ANTITRUST MAGAZINE ONLINE, February 2022. © 2022 by the American Bar Association. Reproduced with permission. All rights reserved. This information or any portion thereof may not be copied or disseminated in any form or by any means or stored in an electronic database or retrieval system without the express written consent of the American Bar Association.

The SPRB Coal Cases, Market Definition, and Analytical Durability

By Nicholas Hill, Christian Salas, Aparna Sengupta, and Arthur Zhou

On February 26, 2020, Arch Resources and Peabody Energy announced plans to combine their coal assets in Wyoming's Southern Powder River Basin ("SPRB") into a joint venture.¹ The joint venture would have combined the two largest coal suppliers in the SPRB. The Federal Trade Commission ("FTC") sued to block the joint venture in the U.S. District Court for the Eastern District of Missouri. On September 20, 2020, the court ruled in favor of the FTC and granted a preliminary injunction that prevented the parties from entering into the joint venture. The court's opinion found that SPRB coal was a relevant market, that the joint venture would significantly increase concentration in that market, and that the joint venture would substantially reduce competition in that market.

The case was a salve on old wounds for the FTC. Seventeen years earlier, in 2004, it had lost the famous Arch Coal case.² In that case—which is best-known for ushering in the litigating-the-fix era—the FTC had sued to block Arch Coal's acquisition of Triton, a transaction that would have combined four SPRB mines. The Arch Coal court had also found that SPRB coal was the relevant market and that the transaction would not likely have reduced competition in that relevant market.

While the Peabody-Arch and Arch Coal decisions resulted in opposite outcomes for the FTC, they reflect remarkable continuity with respect to both product market definition methodology and its practice. Like its predecessor case, in Peabody-Arch the FTC argued that the relevant product was the sale of SPRB coal.³ The defendants argued the relevant market is broader and that SPRB coal now competes in a broader market that includes other fuels, notably natural gas.⁴ Indeed, the defendants argued that natural gas was every bit as much of a constraint on the prices charged by an SPRB producer as the prices charged by rival SPRB producers. The court, citing the market definition work done by the FTC, notably the implementation of the hypothetical monopolist test, ruled that SPRB coal is a properly defined antitrust market. Given the high level of concentration that the joint venture would have created in this market, the court's product market decision likely had an enormous outcome on its decision as a whole.

The Arch Coal case was also heavily dependent upon market definition. The FTC argued that there were two relevant markets: (1) a market for SPRB coal and (2) a separate, narrower market for 8800 British Thermal Unit ("Btu") coal.⁵ The defendants also argued for two relevant markets. They

Dr. Hill is a Partner, Dr. Salas a Senior Economist, and Dr. Sengupta a Manager at Bates White Economic Consulting. Mr. Zhou is a former Manager at Bates White. All four worked on the Peabody-Arch matter on behalf of the FTC, with Dr. Hill serving as the plaintiff's economic expert.

¹ The joint venture would also have included mines in Colorado.

² FTC v. Arch Coal, Inc., 329 F. Supp. 2d 109, 121 (D.D.C. 2004).

³ That is, the FTC argued that competition between SPRB coal producers is valuable in that its elimination would lead to higher prices for SPRB coal.

⁴ That is, the defendants argued that eliminating all competition between SPRB producers would not lead to higher prices for SPRB coal i.e., competition between SPRB coal producers is not valuable.

⁵ Btu is a unit of heat. Specifically, it is the amount of heat required to raise the temperature of one pound of water by one degree Fahrenheit. The higher the Btu of a ton of coal, is the more heat will be generated by burning that coal.

