCorp, from 1986 through 2015 when the mine was permanently closed.

The ECA unit is intended to be transferred to the Bridger Coal Company, a joint venture two-thirds owned by PacifiCorp, and located near the town of Point of Rocks, Wyoming.

At the time of this appraisal, the ECA unit remains in-place and out-of-service as the nuclear sources (the primary core of the unit) have been removed. The unit has not been serviced nor maintained since decommissioning. Pictures of the unit (as provided by Bridger) are shown in Figure 1, following this text.

2.0 Opinion of Value

The appraised values of the ECA unit are summarized below:

Description	Appraised Value (\$000)				Note
	FMV	OLV	NOLV	NFLV	
Thermo Scientific CrossBelt Coal Analyzer (Core Only)	29.7	25.2	22.7	12.6	Nuclear Sources Removed

BOYD considers the current condition of the ECA unit as a “core”, an asset requiring a significant rebuild (i.e. re-installation of a new nuclear source/upgrade). Given the current status of the ECA unit as being out-of-service, not maintained, and its “Core” condition rating, the asset is considered to have limited marketability and minimal resale value (less than 10% of the cost of a new unit). BOYD’s opinion of the ECA unit’s Fair Market Value (FMV) on an as-is basis, is \$29,700.

Purchase of new nuclear sources would cost approximately \$40,000, plus installation and technical support. While an upgrade of the ECA unit’s electrics and controls is not required for operation, it would be desirable from a sales perspective. A new electronics/controls package would cost approximately \$180,000 plus installation. In comparison, a brand new ECA unit equipped with state-of-the-art electronics would cost approximately \$300,000.

3.0 Scope of Work

By assignment, BOYD completed our independent asset appraisal of the ECA unit on a desktop basis. It is our understanding that the appraisal is required for purposes of internal asset transfer within PacifiCorp. Given the intended use of this appraisal, BOYD considers that a desktop review of the asset is reasonable and appropriate.

BOYD was provided with pertinent information related to the asset including: original price, purchase date, history of operation, current condition, current location, maintenance history, and recent photos of the asset. This information was used as the basis of our appraisal and serves as the primary support for our opinion of value.

We assume the reader is knowledgeable of modern coal processing equipment; we have not included background discussion of mining concepts, equipment, practices, etc.

4.0 Valuation Methodology

The following terms regarding valuation are used in this report:

- Fair Market Value (FMV): The price at which an asset would exchange ownership between a willing buyer and a willing seller, each having reasonable knowledge of all pertinent facts (i.e. asset to be purchased and the market for such property), without being under any compulsion to buy or sell, and both are able and willing to act. FMVs are assigned based on used equipment market conditions on the date of appraisal, but actual sales price is directly affected by the demand for used equipment at the time of sale.
- Orderly Liquidation Value (OLV): The estimated gross amount an asset could be expected to bring in from a liquidation sale (e.g. an organized private auction) where bidders are selected and invited for the purpose of generating competition to achieve the highest selling price. OLVs assume a sufficient amount of time (usually 6 to 12 months) to organize the auction and locate potential buyers. Assets are sold on an individual basis, independent from the operations. Additionally, assets are sold based on the current in-place locations at the operations and on an as-is basis. It is therefore necessary to deduct for recovery costs associated with each piece of equipment, selling costs, and fees associated with the sale.
- Net Orderly Liquidation Value (NOLV): The net dollar amount an asset could be expected to bring in at an orderly liquidation sale minus direct selling costs including: auction fees, equipment recovery costs, transportation costs, facility rentals, administrative costs, and transfer fees. Additionally, recovery costs for equipment are included as the sale is on an as-is/where-is basis.
- Forced Liquidation Value (FLV): The net dollar amount an asset could be expected to bring in at a "forced" liquidation sale. A forced liquidation assumes a public auction of assets on an accelerated basis (typically 60 to 180 days) as compared to an orderly sale; in other words, a "fire sale." Proper advertisement and auctioning processes are assumed but a reduced final price can be expected given the limited timeframe to find suitable buyers in sufficient numbers to generate competitive bids. Assets are sold on an individual basis, independent from the operations. Additionally, assets are sold at the operations and on a where-is/as-is basis. It is therefore

necessary to deduct for recovery costs associated with each piece of equipment, selling costs, and fees associated with the sale.

- Net Forced Liquidation Value (NFLV): The net dollar amount an asset could be expected to bring in at a “forced” liquidation sale minus direct selling costs including: auction fees, equipment recovery costs, transportation costs, facility rentals, administrative costs, and transfer fees.

In valuing the asset, BOYD used a combination of the Market Approach and the Cost Approach where the value of the asset was based on the condition and the cost to replace said piece with a comparable unit with adjustments made for marketability. In assigning a value to an individual asset, BOYD typically utilizes a number of industry publications, manufacturer quotes, published auction results, and proprietary internal files. BOYD also maintains contact with major manufacturers, rebuild shops, and equipment brokers.

The results of this appraisal are considered reasonable and achievable by an experienced mining asset broker. However, the actual sales prices of individual assets would be expected to vary from the appraised values given various considerations at the time of sale including, but not limited to, time period for marketing and conducting the sale, populations of comparable equipment available elsewhere in the marketplace, demand for specialized mining equipment, potential buyer base, and coal market environment. Other factors include the operating condition, age, historic use, and maintenance history of individual items, equipment options, obsolescence, etc.

The condition of this asset was determined through the photos and descriptions provided. BOYD personnel did not make a physical on-site inspection of the equipment (i.e. work was done on a desktop basis).

5.0 Market Conditions

BOYD has taken into consideration the current state of coal market conditions in the Green River Basin and other western coal mining regions in assessing likely demand for used coal processing equipment. Cross-the-belt or over-the-belt coal analyzers are utilized at most coal processing and handling facilities, including port and rail loading and unloading facilities. A used model that is several years old, such as this unit, even in good working order, is not as desirable as newer models that have state-of-the-art electronic/control systems. For this reason, along with the current condition of the unit, its marketability outside of the proposed mining operations is likely to be limited.

