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ARGUS COAL TRANSPORTATION

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The most up-to-date *Argus Coal Transportation* methodology is available on www.argusmedia.com

Argus Coal Transportation Assessment Methodology

To compile its price assessments, *Argus Coal Transportation* surveys a broad selection of shippers, producers and other market participants through telephone conversations, instant messenger services and email communication. To maintain balance and consistency, *Argus* contacts these sources each time the assessments are made. *Argus* publishes prices that report and reflect prevailing levels for open-market arm's length transactions (please see the Argus Global Compliance Policy for a detailed definition of arm's length).

When available, *Argus* uses actual rail tariff rates in compiling assessments, but these rates are not the only indication for, or component in, price assessments. When the route indicated in tariff pricing falls outside transportation specifications assessed by *Argus*, mileage differences are taken into account in evaluating the rates. In addition to tariff information, *Argus Coal Transportation* collects estimates and information from market participants in determining rates.

If certain routes are illiquid during the assessment period, *Argus* will use the industry survey for similar moves along other routes in determining how those rail rate assessments should change.

Argus Coal Transportation rail rate assessments do not incorporate costs for purchase or lease of railcars, or the fees associated with equipment handling. Rates are not reflective of equipment ownership and are solely the cost of transport for the routes in question.

Prices are assessed for volumes shipped on a prompt 90-day basis.

Argus Coal Transportation assesses rail rates for deliveries from the five major coal producing regions in the United States. Those regions are: Central Appalachia, Powder River Basin, Pittsburgh Seam, Illinois Basin and Colorado-Utah. The prices are published on a monthly basis.

In the East, rates are assessed from:

- Central Appalachia to East Coast Export Terminals, Carolinas, Cinergy, Florida, New York, Southern and TVA.
- Pittsburgh Seam to Florida, New York and East Coast Export Terminals.
- Illinois Basin to Cinergy and Illinois Basin.

In the West, rates are assessed from:

- PRB to ERCOT, Cora Docks, Southern, Cinergy, TVA and Superior Terminal.
- Colorado to TVA.

Calculating Rail Rates Plus Fuel Surcharges

Given the volatile cost of diesel fuel and the subsequent fuel surcharges levied on coal shippers, any assessment of rail rates would be incomplete without the inclusion of fuel surcharges.

The Class I railroads assess fuel surcharges for many shipments using a coal mileage-based system, though some coal-delivery contracts base fuel surcharges on the underlying base rail rate. The mileage-based rate is calculated by multiplying the applicable fuel surcharge times the number of miles per carload. Each carrier has a different price at which surcharges begin to accrue, indicating when the surcharge goes into effect, and surcharge levels change in different increments. Rates for Norfolk Southern are not provided because the railroad built fuel surcharges into its tariff rates.

Difficulty in calculating the total freight cost occurs because fuel surcharges are assessed in cents per mile per railcar, while rail rates are assessed in dollars per ton. To resolve this, *Argus* converts the surcharge into dollars per ton using the following calculation:

$$((\text{rate/ton} * \text{tons per car}) + (\text{mileage} * \text{surcharge/mile})) / \text{tons per car}$$

Example: For shipments from Central App to the East Coast Export Terminals on CSX

$$((\$27.50 * 105 \text{ tons per car}) + (400 \text{ miles} * 53¢/\text{mile})) / 105 \text{ tons per car} = \$29.52/\text{ton}$$

Argus uses the same tons/car from month to month. CSX coal cars are estimated at 105 tons per car and BNSF and Union Pacific cars are estimated at 118 tons per car.

Mileage is also standard from month to month and does not represent a specific plant mileage. Instead, this is a generic move from the basin to the region being assessed. *Argus* applies the following mileage in its assessments:

Eastern Rail Rates

Origin	Destination	Mileage
Central App	East Coast Export Terminals	400
	Carolinas	400
	Cinergy	260
	Florida	1,100
	New York	515
	Southern	800
Pittsburgh Seam	TVA	825
	Florida	1,200
	New York	480
Illinois Basin	East Coast Export Terminals	300
	Cinergy	300
	Illinois Basin	90

Western Rail Rates

Origin	Destination	Mileage
PRB	Ercot	1,200
	Cora Docks	1,050
	Southern	1,575
	Cinergy	1,290
	TVA	1,700
	Superior Terminal	800
Colorado	TVA	1,200

Barge Rate Assessments

Since 1994, *Argus Coal Transportation* has assessed barge rates for the main trading routes on North America's inland waterways. These freight rates are assessed as a result of communication with leading barge operators, shippers and others in the industry.

The following routes are assessed:

- Domestic movements between Big Sandy to Pittsburgh, Port Amherst to Cincinnati, Port Amherst to Pittsburgh and Big Sandy to St. Louis.
- Movements to export terminals between Big Sandy to Davant, Birmingham to Mobile, Louisville to Davant, Port Amherst to Davant and St. Louis to Davant.
- Northbound backhauls between Davant to Chicago, Cincinnati, Huntington, Pittsburgh and St. Louis.

Seaborne Freight Rate Assessments

Argus Coal Transportation assesses freight rates for the main trading routes for capesize (150,000 metric tonnes), panamax (70,000 metric tonnes) and certain handysize (60,000 metric tonnes) vessels to North America, Europe and East Asia as well as certain exports from Colombia and other South American originations. These freight rates are assessed as a result of communication with leading freight brokers and international traders of coal.