2

At a time of heated	agreed that there was a market for SPRB coal but also argued for a broader market of all Powder
	River Basin ("PRB") coal. ⁶ The Arch Coal court, citing hypothetical monopolist tests performed
discussion about	by both economic experts, ruled that there is a market for SPRB coal but rejected both the FTC's
	proposed 8800 Btu SPRB coal market and the defendants' all-PRB coal market. Because the fix
the proper frame for	in that case mitigated the increase in competition in the SPRB market but not the 8800 Btu SPRB
	coal market, the Arch Coal court's market definition decision helped set the stage for its decision
antitrust analysis,	on the merits.
	The Peabody-Arch court and the Arch Coal court both found that there exists a market for SPRB
the importance of	coal and both relied upon the hypothetical monopolist in defining that market. At a time of heated
	discussion about the proper frame for antitrust analysis, the importance of the hypothetical monop-
the hypothetical	olist test in general and economic evidence in particular to the decision of two courts separated by
	a decade and a half and thousands of miles is striking.
monopolist test in	
	Background on SPRB coal
general and economic	Coal has a bad reputation: it is considered to be worse for the environment than most other energy
	sources. ^{7,8} Indeed, the 2012 Mercury and Air Toxics Standards ("MATS") regulation was enacted
evidence in particular	in large part to reduce the level of pollutants emitted from coal power plants. ⁹ But not all coal was
	created equal. The Powder River Basin—located in northeast Wyoming and southeast Montana—
to the decision of two	is the largest coal-producing basin in the United States. It is divided into a northern and southern
	region, and each region's coal has distinct characteristics. Coal from the Southern Powder River
courts separated by a	Basin has lower sodium and ash content than Northern Powder River Basin ("NPRB") coal. SPRB
	coal has a lower sulfur content than coal from other parts of the United States and is less damaging
decade and a half and	to the environment. The lower emissions that result from its lower sulfur content mean that SPRB
	coal, compared to other types of coal, aids with environmental regulation compliance and confers

striking.

thousands of miles is

operational benefits.¹⁰

There are today seven active coal suppliers in the SPRB, with Peabody and Arch being the two largest. To extract coal from the ground, coal suppliers employ machinery to remove topsoil and layers of rock to expose the coal.¹¹ In 2019, Peabody produced 108 million tons of SPRB coal, Arch produced 75 million tons of SPRB coal, and all other SPRB coal producers collectively mined only 85 million tons of SPRB coal.12

⁶ The PRB also includes Northern Powder River Basin ("NPRB") coal. NPRB and SPRB coal have different characteristics, as discussed below. In particular, NPRB coal contains significantly more pollutants.

⁷ In this article when we use the term "coal," we are referring to thermal coal. Other types of coal are not commonly used to generate electricity and are outside the scope of our analysis.

⁸ David Roberts, Survey Says: The American Public Is Souring on Coal, Vox (Feb. 14, 2018), https://www.vox.com/energy-and-environment /2018/2/14/17006680/survey-american-public-souring-on-coal.

⁹ See Environmental Protection Agency, Regulatory Actions—Final Mercury and Air Toxics Standards (MATS) for Power Plants (July 17, 2020), https://www.epa.gov/mats/regulatory-actions-final-mercury-and-air-toxics-standards-mats-power-plants.

¹⁰ Customers typically procure SPRB coal through a Request for Proposal process. They issue RFPs to SPRB coal suppliers specifying the desired coal properties (e.g., Btu, sulfur, and ash content), quantities, and the time period.

¹¹ SPRB coal is mined from surface mines. While transportation costs for SPRB coal are high, surface mining techniques make it low-cost compared to underground coal that involves machinery and labor which add to the overall cost of coal production.

¹² Peabody operates the North Antelope Rochelle ("NARM"), Rawhide, and Caballo SPRB mines. NARM is the largest coal mine in the world. Arch operates the Black Thunder and Coal Creek SPRB mines.