6.0 Capability Statement and Project Team

BOYD is a full-service mining and geological consulting firm with over a 70-year history of providing professional services to a diverse client base. Our main office is located in Canonsburg, Pennsylvania (near Pittsburgh), and we have offices in Denver, Brisbane (Australia), and Beijing (China). Our full-time staff maintains expertise in all primary aspects of the mining industry:

- Geology and reserves
- Valuations and mineral/asset appraisals
- Geotechnical analysis
- Operational assessments
- Surface and underground mine planning
- Strategic business plans
- Mineral processing and material handling
- Environmental assessments
- Market and transportation analysis
- Price forecasting
- Competitor analysis
- Financial analysis
- Litigation support
- Mine health and safety

We have had unparalleled exposure to a vast array of coal and mineral properties, including access to commercial data and technical documentation, during the course of our assignments for clientele such as mining companies, utilities, financial institutions, attorneys, reserve owners, equipment manufacturers, and other participants in the mineral industries. While proprietary information acquired during the course of other assignments remains confidential, our collective experience provides BOYD with a solid foundation to apply professional judgment and offer informed and supported opinions in this matter.

BOYD's domestic and international services include evaluations of projects involving metals, non-metals, aggregates, and industrial minerals, but the majority of our business is related to coal. We have performed thousands of coal-related assignments in the United States in every major coal-producing basin. This includes detailed and extensive experience relative to projects in the Western coal basins.

BOYD's core project team was comprised of the following personnel:

Team Member	Experience	Area of Expertise/ Project Participation
Ronald L. Lewis Managing Director	Over 40 years; registered professional engineer; diverse experience in the analysis and valuation of coal and mineral properties throughout the US and internationally.	Overall review of project findings.
Brandon J. Williamson Project Manager	10 years; registered professional engineer, certified mine foreman. Member American Society of Appraisers (ASA). Primary focus on underground mine planning including valuation of mining entities and assets.	Project Manager. Coordination with client; report coordination; appraisal of assets at underground mines.

Team Member	Experience	Area of Expertise/ Project Participation
John L. Hamric Executive Consultant	40 Years; Specialist in coal processing, CPP operation, and material handling facilities.	Appraisal of coal processing facilities and related equipment.

7.0 Qualifications

The findings and conclusions presented in this report represent the independent professional opinions of BOYD based on available information and correspondence with Bridger. We supplemented this information with our general industry knowledge and experience. Our opinions have been prepared in a manner consistent with accepted engineering practices and prudent industry standards to the extent possible within the time frame associated with our assignment.

The appraisal values as stated herein represent BOYD's independent opinion and are unrelated to the desires, wishes, or needs of the client. The employment of BOYD in providing an opinion of the value of the assets listed was in no manner contingent upon the value derived herein.

Our expertise is in technical and financial aspects associated with mining projects; BOYD is not qualified to offer, nor do we represent, that any of our findings include matters of a legal or accounting/actuarial nature.

BOYD's findings are prepared using reasonable professional efforts to address the scope within the available time frame of this assignment. BOYD did not perform independent analysis of equipment to verify ownership status as to whether equipment is subject to existing liens. It is BOYD's recommendation that ownership status of all appraised equipment be verified. Our findings are prepared for the exclusive internal use of Bridger and PacifiCorp. While we believe our findings and conclusions to be reasonable, we do not warrant this report in any manner, expressed or implied.

BOYD's findings and opinions are supported by the text, tables, and photographs presented in this report. The asset value is based on the documentation provided by Bridger and the reported condition of the assets at the time of this appraisal. BOYD

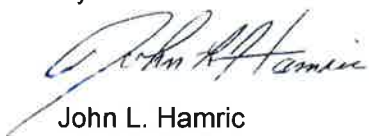
cannot speculate on the condition of any piece beyond the appraisal date or the change in market value due to the actual equipment condition at the time of sale.

Following this text is Figure 1, Selected Photographs of CrossBelt Coal Analyzer.

Respectfully submitted,

JOHN T. BOYD COMPANY

By:



John L. Hamric
Lead Appraiser



Brandon J. Williamson
Project Manager



Ronald L. Lewis
Managing Director and COO

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Thermo Scientific Elemental CrossBelt Analyzer™ (ECA) located at Deer Creek Mine Emery County, Utah



ECA Serial Plate SN#861063

FIGURE 1

**SELECTED PHOTOGRAPHS OF
CROSSBELT COAL ANALYZER**

Prepared For
BRIDGER COAL COMPANY (PACIFICORP)



John T. Boyd Company

June 2017



ECA Additional Photo 2



ECA Additional Photo 3

FIGURE 1 - Continued



ECA Additional Photo 4

Attachment 2

Appraisal

By Hollberg Professional Group, PC

**FAIR MARKET VALUE APPRAISAL
OF THE
THERMO SCIENTIFIC ELEMENTAL
CROSSBELT ANALYZER™**



**PREPARED FOR
PACIFICORP – BRIDGER COAL COMPANY**

**FINAL
REPORT
(22-17-001)**

JULY 2017

PREPARED BY:

**HOLLBERG PROFESSIONAL GROUP, PC
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Hollberg Professional Group PC

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DISCLAIMER

The attached report, titled *Fair Market Value Appraisal of Thermo Scientific Elemental CrossBelt Analyzer™* (ECA), was prepared by Hollberg Professional Group PC (HPG) for Bridger Coal Company (BCC).

Hollberg Professional Group professionals involved in this project made a visit to PacifiCorp's Deer Creek Mine and have reviewed information provided by BCC, including technical data and cost estimates, produced by BCC, its subcontractors, and other consulting firms. This review was conducted on a reasonableness basis, and HPG has noted herein where such provided information engendered questions. Except for the instances that have been noted, HPG has relied upon the information provided as being accurate and suitable for use in this report. Hollberg Professional Group assumes no liability for the accuracy of the information provided by Bridger Coal Company and others.

These summary opinions are being given in the course of valuation discussions and shall be subject to all privileges applicable thereto. These statements are not intended to be all inclusive, or final statements, of Hollberg Professional Group's opinions, and are subject to revision or supplementation as new or additional information becomes available.

ELECTRONIC DISCLAIMER

Electronic mail copies of this report are not official unless authenticated and signed by Hollberg Professional Group and are not to be modified in any manner without HPG's expressed written consent.