The following routes are covered:

- US North of Cape Hatteras to Amsterdam-Rotterdam-Antwerp (ARA) (Panamax, Capesize) and Japan (Panamax)
- West Coast North America to ARA (Panamax) and Japan (Panamax)
- Puerto Bolivar to ARA (Panamax), US Gulf (Panamax) and US East Coast (Handysize)
- US Gulf Coast to ARA (Panamax)
- Gdansk to ARA (Panamax)
- Richards Bay to ARA (Capesize, Panamax)
- Dalrymple to ARA (Panamax)
- Australia to Japan (Panamax)

For a more extensive explanation of *Argus* freight indexes, please see the methodologies for *Argus Freight* and *Argus Coal Daily International* at www.argusmedia.com.

Delivered and SO₂-Adjusted Coal Prices

Argus Coal Transportation provides delivered coal costs to major destinations from the five major coal regions on a weekly basis using prompt-quarter coal prices and monthly transport cost assessments.

SO₂-adjusted, delivered prices are also calculated to compare the economics of coals by estimating the cost to scrub out all of the sulfur in the coal based on the price of SO₂ allowances. These

comparisons are provided weekly on page 11 of the report and are provided in both \$/short ton and \$/mmBtu. Delivered coal prices without an emissions adjustment are incorporated within the *Argus Coal Transportation* data feed.

For a more extensive explanation of *Argus* coal indexes, please see the methodologies for *Argus Coal Daily* and *Argus Coal Daily International* at www.argusmedia.com. For a more extensive explanation of *Argus* emissions assessments, please see the *Argus Air Daily* methodology at www.argusmedia.com.

Delivered SO₂-Adjusted Coal Prices

Hub	Delivered to
Central Appalachia Rail	
Big Sandy/CSX Rail 12,500 1.2	By rail into East Coast ports for export, Carolinas, Cinergy, Florida and New York
Big Sandy/CSX Rail 12,500 1.6	By rail into East Coast ports for export, Carolinas, Cinergy, Florida and New York
Big Sandy/CSX Rail 12,500 2.0	By rail into East Coast ports for export, Carolinas, Cinergy, Florida and New York
Powder River Basin	
Fob Mine/Rail 8,800 0.8	Ercot, Cora Docks, Southern, Cinergy and TVA
Fob Mine/Rail 8,400 0.8	Ercot, Cora Docks, Southern, Cinergy and TVA
Central Appalachia Barge	
Nymex Spec Barge 12,000 1%	Pittsburgh, Cinergy and St. Louis
Big Sandy Barge 12,000 1.2	Pittsburgh, Cinergy and St. Louis
Pittsburgh Seam	
Fob Mine 13,000 2.5	Florida and New York
Fob Mine 13,000 3.0/4.0	Florida and New York
Fob Mine 12,500 6.0	Florida and New York
Illinois Basin	
Ohio R / KY Barge 11,200 4.5	Cinergy and Illinois Basin
Illinois/Indiana Mine 11,200 4.5	Cinergy and Illinois Basin
Illinois/Indiana Mine 11,500 1.2/1.8	Cinergy and Illinois Basin
Ohio R / KY Barge 11,800 2.5/3.0	Cinergy and Illinois Basin
Illinois/Indiana Mine 11,000 >6.0	Cinergy and Illinois Basin
Ohio R / KY Barge 11,000 >6.0	Cinergy and Illinois Basin
Colorado/Utah	
Green River Basin 11,100	TVA
Uinta Basin, Colorado 11,700	TVA
Uinta Basin, Utah 11,700	TVA

On-Time Delivery Index Methodology

Argus Coal Transportation's On-Time Delivery Index is the definitive independent measure of railroad on-time performance, designed to give shippers, receivers and carriers a nationwide picture of on-time delivery.

Launched in May 1997, the index provides a standardized method of defining and measuring on-time traffic delivery, regardless of differences in individual railroad performance tracking methods. Each railroad generally defines and calculates "on-time" differently, making it difficult to compare carrier performance. For example, some track all movements and consider a train on time

if it arrives in a roughly two-hour window, while other carriers track only certain, time-sensitive trains (such as intermodal shipments) on specified routes.

Argus' On-Time Delivery Index uses a single standard method — how the railroads' performance is perceived by the shippers who rely on them.

Shippers rank deliveries on a 1-5 scale, with 1 being the worst performance while 5 is the best performance. Shippers are asked to look at the last few months of service and base the rank on how well the carrier has performed during that period.

Argus speaks to multiple shippers, both large and small, served by each major carrier and averages the ranking provided by each to demonstrate how well each carrier has done in meeting shipper requirements.

Using this qualitative method, *Argus* is able to provide an accurate picture of rail performance across the nation.

Weekly Coal Carloadings and Railroad Metrics

Argus Coal Transportation breaks out coal carloading data for the six largest North American Class I railroads and provides a combined figure for shipments from the smallest Class I and several large shortline and regional carriers.

The latest weekly data is provided as is a rolling four-week average, which provides a better assessment of the latest trends in coal loadings. That information is compared with prior-year data, allowing subscribers to see the change over time.

The average coal train and system-wide velocities of the seven Class I railroads are also provided. The latest weekly data is provided as is a rolling four-week average. Both are compared with prior-year data.

Data on the number of freight cars on line is also provided, focusing on the cars most likely used to haul coal — open-top hoppers and gondolas. The latest weekly data is provided as is a rolling four-week average. Both are compared with year-ago performance.