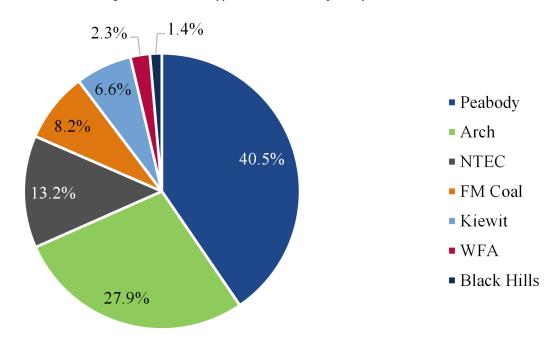


Figure 1. SPRB coal supplier market shares by 2019 production volume

Source: S&P Global data

Once SPRB coal is mined, it is processed, cleaned, and then transported to power producers, typically by rail. Customers usually purchase SPRB coal at the mine and then arrange delivery to their plants directly with the help of rail carriers. The price of SPRB coal, therefore, typically consists of the mine-mouth price of the coal plus a transportation cost.

One key feature of different energy sources is the efficiency to produce energy.¹³ Coal produces energy using the heat it produces when burning.¹⁴ The higher the heat, the more efficient is the coal. The heat produced by burning coal is typically measured in Btu "per pound" (though per pound is generally excluded in favor of just Btu).¹⁵ The coal found in the SPRB has thermal content of between 8,400 and 9,400 Btu.¹⁶ There are a series of mines in the SPRB that produce coal with a Btu at the upper end of this range (i.e., approximately 8,800 Btu and above). These mines are typically referred to as Tier 1 mines. The largest Tier 1 mines are Peabody's North Antelope Rochelle mine and Arch Coal's Black Thunder mine.

A Primer on Market Definition

A common first step when analyzing a proposed transaction's likely effect on competition is to focus the inquiry on a subset of an industry that includes the products most likely to be affected by the transaction. This process is known as "market definition," and the subset of an industry that results is known as the "relevant market." Market definition is described in detail in the 2010

¹³ U.S. ENERGY INFORMATION ADMINISTRATION, U.S. Energy Facts Explained, https://www.eia.gov/energyexplained/us-energy-facts/.

¹⁴ U.S. GEOLOGICAL SERVICE, What Is Coal Used For? https://www.usgs.gov/faqs/what-coal-used?qt-news_science_products=0#qt-news_ science_products.

¹⁵ U.S. ENERGY INFORMATION ADMINISTRATION, What Is the Heat Content of U.S. Coal? https://www.eia.gov/tools/faqs/faq.php?id=72&t=2.

¹⁶ S&P GLOBAL, Specifications Guide: Global Coal (August 2020), https://www.spglobal.com/platts/plattscontent/_assets/_files/en/ our-methodology/methodology-specifications/coalmethodology.pdf.

DOJ-FTC Horizontal Merger Guidelines ("Merger Guidelines").¹⁷ Given the importance of product market definition in the two SPRB coal cases, it is worth discussing it in more detail. Below, we summarize some of the key precepts of market definition established by the Merger Guidelines and discuss how they are applied in practice.

Market definition is concerned with the preferences of customers. It identifies (1) a group of products that customers view as being close substitutes and (2) the geographic area in which customers will look to purchase these products.¹⁸ The group of products that is identified is known as the "product market."¹⁹ The area in which customers would look to purchase the group of products is known as the "geographic market."²⁰ Together, the product market and the geographic market provide an analytically appropriate scope in which to analyze the effects of a joint venture on competition to supply a product to customers.²¹

The Merger Guidelines explain that "[w]hen a product sold by one merging firm (Product A) competes against one or more products sold by the other merging firm," it is appropriate to "define a relevant product market around Product A to evaluate the importance of that competition."²² The product market is complete when one has identified a group of products that customers view as being reasonable substitutes for Product A.²³

When defining a product market, the key question is where to draw the line between which substitute products should be added to the market and which should not. If one adds fewer products, one may exclude an important substitute for Product A. If one adds products that are more distant substitutes, one is likely to obscure competition between Product A and the products that are closer substitutes for it. For example, including cars in a motorcycle market will tend to underestimate the intensity of competition between motorcycle producers.²⁴

The Merger Guidelines employ a well-accepted method to determine which products may be excluded from a market: the hypothetical monopolist test.²⁵ The hypothetical monopolist test is designed to ensure that important substitute products for Product A are not excluded from the market.²⁶ Conceptually, it tests whether the competition between a group of products is valuable, where "valuable" means that eliminating that competition would result in a small but significant price increase. In particular, the hypothetical monopolist test asks whether a hypothetical profit-maximizing monopolist of the products in a proposed market would increase the price of at least

¹⁷ U.S. Dep't of Justice & Federal Trade Comm'n, Horizontal Merger Guidelines (2010).

