



NATIONAL BEEF PACKING COMPANY, LLC )  
12200 North Ambassador Drive, 5th Floor )  
Kansas City, MO 64163, )  
 )  
Defendants. )  
\_\_\_\_\_ )

**COMPLAINT**

The United States of America, acting under the direction of the Attorney General of the United States, and the states of Colorado, Iowa, Kansas, Minnesota, Missouri, Montana, North Dakota, Ohio, Oklahoma, Oregon, South Dakota, Texas, and Wyoming (“Plaintiff States”), acting under the direction of their respective Attorneys General or other authorized officials, bring this civil action to enjoin the acquisition of Defendant National Beef Packing Company, LLC (“National”) by Defendant JBS S.A. (“JBS”) and complain and allege as follows:

1. JBS, based in Brazil, is the world’s largest beef packer. In mid-2007, JBS acquired Colorado-based Swift Foods Company, then the third-largest beef packer in the United States, with plants in Texas, Nebraska, Colorado, and Utah. JBS is in the process of acquiring Smithfield Beef Group, Inc., the fifth-largest beef packer in the United States, with packing plants in Arizona, Wisconsin, Michigan, and Pennsylvania.
2. National is the fourth-largest beef packer in the United States. National operates two major beef packing plants in Kansas and a third plant in southern California. Like JBS’s plants in the United States, National’s plants process primarily fed cattle, which are steers and heifers raised and fed for the production and sale of high quality beef products, including beef graded as “Choice,” “Select” or “Prime” by the United States Department of Agriculture (hereinafter

“USDA-graded beef”).

3. JBS’s proposed acquisition of National, its third major acquisition since 2007, would complete a fundamental restructuring of the United States beef packing industry. The acquisition would increase JBS’s share of fed cattle packing capacity from close to 20% to approximately 35% and eliminate one of three large packers that compete with JBS. Post merger, over 80% of the nation’s fed cattle packing capacity would be controlled by a three-firm oligopoly — JBS, Tyson Foods, Inc. (“Tyson”) with approximately 25-30%, and Cargill, Inc. (“Cargill”) with approximately 20-25% share.

4. Competition among packers to purchase fed cattle is critical to ensure that the nation’s thousands of cattle producers, ranchers, and feedlots receive competitive prices for the fed cattle that they produce, feed, and market. In 2007, packers purchased more than 27 million fed cattle at a cost of close to \$30 billion. Defendants plus Tyson and Cargill together purchased over 85% — nearly 24 million — of these cattle.

5. Competition among fed cattle packers to produce and sell USDA-graded beef products, primarily as wholesale “boxed” beef, has benefitted grocers, food service companies and ultimately United States consumers. In 2007, packers in the United States produced and sold more than \$20 billion of USDA-graded boxed beef products.

6. The proposed transaction would eliminate head-to-head competition between the merging parties and likely would diminish the vigor with which JBS and the two other significant packers each will compete to purchase fed cattle and produce and sell USDA-graded boxed beef, making interdependent or coordinated conduct among these large packers more likely. As a result, cattle producers, ranchers and feedlots likely will receive lower prices for their cattle. Similarly,

grocers, food service companies and ultimately United States consumers likely will pay higher prices for USDA-graded beef. Accordingly, JBS's acquisition of National likely will substantially lessen competition in violation of Section 7 of the Clayton Act, as amended, 15 U.S.C. § 18.

### **I. JURISDICTION AND VENUE**

7. This action is filed by the United States under Section 15 of the Clayton Act, as amended, 15 U.S.C. § 25, which invests the Court with jurisdiction to prevent and restrain violations of Section 7 of the Clayton Act, as amended, 15 U.S.C. § 18. Each of the Defendants, themselves or through wholly-owned subsidiaries that they control, purchase fed cattle and sell USDA-graded boxed beef products in the flow of interstate commerce, and their activities substantially affect interstate commerce as well as commerce in each of the Plaintiff States.