UNITS OF MEASUREMENT

Measurement units used in this report are in the English system unless noted otherwise.

1.0 EQUIPMENT APRAISAL

1.1 PURPOSE OF THE APPRAISAL

PacifiCorp's Bridger Coal Mine, located approximately 30 miles east of Rock Springs, Wyoming, is planning to transfer a Thermo Scientific Elemental CrossBelt Analyzer™ (ECA), located at PacifiCorp's Deer Creek Mine in Utah, to the Bridger Coal Company's (BCC) mine in Wyoming. Bridger Coal Company engaged Hollberg Professional Group (HPG) to provide a fair market value appraisal of the ECA for this intercompany transfer.

HPG inspected the equipment and reviewed documents, interviewed BCC representatives, Thermo Scientific representatives, and others, studied available data and information, performed independent analysis of relevant facts, and has formed valid opinions with respect to the fair market value.

1.2 INFORMATION SOURCES

HPG's opinions are based on the information provided by BCC as well as to what public information that could be found. Should additional information become available, HPG might need to revise or supplement this work.

1.3 BACKGROUND

The equipment under review is a 42-inch Thermo Scientific Elemental CrossBelt Analyzer™ (ECA).

*"The Thermo Scientific ECA is a Prompt Gamma Neutron Activation Analyzer (PGNAA) designed to mount around an existing conveyor belt and analyze the composition of the coal on the belt in real-time. . . . The ECA measures and reports ash and sulfur. A moisture measure and report option is also available. If the optional moisture meter is purchased, the ECA calculates and reports heating value and Lbs SO₂ per million BTU. It is used to control the sorting and blending of coals to maximize coal resources, reduce out-of-seam dilution, and control preparation plant performance. The analyzer's operator interface is a comprehensive, easy-to-use Microsoft® Windows®-based package that comes standard with current analyses, rolling averages, cumulative averages, product tracking, extensive data graphing capabilities, alarm information, and advanced OPC data linking to the customer's PLC or other control system. There is an optional Automated Report Generator software package available that allows data from the analyzer to be reported to the customer in a configurable spreadsheet compatible format."*¹

The unit was installed at Deer Creek in August 2013 and was in use there until January 2015, at which time the nuclear source was removed. The Deer Creek facility is idle and power source terminated with closure activities in process. The original cost of the unit in 2013 was \$296,700, as reported by DCC. Figure 1.1 shows the ECA in place at the Deer Creek Mine.

The Deer Creek's ECA does not have the optional moisture sensor and reports only ash and sulfur. The current book value of the ECA is unknown, as it was part of a larger projects capitalization and cannot be

¹Thermo Scientific ECA Brochure, www.thermo.com/coal, 2017

separated out. BCC is requesting a fair market value appraisal based on an arm's length transaction for an intercompany transfer of the asset.

1.4 ASSUMPTIONS AND LIMITING CONDITIONS

This is to certify that the appraiser, in submitting this statement of the opinion of value of the subject property, acted in accordance with and was bound by the following assumptions and limiting conditions:

1. This appraisal is to be used in whole and not in part. No part of it shall be used in conjunction with any other appraisal.
2. No responsibility is assumed for matters, which are legal in nature. The legal descriptions furnished are assumed to be correct.
3. Title is assumed to be marketable. Unless otherwise noted, property has been appraised as though free and clear of liens and encumbrances.
4. No attempt has been made to render an opinion of title or of any other matters of legal character.
5. Possession of this report, or copy thereof, does not carry with it the right of publication nor may it be used for any purpose by any but those who contracted for it without the previous written consent of the appraiser.
6. The appraiser is not required to give testimony or to appear in court by reason of this appraisal, with reference to the property in question, unless arrangements have been previously made.
7. The equipment was not powered, incomplete, and as such, it was impossible to confirm the operational status of the equipment or its electronic controls. Only visual inspections were made.
8. Exposure time, or time to sell, has been specified by the client to be six months or less due to plans for shutting down and reclaiming portions of the Deer Creek Mine site.

1.5 EQUIPMENT CONDITION

Mr. Marc Littlefield, HPG's Senior Associate, visited the Deer Creek Mine on 08-Jun-2017, to inspect the referenced equipment. The ECA is installed over a 42-inch belt exiting the Deer Creek Mine. The unit is a Thermo Scientific Elemental CrossBelt Analyzer™ Model ECA, Serial Number 861063.

The equipment consists of the ECA cabinet, which normally contains a nuclear source above the belt and a detection tube below the belt. The ECA cabinet and sensors are connected electrically to the main controller (Electronic Module), a Gamma-Link Module, and Operation station for the ECA equipment, which is located inside the MCC room of the Prep Plant. Operation station hardware consisted of a Keyboard, Monitor, and Computer, all looked to be in good condition with no visible damage. Only a visual inspection of the equipment was possible as power to the equipment was not available for a powered test. The software

status for the ECA equipment is unknown, but should be available based on conversations with Thermo Scientific. It may need to be updated and licensed at the new site. The computer hardware is several years old and has little value. The software can be installed on a typical Microsoft Window® computer.

The Analyzer Electronics Module, Gamma-Link II, and Operator Hardware are located in the Prep Plant MCC room that is northwest of the ECA unit. They are intact and look to be in good condition, visually. No power was available for a powered test.

The key to the detector cabinet was not available during our site visit. Deer Creek was able to send an individual to the site on 22-Jun-2017 and provided HPG with photos of the detector (Figure 1.7 to Figure 1.9) showing it to be in good condition. Again, due to the lack of power, only a visual inspection was possible.

Table 1.1 summarizes the results of our visual inspection. Other than the missing nuclear source, the ECA appears to be physically intact, shows no signs of damage, is secure, and is in excellent condition, considering its 47-month (3.84 years) age and 17-month (1.42 years) operational life.

Figure 1.1 through Figure 1.16 are photos showing the ECA and its related control equipment.

The site also provided HPG with a copy of the operations manual, which is included as Appendix 1.0 of this report.