¹⁸ Merger Guidelines, at § 4 ("Market definition focuses solely on demand substitution factors, i.e., on customers' ability and willingness to substitute away from one product to another [...] Customers often confront a range of possible substitutes...Some substitutes may be closer, and others more distant, either geographically or in terms of product attributes and perceptions.").

¹⁹ Id., at § 4.1 ("[A] relevant product market consists of a group of substitute products including Product A.").

²⁰ Id., at § 4.2 ("The arena of competition affected by the merger may be geographically bounded if geography limits some customers' willingness or ability to substitute to some products, or some suppliers' willingness or ability to serve some customers.").

 ²¹ *Id.*, at § 4 ("[M]arket definition helps specify the line of commerce and section of the country in which the competitive concern arises.").
²² *Id.*, at § 4.1.

²³ *Id.*, at § 4.1 ("[A] relevant product market consists of a group of substitute products including Product A").

²⁴ *Id.*, at § 4, Example 4.

²⁵ Id., at § 4.1.1 ("The Agencies employ the hypothetical monopolist test to evaluate whether groups of products in candidate markets are sufficiently broad to constitute relevant antitrust markets.").

²⁶ Id., at § 4.1.1 ("The Agencies use the hypothetical monopolist test to identify a set of products that are reasonably interchangeable with a product sold by one of the merging firms.").

some products in that market by a small but significant and non-transitory amount, often taken to be 5 percent.²⁷

Suppose a hypothetical profit-maximizing monopolist would impose at least a small but significant and non-transitory increase in price (a "SSNIP"). In that case, the proposed product passes the hypothetical monopolist test (i.e., it includes the key substitutes for Product A).²⁸ If, however, the hypothetical profit-maximizing monopolist would not impose a small but significant and non-transitory increase in price, it means that some important substitutes have been excluded from the market, and the proposed market fails the hypothetical monopolist test. In this case, the market must be expanded to include at least one previously excluded substitute product, and the newly expanded market must be tested again.²⁹

It is important to understand that a market need not—and typically will not—include every reasonable substitute for Product A. As the Merger Guidelines put it, "[G]roups of products may satisfy the hypothetical monopolist test without including the full range of substitutes from which customers choose."³⁰ Indeed, a group of products may pass the hypothetical monopolist test "even if customers would substitute significantly to products outside that group in response to a price increase."³¹ In the motorcycle hypothetical mentioned earlier, for example, two motorcycle brands could have two-thirds of their lost sales in the event of a price increase divert to cars and still be a product market (i.e., cars may compete with motorcycles and yet not be in the product market because the elimination of competition between motorcycle brands would not be offset by competition with cars).³² A product market is not a catalog of all substitutes for Product A—rather, it is a collection of products whose competition is valuable (i.e., the removal of competition between the suppliers of those products would lead to higher prices than would prevail if the current level of competition were maintained).

Product Market Definition in the Arch Coal Case

Each of the parties in the Arch Coal case proposed two product markets. The FTC proposed relevant markets of (1) all SPRB coal and (2) a narrower market of 8,800 Btu SPRB coal. The defendants agreed that all SPRB is a properly defined product market, but also argued for an all PRB coal market. This market would have included NPRB coal in addition to SPRB coal.

Faced with these three possible markets, the court first ruled that the evidence supported defining an SPRB coal market. The court noted explicitly in making this determination that both the plaintiff and defense experts had implemented the hypothetical monopolist test and concluded that SPRB coal was a relevant product market.³³

- ³⁰ *Id.*, at § 4.1.1.
- ³¹ Id., at § 4.1.1.
- ³² Id., at § 4.1.1.