8. The Plaintiff States bring this action under Section 16 of the Clayton Act, 15 U.S.C. § 26, to prevent and restrain the violation by the Defendants of Section 7 of the Clayton Act, 15 U.S.C. § 18. The Plaintiff States, by and through their respective Attorneys General, or other authorized officials, bring this action in their sovereign capacities and as *parens patriae* on behalf of the citizens, general welfare and economy of each of their states.

9. Defendant National transacts business and is found in the Northern District of Illinois, through, among other things, selling beef products to customers in this District. Venue is proper over National in this Division within the Northern District of Illinois within the meaning of 15 U.S.C. § 22. Venue is proper in the Northern District of Illinois for Defendant JBS S.A., a Brazilian corporation, under 28 U.S.C. § 1391(d). Alternatively, venue is proper over JBS S.A. in this Division within the Northern District of Illinois under 15 U.S.C. § 22 because JBS S.A. transacts business in this District through wholly-owned subsidiaries, over which JBS S.A.

exercises dominant control, that sell beef to customers in this District.

## **II. THE DEFENDANTS AND THE PROPOSED TRANSACTION**

10. JBS, a corporation organized under the laws of Brazil, is the world's largest beef packer. JBS's wholly-owned subsidiary, JBS USA, is currently the third-largest beef packer in the United States. JBS's beef packing plants in Cactus, Texas; Grand Island, Nebraska; Greeley, Colorado; and Hyrum, Utah have a combined slaughter capacity of approximately 20,000 head of cattle per day and generate over \$6 billion in beef sales annually. Through the acquisition of Smithfield Beef Group, the fifth-largest United States beef packer, JBS will obtain additional packing plants in Tolleson, Arizona; Green Bay, Wisconsin; Plainwell, Michigan; and Souderton, Pennsylvania, increasing its total slaughter capacity to approximately 27,000 head per day.

11. National is the nation's fourth-largest beef packer, with annual beef sales of over \$5 billion and a packing capacity of approximately 14,000 head of cattle per day. National operates three beef packing plants located in Liberal, Kansas; Dodge City, Kansas; and Brawley, California. National is majority-owned by U.S. Premium Beef, LLC, a Delaware limited liability company partially owned by cattle producers.

12. JBS agreed to purchase 100% of National shares for approximately \$560 million pursuant to an agreement dated February 29, 2008. At closing, JBS will assume the debt and other liabilities of National, resulting in an enterprise value of approximately \$970 million.

### III. TRADE AND COMMERCE

#### A. The Beef Packing Industry is Centered in the High Plains

13. The overwhelming majority of fed cattle slaughter in the United States occurs in the High Plains, a region often referred to as the “Beef Belt,” which is centered in Colorado, western Iowa, Kansas, Nebraska, Oklahoma, and Texas. Approximately three-quarters of the fed cattle packing capacity in the United States is found in this region, along with close to 80% of all cattle on feedlots.

14. Both National and JBS operate significant packing plants in the High Plains area. National’s plants in Liberal, Kansas and Dodge City, Kansas are among the largest and most profitable beef packing plants in the nation. Located in the center of the High Plains region, the National plants compete with JBS’s Grand Island, Nebraska plant to the north; its Cactus, Texas plant to the south; its Greeley, Colorado plant to the west; and other plants in the High Plains. Together, the five plants owned by JBS and National account for approximately one-third of total fed cattle packing capacity in the High Plains. Tyson and Cargill also each operate five fed cattle plants in the High Plains, with Tyson and Cargill accounting for approximately 30% and 25% of High Plains packing capacity, respectively.

15. An area centered in the Imperial Valley of California, encompassing parts of southern California and Arizona (hereinafter “the Southwest”), is another important region for the production and feeding of fed cattle. National operates a plant in the Imperial Valley, in Brawley, California. The next closest major packing facility for the slaughter of fed cattle is the former Smithfield Beef Group plant in Tolleson, Arizona, which is being acquired by JBS. Other packing plants in the region purchase and slaughter only small volumes of fed cattle.