TABLE 1.1
ECA EQUIPMENT EVALUATION

Equipment Evaluation Form		Client: PacifiCorp, Deer Creek Mine			
Equipment Number	Manufacturer	Model	Type	Serial Number	Year Mfg.
N/A	Thermo Scientific	ECA	CrossBelt Sampler	861063	2013
ECA					
Item Description	MFG.	Condition	Comment/Notes		
Support Mounting Frame	Fab	Excecelent	Welds and fastners secure, no damage to assembly		
Upper Shield Blocks	OEM	Excecelent	All secure, no visable damage		
Lower Shield Blocks	OEM	Excecelent	All secure, no visable damage		
Up Stream Shield Blocks	OEM	Excecelent	All secure, no visable damage		
Down Stream Shield Blocks	OEM	Excecelent	All secure, no visable damage		
Source Cartridge and Access Door	OEM	Removed	Source removed, rod assembly visable, no damage		
Detector Cartridge and Access Door	OEM	Excecelent	Detector Cartridge in place, no visiable damage		
Assembly Protective Canopy	Fab	Excecelent	Canopy over unit fabricted by operator		
Decals and Warning Lables	OEM	Excecelent	In place no damage		
Power Source	Site	Excecelent	All secure, no visable damage		
ANALYZER ELECTRONICS MODULE			Assembly S/N	A305	
Item Description	MFG.	Condition	Comment/Notes		
Operator Panel	OEM	Excecelent	No physical damage, secure to cabinet door		
Exhaust Fan, Inlet Filter	OEM	Excecelent	No physical damage, secure to cabinet frame		
Heat Exchanger	OEM	Excecelent	No damage or signs of discoloration or heat, secure		
Signal Terminal Rail	OEM	Excecelent	No damage or signs of discoloration or heat, secure		
High Voltage Power Supplies	OEM	Excecelent	No damage or signs of discoloration or heat, secure		
Solid State Displays	OEM	Excecelent	No damage or signs of discoloration or heat, secure		
PLC with VO Modules	OEM	Excecelent	No damage or signs of discoloration or heat, secure		
DC Power Supplies	OEM	Excecelent	No damage or signs of discoloration or heat, secure		
Heater/Fan	OEM	Excecelent	No damage or signs of discoloration or heat, secure		
Detector Heater Power Supply	OEM	Excecelent	No damage or signs of discoloration or heat, secure		
24V DC Power Supply	OEM	Excecelent	No damage or signs of discoloration or heat, secure		
Circuit Breakers	OEM	Excecelent	No damage or signs of discoloration or heat, secure		
AC Terminal Blocks	OEM	Excecelent	No damage or signs of discoloration or heat, secure		
Fuses	OEM	Excecelent	No damage or signs of discoloration or heat, secure		
Thermostates	OEM	Excecelent	No damage or signs of discoloration or heat, secure		
AC Power Switch	OEM	Excecelent	No damage or signs of discoloration or heat, secure		
AC Power Conditioner	OEM	Excecelent	No damage or signs of discoloration or heat, secure		
Dehumidifier	OEM	Excecelent	No damage or signs of discoloration or heat, secure		
Enclosure RTD Probe	OEM	Excecelent	No damage or signs of discoloration or heat, secure		
Processor Assembly	OEM	Excecelent	No damage or signs of discoloration or heat, secure		
Terminal Connectors	OEM	Excecelent	No damage or signs of discoloration or heat, secure		
Wiring	OEM	Excecelent	No damage or jumped connections		
Power Source	Site	Excecelent	No visable damage, secure mountings		
GAMMA-LINK					
Item Description	MFG.	Condition	Comment/Notes		
Control Assembly	OEM	Excecelent	No damage secure to structure		
Display Panel	OEM	Excecelent	No damage visable		
Power Source	OEM	Excecelent	Intact, no visable damage		
OPERATOR PANEL					
Item Description	MFG.	Condition	Comment/Notes		
Monitor	Site	Good	Physically intact, no damage		
Keyboard	Site	Good	Physically intact, no damage		
Computer	Site	Good	Physically intact, no damage		