²⁷ Id., at § 4.1.1 ("[T]he test requires that a hypothetical profit-maximizing firm . . . ('hypothetical monopolist') likely would impose at least a small but significant and non-transitory increase in price ("SSNIP") on at least one product in the market, including at least one product sold by one of the merging firms.").

²⁸ Id., at § 4.1.1 ("[T]he test requires that a hypothetical profit-maximizing firm . . . ('hypothetical monopolist') likely would impose at least a small but significant and non-transitory increase in price ("SSNIP") on at least one product in the market, including at least one product sold by one of the merging firms.").

²⁹ Id., at § 4.1.1 ("The hypothetical monopolist test requires that a product market contain enough substitute products so that it could be subject to post-merger exercise of market power significantly exceeding that existing absent the merger.").

³³ FTC v. Arch Coal, Inc. at 7. "Plaintiff's expert concluded, after applying the hypothetical monopolist test, that the relevant market is no broader than SPRB coal." Defendants' expert, applying the same test, concluded that the relevant market is no narrower than SPRB coal.

Turning next to the FTC's narrower market of 8,800 Btu coal, the court rejected the FTC's narrower market for two reasons. First, the plaintiffs' own expert was reluctant to endorse this market.³⁴ Second, there was "significant evidence" of interchangeability between 8,800 Btu SPRB coal and other types of SPRB coal.³⁵ There is no evidence that the plaintiffs' expert performed a hypothetical monopolist test in support of an 8,800 Btu SPRB coal market.

The court rejected firmly the defendants' contention that there is a broader PRB market.³⁶ It wrote: "Defendants' half-hearted argument for a market of all PRB coal is totally unpersuasive."³⁷ In rejecting this broader market, the court appealed to the "'narrowest market' principle" and described the methodology as the following: "the analysis begins by examining the most narrowly-defined product or group of products sold by the merging firms to ascertain if the evidence and data support the conclusion that this product or group of products constitutes a relevant market. If not, the analysis shifts to the next broadest product grouping to test whether that is a relevant market. This process continues until a relevant market is identified."³⁸ This principle is also embodied in the 2010 Merger Guidelines, though in less mechanistic terms: "defining a market broadly to include relatively distant product or geographic substitutes can lead to misleading market shares."³⁹

It is perhaps not surprising that the Arch Coal court accepted an SPRB coal market given that both the plaintiffs and the defendants proposed it and that both economic experts performed hypothetical monopolist tests that supported it. The court rejected both a narrower and broader market than SPRB coal. The court determined that the FTC's narrower market did not align with the qualitative evidence on substitutability, and this proposed market does not seem to have been supported by a hypothetical monopolist test.⁴⁰ The court also found the defendants' argument that a broader market could be relevant when the narrower all SPRB coal market was a properly defined market to be unavailing.

Product Market Definition in Peabody-Arch

The parties in the Peabody-Arch litigation differed sharply on whether SPRB is a product market. The FTC's economic expert argued that SPRB coal was the relevant product market, based on multiple applications of the hypothetical monopolist test, each of which found that SPRB coal passed.

To implement the hypothetical monopolist test, the FTC's economic expert used the critical elasticity method.⁴¹ This method is regularly used to define markets and has been accepted by courts.⁴² To apply the method, one first calculates the *critical elasticity* for a product (here SPRB

³⁹ Merger Guidelines, at § 4.

³⁴ *Id.* at 9.

³⁵ *Id.* at 8.

³⁶ Id. at 7. "The Court, therefore, rejects the proposition that the entire PRB coal market is the relevant product market for analysis of the proposed transactions."

³⁷ *Id.* at 9. See also *Id.* at 7: "However, defendants have not set forth a viable argument, supported by evidence, for consideration of all PRB coal as a broader relevant market."

³⁸ *Id.* at 7.