## **B. The Production of Fed Cattle for Slaughter**

16. Fed cattle are steers and heifers that are raised and fed specifically for beef production. Most fed cattle are breeds that are raised only for beef production. After being weaned, these cattle spend anywhere between two and ten months grazing on pasture or being “backgrounded” in confined lots, where they are typically fed forage or hay until they reach a weight of 600 to 800 pounds. The cattle, then referred to as feeder cattle, are transferred or sold to feedlots where they are fed a high-energy grain feed for three to six months or more, until they reach an average slaughter weight of 1,250 pounds.

17. A small percentage of fed cattle slaughtered annually are calf-fed Holstein steers and heifers. Many Holstein calves are raised for dairy production. A portion, however, are designated for beef production and are transferred to calf ranches almost immediately after birth. Calf-fed Holsteins are typically placed in feedlots much earlier than other breeds of fed cattle and remain there, often for as long as a year, until they reach slaughter weight.

18. Fed cattle are usually transported only moderate distances from feedlot to packing plant due to transportation costs and the “shrinkage” in the weight of the cattle that occurs during transport. Cattle can be, and sometimes are, transported further, but prices for fed cattle transported long distances are often discounted to reflect higher shipping costs and increased shrinkage.

## **C. Competition in the Purchase of Fed Cattle**

19. In an average week, fed cattle packers in the United States purchase more than half a million fed cattle at a combined price of close to half a billion dollars. Packers purchase the majority of fed cattle on a weekly “cash” or “spot” market that is centered in the High Plains

region. Over the course of the week, feedlots obtain bids from cattle buyers from several companies. Typically, after several days of a “bid and quibble” process, most transactions clear within a period of a few hours late in the week.

20. Throughout the “bid and quibble” process, packers have extensive and timely information about the cash market. Packers regularly obtain detailed information regarding competitive bids, sales quantities, and prices from feedlot managers. In addition, packers have access to pricing and volume information from numerous commercial and governmental sources, including aggregated but detailed information reported daily by the USDA.

21. Packers also purchase fed cattle under “grid” or “formula” pricing arrangements and forward contracts. The applicable base price under these pricing arrangements is often linked to one of several USDA-reported regional cash prices. Grids typically include discounts or premiums that are based on the characteristics of the cattle carcasses.

#### **D. Competition in Sale of USDA-Graded Boxed Beef**

22. The production of USDA-graded boxed beef begins with the slaughter of fed cattle. After cattle are killed, the carcasses are chilled and then graded by onsite USDA graders as Prime, Choice, Select, or “No-Roll,” which indicates that the carcass did not meet grading requirements. During the fabrication process, the carcass is processed into various primal cuts, including rounds, chucks, loins, and flanks. The primal cuts, or smaller sub-primal cuts, are then vacuum packed and boxed for sale to wholesale customers as boxed beef.

23. Customers for USDA-graded boxed beef include foodservice companies, grocers, and other retailers, which typically cut the boxed beef into individual or “case-ready” portions for sale to consumers. Some beef packers also perform this portioning process and sell case-ready



products to wholesale customers at a premium over boxed beef prices. The demand for USDA-graded boxed beef is fragmented, with no single customer representing a significant portion of any major packer's total sales.

24. There are few long-term contracts for the sale of USDA-graded boxed beef. Many customers purchase their USDA-graded boxed beef from packers on a weekly basis, though some customers purchase under forward contracts or longer-term supply arrangements, which are often linked to USDA-reported weekly prices for USDA-graded boxed beef. Although packers do sell some value-added products, the vast majority of USDA-graded boxed beef is a commodity product. Competition to sell USDA-graded boxed beef is based primarily on price.

**E. Packer Profits are Affected by Industry Output Decisions**

25. Beef packing has historically been a high-volume, relatively low-margin business with predictable seasonal demand variations. With the price of fed cattle representing most of the cost of beef production, packer profitability is determined largely by the "meat margin," or the spread between the price packers pay for fed cattle and the price packers charge for beef, including USDA-graded boxed beef.