Figure 1.1 Thermo Scientific Elemental CrossBelt Analyzer™ (ECA) Control Side



Figure 1.2 ECA Downstream Photo



Figure 1.3 ECA Upstream Photo

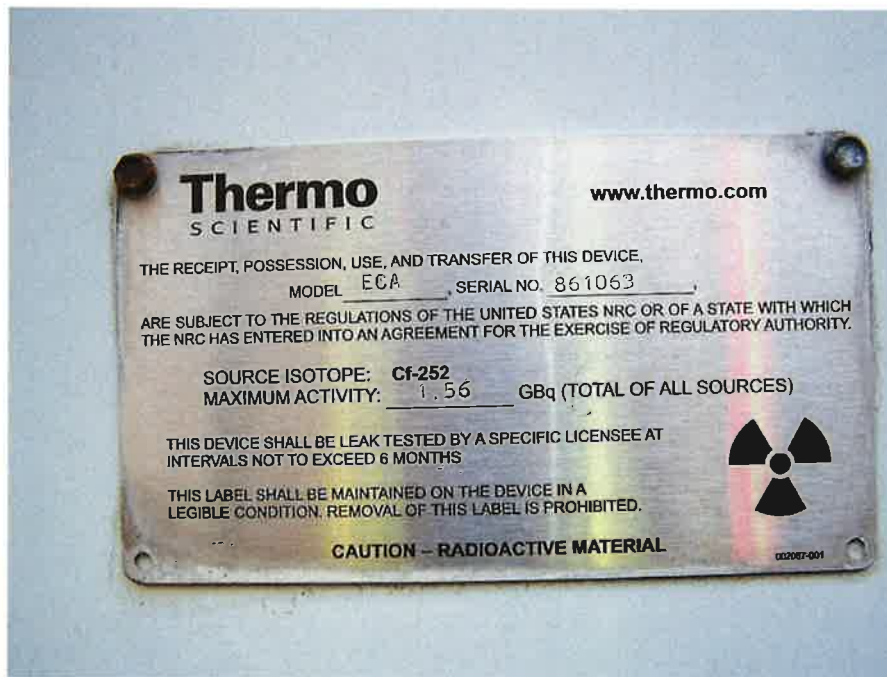


Figure 1.4 ECA Identification Plate



Figure 1.5 ECA Caution Plate Photo



Figure 1.6 ECA Rod Assembly Inside the Source Cartridge Door

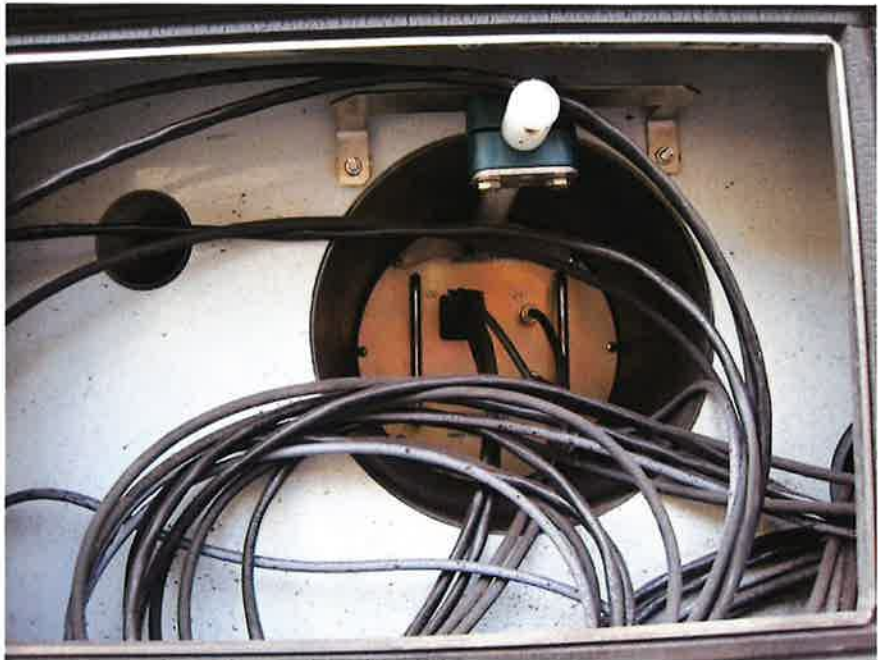


Figure 1.7 ECA Detector Section – In Place



Figure 1.8 ECA Detector Section – Partially Removed

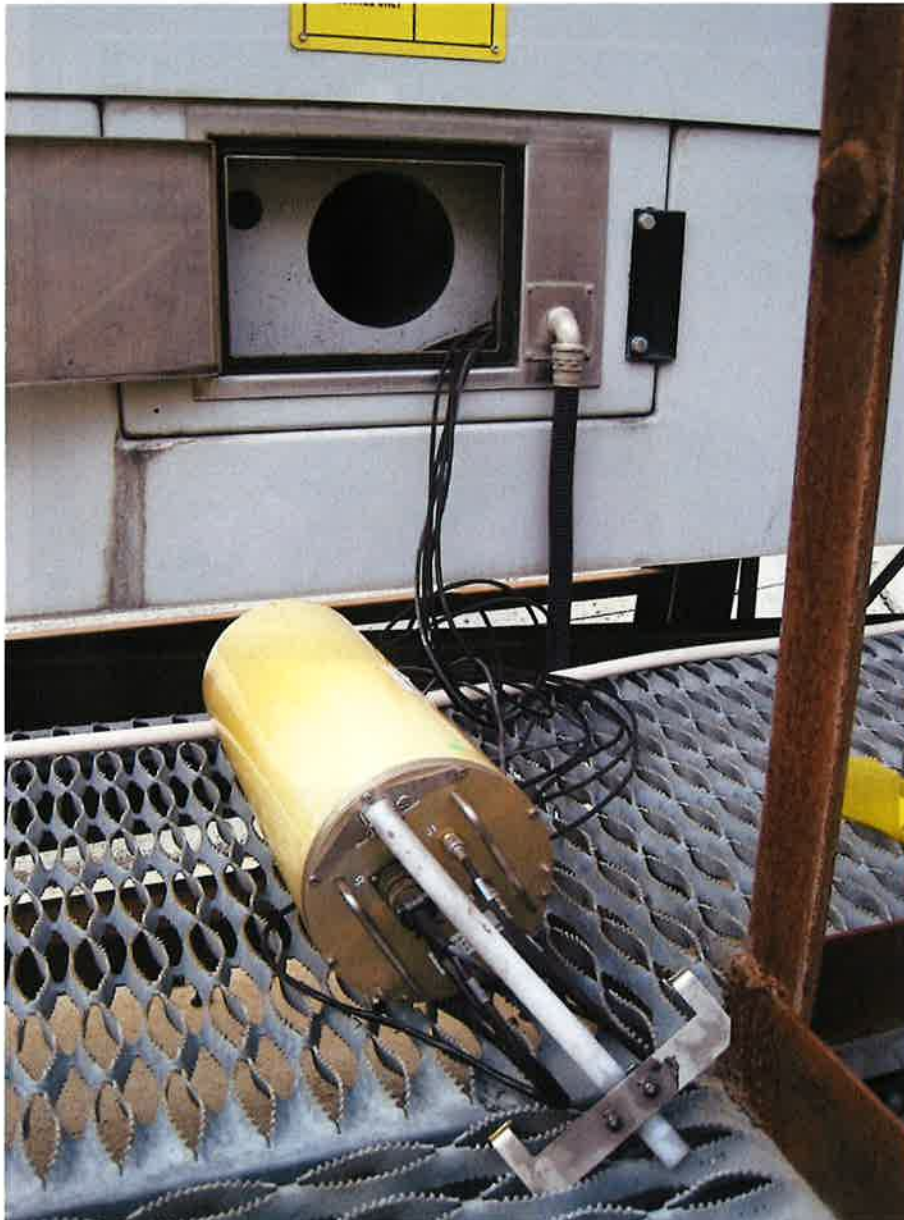


Figure 1.9 ECA Detector Section – Removed



Figure 1.10 ECA Operator Panel for the Analyzer Electronic Module



Figure 1.11 ECA Analyzer Electronics Module with Exhaust Fan and Filtered Inlet



Figure 1.12 Analyzer Electronics Module S/N ID (A305) – Processor Cabinet

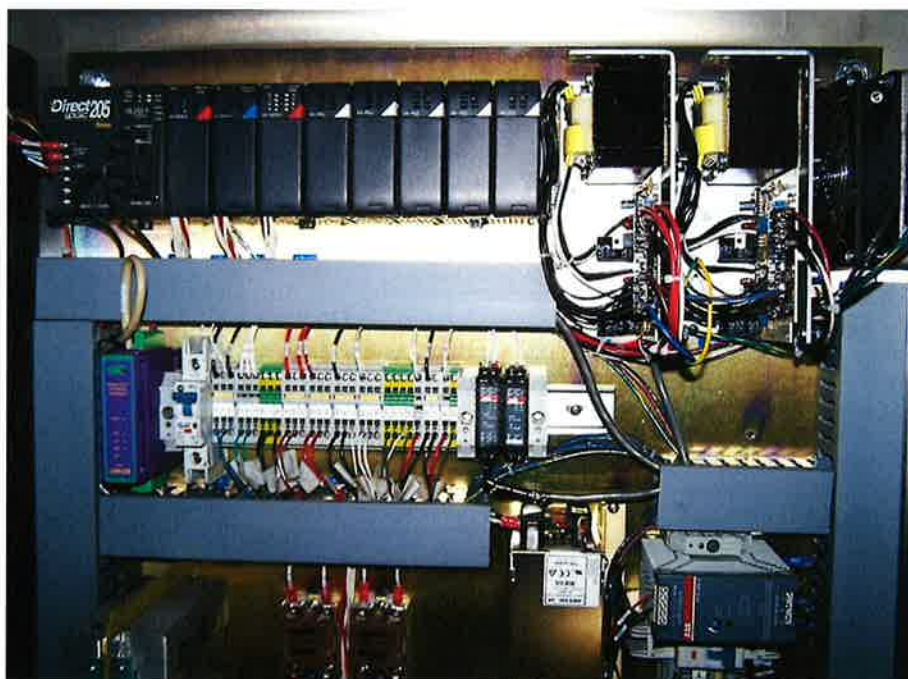


Figure 1.13 Analyzer Electronics Module Internal – Upper Half

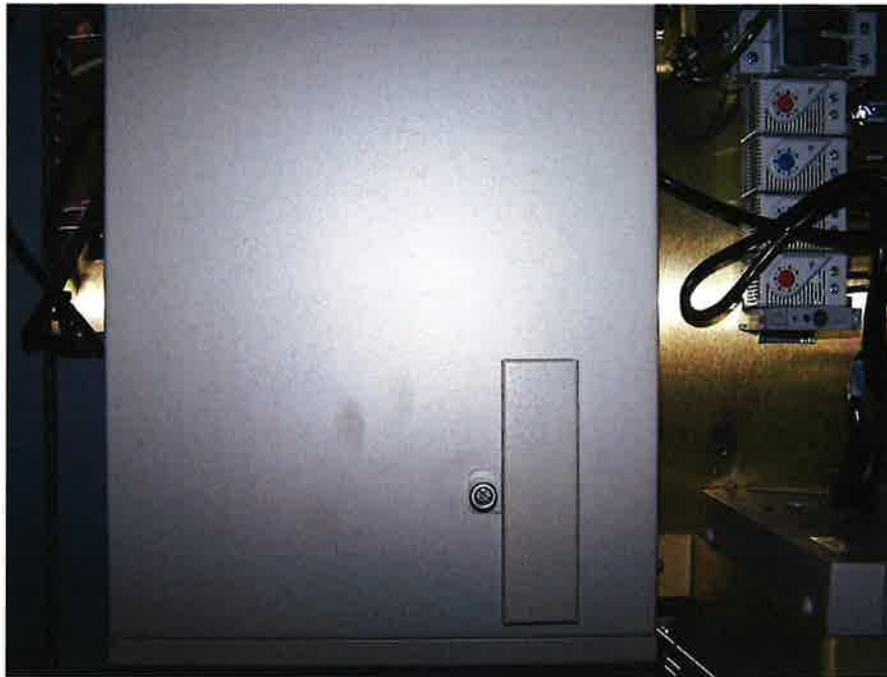


Figure 1.14 Analyzer Electronics Module Internal – Lower Half



Figure 1.15 ECA Gamma-Link II Cabinet



Figure 1.16 ECA Gamma-Link II Cabinet – Open

1.6 ORIGINAL VALUE, OWNERSHIP COSTS, AND USEFUL LIFE

The ECA unit was installed at the Deer Creek Mine in August 2013 and was in use there until January 2015, at which time the nuclear source was removed. The original cost of the unit in 2013 was reported to be \$296,700. Value for a similar unit today is \$340,000 with an estimated 8 months lead time, assuming there is no additional payment for expediting.

The unit has minimal moving parts and is made up of the nuclear source, a detector unit, and the controlling electronics. The ECA is a sensitive piece of instrumentation and typically is maintained and calibrated by an OEM trained technician. This is usually based on a costly service contract. Life of the nuclear