⁴⁰ "Both Dr. Morris and Ms. Guerin-Calvert concluded, after applying the hypothetical monopolist test and critical loss analysis, that SPRB coal is a relevant market... and plaintiffs have not carried their burden of establishing that 8800 Btu SPRB coal is a distinct relevant product market." FTC v. Arch Coal, Inc., at 9.

⁴¹ See Gregory J. Werden, Demand Elasticities in Antitrust Analysis, 66 ANTITRUST L.J., 363 (1998).

⁴² In re Tronox Ltd., 2018 FTC LEXIS 190, at ¶78–82 (FTC Dec. 14, 2018); FTC v. Tronox Ltd., 332 F. Supp. 3d 187, 204 (D.D.C. 2018).

coal). The critical elasticity captures how willing consumers must be to switch away from the product in the event of a price increase to make a monopolist of that product unwilling to implement that price increase. Next, one calculates the *actual price elasticity* of demand for the product.⁴³ This captures how willing consumers actually are to switch away from the product in response to a price increase. Finally, one compares the critical elasticity to the actual elasticity—if the actual demand is less elastic (i.e., less willing to switch products) than the critical elasticity (i.e., the critical willingness to switch), then the hypothetical monopolist test is satisfied, and the group of products is a properly defined product market.⁴⁴

The FTC's expert calculated margins using the parties' accounting data and then calculated the critical elasticity for a 5 percent price increase.⁴⁵ He then estimated the actual price elasticity of demand for SPRB coal using five distinct approaches. First, he estimated the price elasticity of demand using data on SPRB coal shipments and prices over time. Second, he estimated it using an ordinary-course study of the impact of railroad costs on demand for SPRB coal taken from Peabody's documents. Third, he estimated it using data on retirements of plants that burn SPRB over time. Fourth, he estimated it using data on how demand for SPRB coal changes as the profitability of SPRB power plants changes in response to the price of SPRB. Finally, he estimated it using the demand for SPRB coal forecasted by an electricity consulting firm under different SPRB coal and natural gas price scenarios.⁴⁶

For each of the FTC's expert's five methodologies, the actual price elasticity was less elastic than the critical elasticity, which means that SPRB coal passed the hypothetical monopolist test and is a properly defined product market. Since these estimated price elasticity of demand estimates incorporated the competitive pressures from other potential substitutes like natural gas, they showed that the elimination of competition between SPRB coal producers would likely lead to higher prices, notwithstanding competition between SPRB coal and other energy sources.

The defendants' economic experts rejected the idea that SPRB coal is a properly defined product market, stating that "commercial realities have changed significantly in the sixteen years since the FTC last litigated—and the federal courts last adjudicated—a merger challenge in this industry."⁴⁷ The defendants' experts presented three reasons that they believed that SPRB coal was no longer a product market: (1) the availability of low-cost natural gas,⁴⁸ (2) increasing generation of electricity by renewable sources, and (3) the risk of coal plant retirements that prevented SPRB coal producers from raising prices.⁴⁹ The crux of the defendants' economic experts' arguments was that SPRB coal customers would directly switch from using SPRB coal to using other generation sources in large enough numbers that SPRB coal was no longer a product market.

⁴³ The responsiveness of customers to a change in price is captured economically by a quantity known as the price elasticity of demand.

⁴⁴ FTC v. Peabody-Arch Coal (Eastern Dist. Of Missouri, Jan 28, 2021), Plaintiff's Proposed Findings of Fact and Conclusions of Law, ¶ 43.

⁴⁵ Using Defendant expert's, Dr. Israel's, computed margin led to similar critical elasticity results.

⁴⁶ ABB is a widely used electricity consulting firm that is well recognized for its modeling of electricity demand and supply, including generation and transmission modeling. One of ABB's flagship products is a highly sophisticated and proprietary market simulation model called PROMOD, which incorporates a range of inputs to model the demand and supply of electricity. Power producers use PROMOD in the ordinary course of business to forecast their coal burns, and ISOs and RTOs use PROMOD to assist with transmission planning.