26. This meat margin is highly sensitive to changes in the aggregate output levels of fed cattle packers. All else being equal, when the meat packing industry reduces production levels, feedlots and cattle producers are paid less for fed cattle because fewer fed cattle are demanded and customers pay more for USDA-graded boxed beef because less is available for purchase.

27. Because the supply of fed cattle and the demand for USDA-graded boxed beef are relatively insensitive to short term changes in price, even small changes in industry production levels can significantly affect packer profits. The major packers obtain significant information

about each other's past and future output decisions, including the number of days and shifts that competitors' plants operate. Information about production levels is obtained by directly observing plant operations and from third-party sources, including USDA reports showing aggregate industry slaughter of fed cattle. Major packers use this information to calculate market shares based on output and consider this information when setting their own production schedules.

#### **IV. MARKET DEFINITION**

##### **A. Relevant Antitrust Market for the Purchase of Fed Cattle**

###### *1. The Purchase of Fed Cattle is a Relevant Product Market*

28. Fed cattle are steers and heifers that are raised and fed high-energy, corn-based feed for several months to "finish" them for sale to packers for the production of high-quality USDA-graded boxed beef. There are no other reasonable uses for fed cattle other than for the production of beef, including wholesale USDA-graded boxed beef and derivative consumer products. A small but significant, non-transitory decrease in the price paid by packers for fed cattle likely would not be rendered unprofitable by a switch of the sale of fed cattle to other purchasers for any other use or by the repositioning of cattle producers, ranches or feedlots to other purposes.

29. The purchase of fed cattle is a line of commerce and a relevant product market within the meaning of Section 7 of the Clayton Act.

###### *2. The High Plains and the Southwest are Relevant Geographic Markets for the Purchase of Fed Cattle*

30. Cattle producers and feedlots face increased transportation and other costs when shipping fed cattle long distances. In the event of a small but significant, non-transitory decrease in the prices paid by fed cattle packers in the High Plains, cattle producers and feedlots likely would not shift a sufficient volume of fed cattle to other geographic areas or reduce sufficiently the

production of fed cattle to render the price decreases unprofitable. Similarly, in the event of a small but significant, non-transitory price decrease on the prices paid by fed cattle packers to feedlots in the Southwest, cattle producers and feedlots likely would not shift a sufficient volume of fed cattle to other areas or reduce sufficiently the production of fed cattle to render the price decreases unprofitable.

31. Relevant geographic markets for the purchase of fed cattle within the meaning of Section 7 of the Clayton Act are the High Plains and the Southwest regions of the United States.

**B. Relevant Antitrust Market for the Sale of Boxed Beef**

*1. USDA-Graded Boxed Beef is a Relevant Product Market*

32. USDA-graded boxed beef is a distinct product without reasonable substitutes and differs from other types of beef (including non-USDA-graded beef products), other protein, and other food commodities. There is no substitute food product to which customers for USDA-graded boxed beef likely would turn in sufficient numbers to render a small but significant, non-transitory increase in price unprofitable.

33. The production and sale of USDA-graded boxed beef is a line of commerce and a relevant product market within the meaning of Section 7 of the Clayton Act.

*2. The United States is a Relevant Geographic Market for the Production and Sale of USDA-Graded Boxed Beef*

34. Packers ship USDA-graded boxed beef to customers throughout the United States. The USDA does not grade beef produced outside the United States. Packers outside the United States also face significant practical and financial barriers to importation of boxed beef. Only a trivial amount of high quality boxed-beef is currently imported into the United States. A small but significant, non-transitory increase in the price of USDA-graded boxed beef in the United States

likely would not cause United States customers to turn to foreign suppliers in sufficient volumes to make such a price increase unprofitable.

35. The United States is a relevant geographic market for the production and sale of USDA-graded boxed beef within the meaning of the Clayton Act.