source is limited due to the continuing neutron emission of the radioactive element. One or more neutron (Cf-252) sources are installed. As a source loses strength, additional sources are added, up to a maximum of four, to maintain the operational strength. Sources are generally added every two years when the source has lost approximately half of its activity (the “half-life of Cf-252). The cost of the renewal unit is \$25,000. The cost of a new nuclear source is \$40,000. These costs make up a large portion of the overall ownership cost of the unit.

The useful life of the unit is estimated at 10-years to 15-years, assuming regular renewal of the nuclear source and normal maintenance and calibration.

1.7 VALUATION METHODOLOGY

There are three typical approaches to valuation: Cost, Sales Comparison, and Income. For this equipment, the Income approach is not appropriate; it is a piece of equipment and as such does not directly produce income. The two methods used for this valuation are the Cost or Depreciated Value Approach (DVA) and the Sales Comparison Approach (SCA), also called the Market Approach. The two approaches are intended to be a check on the appraisers' judgment by reflecting a separate value from each. The final step in the appraisal process is to reconcile the approaches used to value the property. This typically analyzes the range between the approaches to reflect the Market Value based on arm's length transactions between buyers and sellers.

1.7.1 Depreciation Approach

The depreciated value approach is based on the assumption that the value of the equipment corresponds to its initial value (purchase cost) and its typical useful life. As the equipment gets older, its useful life decreases and the value decreases proportionately, as the equipment's useful life decreases.