⁴⁷ FTC v. Peabody-Arch Coal (Eastern Dist. Of Missouri, Jan 28, 2021), Defendant's Proposed Findings of Fact and Conclusions of Law, ¶ 10.

⁴⁸ Henry Hub natural gas prices were traded at \$5.59 in October 2021, in contrast to all-time low prices \$1.63 in June 2020.

⁴⁹ FTC v. Peabody-Arch Coal (Eastern Dist. Of Missouri, Jan 28, 2021), Defendant's Proposed Findings of Fact and Conclusions of Law, 11 11-18.

However, the court's

opinion does not turn

a blind eye to the

interchangeability of

product substitutes.

In fact, the court

recognized the role

of substitution in its

market definition

- by citing past case
- precedents such

as Brown Shoe and

Process Controls

Int'l. Inc. v. Emerson

Process Mgmt.

Crucially, though, none of the defendants' experts calculated an alternative estimate of either the actual price elasticity of demand or the critical elasticity of demand.⁵⁰ This failure to produce any alternative estimate supporting a broader relevant market, in the face of the FTC's expert's five estimates, may well have been decisive.

The Peabody-Arch court ruled that the FTC had established that the relevant market was for SPRB coal and ruled in favor of the FTC, granting a preliminary injunction. In its opinion, the court highlighted the importance of market definition in its decision stating that "if the FTC does not provide sufficient evidence for its proposed market definition. ... it will be very difficult to justify its request for a preliminary injunction against the JV."51

The court accepted the hypothetical monopolist test as defined in the Merger Guidelines as an appropriate method to evaluate market definition, writing that "the FTC has presented substantial legal authority supporting the use of the [hypothetical monopolist test] for questions of market definition" and that the defendants "have not persuaded the Court that the energy industry is so different from all other industries that a standard, well-accepted analytical tool like the [hypothetical monopolist test] must be discounted entirely, or that the Court should favor Defendants' less scientific approach to market definition."52

thinking about product However, the court's opinion does not turn a blind eye to the interchangeability of product substitutes. In fact, the court recognized the role of substitution in its thinking about product market definition by citing past case precedents such as Brown Shoe and Process Controls Int'l, Inc. v. Emerson Process Mgmt.⁵³ In particular, the court addressed product substitution head-on by stating that it is "indisputable... that coal competes with natural gas and renewables in a broader energy market."54

> The court ultimately granted its preliminary injunction not because SPRB coal does not compete with other fuels, but rather because "the FTC has presented more than sufficient evidence that there is also a distinct competitive market among SPRB coal producers that satisfies the applicable criteria for market definition."55 If alternative energy sources were sufficiently close substitutes for SPRB coal, then the market definition tests performed by the FTC's expert would have found that the demand for SPRB coal is significantly more elastic.

> In the end, then, the Peabody-Arch decision was fully consistent with the Arch Coal decision with respect to the relevant product market, both in general and in the specifics. Both opinions defined SPRB coal as the relevant product market and rejected other markets. Both decisions also confirmed the primacy of the Merger Guidelines approach in general, and the hypothetical monopolist test in particular. And both decisions emphasized the importance of the facts, of using data to implement the hypothetical monopolist test. As such, both decisions argue in favor of neither narrow nor broad markets per se, but rather markets that are defined in accordance with the Merger Guidelines and comport to the facts of the case.

- ⁵³ *Id.* at p. 21.
- ⁵⁴ *Id.* at p. 23.
- ⁵⁵ *Id.* at p. 23–24, emphasis in original.

⁵⁰ "None of Defendants' experts calculated an alternate value for the price elasticity of demand for SPRB coal." Opinion, FTC v. Peabody Energy Corporation et al., No. 4:20-cv-00317-SEP (E. D. Mo. Oct. 5, 2020), p. 26.

⁵¹ *Id.* at p. 20.

⁵² *Id.* at p. 35.