## **V. LIKELY ANTICOMPETITIVE EFFECTS OF THE TRANSACTION**

### **A. Likely Effects in Regional Fed Cattle Procurement Markets**

36. JBS's acquisition of National would give JBS control of approximately one-third of fed cattle packing capacity in the High Plains and leave three firms with more than 85% of capacity in that region. Using a measure of market concentration called the Herfindahl-Hirschman Index ("HHI") (defined and explained in Appendix A), the post-acquisition HHIs would increase by over 500 points, resulting in a post-acquisition HHI of approximately 2,600 points. JBS's purchase of National would reduce the number of competitively significant actual or potential bidders for fed cattle from 4 to 3 in the High Plains, resulting in less aggressive competition and lower prices for feedlots and producers of fed cattle. The proposed transaction, therefore, is likely to lessen competition substantially in the purchase of fed cattle in the High Plains.

37. In the Southwest, JBS's acquisition of National would give JBS control of approximately 75% of the region's fed cattle packing capacity. Using the Herfindahl-Hirschman Index, the post-acquisition HHIs would increase by approximately 2,800 points, resulting in a post-acquisition HHI of over 6,000. JBS's purchase of National would eliminate actual and potential competition between JBS — via the Smithfield Beef Group plant it is acquiring — and National, leaving feedlots in the market with only one major buyer of fed cattle. The proposed transaction, therefore, is likely to lessen competition substantially in the purchase of fed cattle in the

Southwest.

**B. Likely Effects on the Production and Sale of USDA-Graded Boxed Beef**

38. JBS's acquisition of National would eliminate a significant packer that competes head-to-head with JBS, and with Tyson and Cargill, to produce and sell USDA-graded boxed beef to wholesale customers. The transaction would concentrate control of fed cattle packing capacity in a three-firm oligopoly. Using the Herfindahl-Hirschman Index, the post-acquisition HHIs would increase by over 500 points, resulting in a post-acquisition HHI of approximately 2,500.

39. This significant structural change to the industry likely would lead JBS, as well as Tyson and Cargill, each to compete less vigorously to produce and sell USDA-graded boxed beef to wholesale customers. The transaction likely would substantially increase the incentive and ability of these major packers to engage in coordinated conduct in output and pricing decisions. As a result, grocers, food service companies and ultimately United States consumers likely will pay higher prices for USDA-graded beef, and cattle producers, ranchers and feedlots likely will receive lower prices for their fed cattle.

40. The proposed transaction, therefore, is likely to lessen competition substantially in the production and sale of USDA-graded boxed beef in the United States.

**VI. ABSENCE OF COUNTERVAILING FACTORS**

41. New entry into the production and sale of USDA-graded boxed beef is costly and time consuming. Construction of a large-scale fed cattle packing facility would require investment of over \$250 million and take two or more years to obtain necessary permits, plan, design, and build. Repositioning by firms or facilities that slaughter primarily cows and bulls, as opposed to fed cattle, would require additional capital investment, such as expansion of cooler capacities. In

addition, there are significant costs and inefficiencies associated with the start-up period of a new fed cattle packing facility and substantial expenses related to establishing necessary cattle procurement and marketing organizations. Entry or repositioning into USDA-graded boxed beef production would therefore not be timely, likely, or sufficient to defeat a small but significant, non-transitory increase in the price for USDA-graded boxed beef or a small but significant, non-transitory decrease in the price of fed cattle.

42. The likely anticompetitive effects of the proposed transaction are not likely to be eliminated or mitigated by any efficiencies that may be achieved by the merger.

## VII.

### **THE PROPOSED ACQUISITION VIOLATES SECTION 7 OF THE CLAYTON ACT**

43. Each and every allegation in paragraphs 1 through 42 of this Complaint is here realleged with the same force and effect as though said paragraphs were here set forth in full.

44. The proposed acquisition of National by JBS is likely to lessen competition substantially in violation of Section 7 of the Clayton Act in the purchase of fed cattle in the High Plains and the Southwest and the production and sale of USDA-graded boxed beef in the United States.