1.7.2 Sales Comparison Approach

The Sales Comparison Approach is also called the "Market Approach." This approach is based on the principle of substitution; "the value of property tends to be set by the cost of acquiring a substitute property or alternative piece of equipment of similar utility and desirability within a reasonable amount of time." The sale is assumed to be an arm's length transaction between a motivated buyer and seller.

1.8 DEPRECIATED VALUE

The ECA was purchased and commissioned in August 2013, making it 3.838 years old. Assuming a 10-year or a 15-year useful life, the depreciated value, as of 01-Jul-2017, would be \$182,385 and \$220,256, respectively. This value is based on an operational unit, complete and in working order. The ECA in this case is not operational. A purchaser of this unit would be required to replace the nuclear source, move, and commission the unit to make it operational. Assuming the purchaser is an end user and not a used equipment dealer, the remaining value is estimated to be \$112,385 and \$150,256 for the 10-year and 15-year depreciation, respectively. Table 1.2 shows the breakdown for the estimated depreciation value.

TABLE 1.2 DEPRECIATED VALUE				
Price	\$296,000			
Age (years)	3.8384			
	10-year		15-year	
	Cost	Remaining Value	Cost	Remaining Value
Depreciation per Year	\$29,600		\$19,733	
Depreciation	\$113,615	\$182,385	\$75,744	\$220,256
New Source	\$40,000	\$142,385	\$40,000	\$180,256
Commissioning	\$20,000	\$122,385	\$20,000	\$160,256
Transportation	\$20,000	\$112,385	\$10,000	\$150,256
		\$112,385		\$150,256

1.9 SALES APPROACH VALUE

The Sales Comparison Approach, or Market Approach, assumes the equipment is purchased as an alternative to purchasing a new unit from the OEM. These devices are usually custom manufactured for each specific installation. As stated earlier, they are highly technical and require skilled technicians for commissioning and maintenance. For an alternative buyer to use the unit, their needs would have to be similar to the original installation. The specificity of the equipment and limited use reduces the market place significantly.

The secondary market for ECA units is extremely small or non-existent. In the course of this review, HPG contacted multiple used equipment dealers, both domestic and international, inquiring as to the availability of ECA units for sale and if they had, over the course of their business, ever handled a similar unit. None of the contacts had ever dealt or sold an ECA unit. The only secondary market we found was based on Thermo Scientific acting as a broker of the units creating ongoing service contracts. Even at that, there are two other units in Utah that have been idle for over 8-years.

Because of the highly specialized nature of the instrument, used equipment dealers are normally not interested. If they were, they would either pay \$0.10 or less on the dollar or scrap price for a working unit, \$29,600 or \$500, respectively. A dealer would have to remove the unit, store, and market it. Given that the unit is not working, the scrap price is the most likely offer from a used equipment dealer. Therefore, a sale to a used equipment dealer is undesirable and unlikely.

End users purchasing equipment on the used market rarely pay more than \$0.50 on the dollar for operational equipment. A motivated seller, with similar needs as Deer Creek, would need to purchase a new nuclear source, move, and commission the unit. The used equipment price discount generally includes the cost to move and commission the unit. Therefore, based on these assumptions, the market value of the unit is estimated at \$108,000 $[(\$296,000 \times \$0.50) - \$40,000 = \$108,000]$.

BCC has indicated that the sale of the ECA needs to take place in the next six months because the Deer Creek site is planned for shutdown and reclamation. The ECA is a highly specialized equipment with a very small market requiring long exposure times for willing buyers to be found. The six-month exposure time likely limits the available buyers to brokers or equipment dealers with the ability to hold the equipment and do the necessary marketing. Given the current state of coal mining in the United States, it is likely that the sale would be international, further increasing the cost and risk to the broker.

1.10 FAIR MARKET VALUE

The reconciliation concludes a reasonable value estimate for the equipment by reviewing the appraisal process, specifically, the approaches to value. Table 1.3 shows the result of our analysis.

TABLE 1.3 ECA ESTIMATED MARKET VALUES		
	Sales Approach	
Depreciated Value Approach	Long Exposure Sale > 1 Year	> 6 Months Exposure
\$112,000	\$108,000	\$30,000

The indications of value vary significantly, based on the assumed exposure. A long exposure sale, assuming a willing end user buyer, is likely to be within 4% of the depreciated value. If an end user with the specific needs cannot be found within six months, the likely purchaser would be a used equipment dealer or broker. Although they differ, all value estimates must be considered. The central-point for a long exposure sale, greater than 1-year, and the depreciated value is \$110,000. If a short-term sale or auction sale is required, the likely value is \$30,000 or less.

After careful consideration of all available pertinent information and the subject's characteristics, the estimated Fair Market Value, based on an arm's length transaction of the subject property on 01-Jul-2017, is concluded as follows:

\$110,000 Market Value– assuming exposure > 1 year
\$30,000 Market Value– assuming exposure < 6 months

Concluded Market Value is subject to all Assumptions and Limiting Conditions stated in this report. No. 7 is of particular importance:

7. The equipment was not powered, incomplete, and as such, it was impossible to confirm the operational status of the equipment or its electronic controls. Only visual inspections were made.

2.0 CERTIFICATION

I certify that to the best of our knowledge and belief:

1. The statements of fact contained in this appraisal report are true and correct.
2. The reported appraisal analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are my personal, unbiased professional analyses, opinions, and conclusions.
3. I have no present or prospective interest in the property that is the subject of this report, and I have no personal interest or bias with respect to the parties involved.
4. My compensation is not contingent upon the reporting of pre-determined value or direction in value that favors the cause of the client, the amount of the value estimate, the attainment of a stipulated result, or the occurrence of a subsequent event.
5. Mr. Marc Littlefield provided significant professional assistance to the person signing this report.
6. The appraisal assignment was not based on a minimum valuation or a specific valuation.
7. I have not provided appraisal practice or related services involving the subject property within the three-year period preceding the date of acceptance of this appraisal assignment.