45. JBS's acquisition of National likely will have the following effects:

- a. actual and potential competition in the purchase of fed cattle in the High Plains and the Southwest likely will be lessened substantially;
- b. actual and potential competition in the production and sale of USDA-graded boxed beef in the United States likely will be lessened substantially; and
- c. prices paid by packers for fed cattle will likely decrease and prices charged by packers for USDA-graded boxed beef sold in the United States will likely

increase.

46. Unless restrained, the proposed acquisition will violate Section 7 of the Clayton Act, as amended, 15 U.S.C. § 18.

### **VIII. REQUESTED RELIEF**

47. Plaintiffs request:

- a. that the proposed acquisition by JBS of National be adjudged to violate Section 7 of the Clayton Act, as amended, 15 U.S.C. § 18;
- b. that the Defendants and all persons acting on their behalf be permanently enjoined and restrained from carrying out the proposed acquisition of National, or from entering into or carrying out any other agreement, plan, or understanding by which JBS would acquire, be acquired by, or merge with National;
- c. that Plaintiffs be awarded their costs of this action;
- d. that the Plaintiff States be awarded their reasonable attorneys' fees; and
- e. that Plaintiffs receive such other and further relief as the case requires and the Court deems just and proper.

Dated: October 20, 2008.

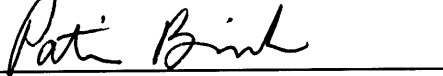
Respectfully submitted,



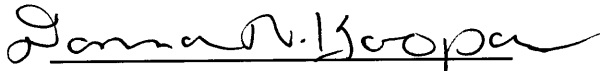
THOMAS O. BARNETT  
Assistant Attorney General



DEBORAH A. GARZA  
Deputy Assistant Attorney General

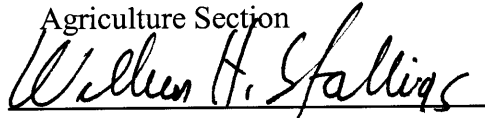


PATRICIA A. BRINK  
Deputy Director, Office of Operations



DONNA N. KOOPERSTEIN  
Chief

Transportation, Energy &  
Agriculture Section

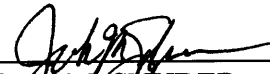


WILLIAM H. STALLINGS  
Assistant Chief  
Transportation, Energy &  
Agriculture Section

PATRICK J. FITZGERALD  
United States Attorney  
for the Northern District of Illinois

s/

THOMAS P. WALSH  
Assistant United States Attorney  
219 South Dearborn Street, 5th Floor  
Chicago, Illinois 60604  
(312) 353-5312  
thomas.walsh2@usdoj.gov



JOHN M. SNYDER  
Claude F. Scott, Jr.

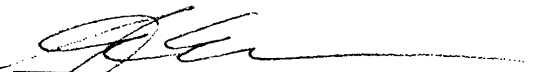


STEVEN KRAMER

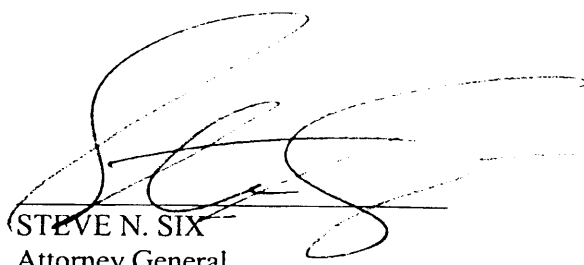
Trial Attorneys  
U.S. Department of Justice  
Antitrust Division  
Transportation, Energy &  
Agriculture Section  
450 Fifth Street, NW  
Suite 4100  
Washington, DC 20530  
Telephone: (202) 307-1281  
john.snyder3@usdoj.gov



JOHN W. SUTHERS  
Attorney General  
State of Colorado



ALISSA HECHT GARDENSWARTZ  
Colorado Bar No. 36126  
Assistant Attorney General  
Office of the Colorado Attorney General  
1525 Sherman Street  
Denver, CO 80203  
(303) 866-5079 (telephone)  
(303) 866-4916 (facsimile)