July 1, 2017
Date of Value



Kurt F. Hollberg
Professional Engineer (WY6599, UT 10385339)

**APPENDIX 1.0
ECA MANUALS**

ECA OPERATIONS MANUAL 2003

ECA_MANUAL-020135-REV A

Attachment 3
Appraisal Evaluation

Deer Creek Elemental CrossBelt Analyzer Appraisals

Bridger Coal Company
July 13th, 2017

Overview

Bridger Coal Company solicited two fair market value appraisals for an Elemental CrossBelt Analyzer (ECA) at the Deer Creek Coal Mine near Price, Utah. John T. Boyd and the Hollberg Professional Group (HPG) were the two companies used. These two companies returned very similar fair market values for the ECA.

The ECA was in service for about 2 years and 6 months. The ECA was placed in service in August of 2013 and removed from service in January 2015. The fair market value reflects that the nuclear source has been removed and will need to be replaced before being put back in to operation and that it is setup to operate on a 42” wide belt which is not common in the coal industry.

John T. Boyd

John T. Boyd conducted a desktop appraisal and did not visit the Deer Creek Mine to examine the ECA. John T. Boyd used the original price, purchase date, history of operation, current condition and location, maintenance history, and recent photos of the ECA to determine the value. John T. Boyd determined that the fair market value to be \$29,700. See the attached report for additional information.

Hollberg Professional Group

Hollberg Professional Group conducted a site visit to examine the ECA prior to giving their appraisal. Bridger will use the short exposure sales method fair market value. This method assumes a short exposure (6 month or less) on the market. The HPG appraisal of the fair market value is \$30,000. See the attached report for additional information.

Summary

The average of the two appraisals (\$29,700 and \$30,000) is determined to be the fair market value. Bridger Coal Company views the ECA fair market value as being \$29,850.

$$\frac{\$30,000 + \$29,700}{2} = \$29,850$$

Attachment 4
Capital Appropriation Document

BRIDGER COAL COMPANY

Capital Appropriation Document

CAD NUMBER

17-040377 REV 1

Project Title:

2017 Deer Creek Ash Analyzer Purchase and Installation

Estimated Commitment Date:

02/28/2017

Estimated Completion Date:

10/28/2017

Description of Project:

Bridger Coal Company requests funding for the purchase, relocation, and installation of the Idled ThermoFisher Elemental CrossBelt Analyzer from Deer Creek Mine to Bridger Coal Mine. The Jim Bridger Power Plant is designed to burn coal within specific parameters to maximize generation output. Coal outside of these parameters may cause the plant to be de-rated and reduce generation output. The ThermoFisher Elemental CrossBelt Analyzer located at the Deer Creek Mine would be installed immediately downstream from the TDS #2 Stockpile which is approximately six miles upstream from the CQM analyzer located at the surface mine. The ECA will measure the coal quality of all underground mine coal. This includes coal shipped directly to the plant and coal stockpiled on TDS #2. The addition of the ECA will accurately determine the quality of the underground mine coal. The existing coal analyzer does not provide the accuracy for Plant blending requirements.

Budgeted - Auto Blending
 Unbudgeted
 Supplemental
 Confirming

Replace/Rebuild (Economic)
 Productivity/Cost Reduction
 Development
 Computer and Related
 Other

Accounting Distribution and Estimated Expenditures		2017 Estimate		Total Project	
Purchase of ECA from Deer Creek		\$	29,880	\$	29,880
Materials		\$	2,880	\$	2,880
WY Sales Tax @ 8%		\$	1,961	\$	1,961
Teardown		\$	15,000	\$	15,000
Shipping		\$	1,260	\$	1,260
Installation		\$	10,280	\$	10,280
Professional Services		\$	11,803	\$	11,803
Total Fixed Capital		\$	72,863	\$	72,863
Labor		\$	15,100	\$	15,100
Contingency @ 10%		\$	8,880	\$	8,880
Total This Request		\$	98,643	\$	98,643
Budgeted Amount:		\$	1,500,000	\$	1,500,000
Over / (Under) Budget			0.4%		0.4%
IERCO				Total Project	
This Request		\$	98,643	\$	98,643
Budgeted Amount:		\$	1,500,000	\$	1,500,000
Over / (Under) Budget			6.4%		6.4%
Estimated Net Present Value @ 8.66%		N/A		Approval Required:	<input checked="" type="checkbox"/> Mine Level <input checked="" type="checkbox"/> PMI <input checked="" type="checkbox"/> IERCO
Estimated Internal Rate of Return		N/A		Nathan Schnebeck	
Estimated Life		4 Years		Originator	<i>Nathan Schnebeck</i>
Facilities to be Retired or Replaced:	N/A			Date:	<i>9-23-2017</i>
				Mgr. Tech Services	<i>Scott Palmer</i>
Proposed Disposition:	N/A			Date:	<i>8-23-2017</i>
				Mgr. Mine Purchase/Wrap	<i>Matt Conforti</i>
Year Acquired/ Net Book Value	\$	Recovery Value	Estimated Gain/(Loss)	Date:	<i>8-23-17</i>
				UG Mine Manager	<i>Kelly Mann</i>
				Date:	<i>8-23-17</i>
				Accty & Finance	<i>Rigby Davidson Davis</i>
				Date:	<i>8-23-17</i>
				General Mine Manager	<i>Jon Brown</i>
				Date:	<i>8/23/17</i>
				Brad Davis	<i>Brad Davis</i>
				Date:	<i>8/23/17</i>
				PMI	<i>Brad Davis</i>
				Date:	<i>8/24/17</i>
				Tom Harvey	<i>Tom Harvey</i>
				Date:	<i>8/24/17</i>
				IERCO	<i>Elizabeth Finley</i>
				Date:	<i>8/24/17</i>
				Elizabeth Finley	<i>Elizabeth Finley</i>
				Date:	<i>8-23-17</i>
				Finance /Accounting	<i>Don Davis</i>
				Date:	<i>8-23-17</i>
				PMI Review	<i>Don Davis</i>
				Date:	<i>8-23-17</i>
				Daria Rolston	<i>N/A</i>
				Date:	<i>8-23-17</i>
				VP, Gen. & Mining	<i>N/A</i>
				Date of Final Approval:	<i>N/A</i>

Review of Tasks and change status to Approved.

K.L. Larsen
9-15-17