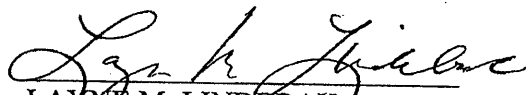


STEVE N. SIX  
Attorney General  
State of Kansas



LYNETTE R. BAKKER  
KS Bar # 22104  
Assistant Attorney General  
LEE EVERETT URBAN  
KS Bar # 23116  
State of Kansas  
120 S.W. 10th Avenue, 4th Floor  
Topeka, Kansas 66612-1597  
Tel: 785-368-8451  
Fax: 785-291-3699

STATE OF IOWA  
THOMAS J. MILLER  
Attorney General  
State of Iowa



LAYNE M. LINDEBAK  
Assistant Attorney General  
State of Iowa  
Iowa Department of Justice  
Hoover Office Building-Second Floor  
1305 East Walnut Street  
Des Moines, Iowa 50319  
Tel: 515 281-7054  
Fax: 551 281-4902

LORI SWANSON  
Attorney General  
State of Minnesota

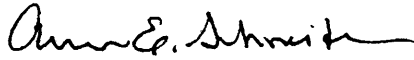


GABRIEL R. GERVEY  
Assistant Attorney General  
Atty. Reg. No. 0386707

445 Minnesota Street, Suite 1200  
St. Paul, Minnesota 55101-2130  
(651) 296-9400 (Voice)  
(651) 296-1410 (TTY)

ATTORNEYS FOR THE STATE OF  
MINNESOTA

JEREMIAH W. (JAY) NIXON  
Attorney General  
State of Missouri



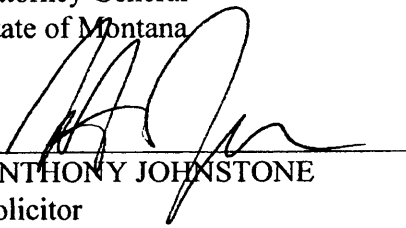
ANNE E. SCHNEIDER  
MO Bar # 35497  
Assistant Attorney General  
State of Missouri  
P.O. Box 899  
Jefferson City, MO 65102  
Tel: 573-751-8455  
Fax: 573-751-7948

State of North Dakota  
Wayne Stenehjem  
Attorney General  
BY:



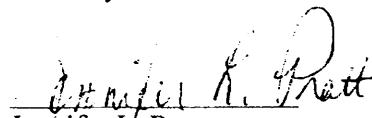
Elin S. Alm (ND ID # 05924)  
Assistant Attorney General  
Consumer Protection and Antitrust Div.  
4205 State Street  
P.O. Box 1054  
Bismarck, ND 58502-1054  
Tel: (701) 328-5570  
Fax: (701) 328-5568  
Email: [ealm@nd.gov](mailto:ealm@nd.gov)

MIKE McGRATH  
Attorney General  
State of Montana



ANTHONY JOHNSTONE  
Solicitor  
State of Montana  
Justice Building  
215 N. Sanders  
P.O. Box 201401  
Helena, MT 59620-1401  
Tel: (406) 444-2026  
Fax: (406) 444-3549  
[ajohnstone@mt.gov](mailto:ajohnstone@mt.gov)

NANCY H. ROGERS  
Attorney General of Ohio



Jennifer L. Pratt  
Chief, Antitrust Section

Patrick E. O'Shaughnessy  
Senior Attorney, Antitrust Section

Beth A. Finnerty  
Principal Attorney, Antitrust Section


Office of the Ohio Attorney General  
150 East Gay St., 23rd Floor  
Columbus, Ohio 43215  
(614) 466-4328  
(614) 995-0266 (fax)

W.A. DREW EDMONDSON  
OKLAHOMA ATTORNEY GENERAL



THOMAS A. BATES, OBA NO. 15672  
JEREMIAH L. STRECK OBA NO. 21373  
ASSISTANT ATTORNEYS GENERAL  
313 NE 21<sup>st</sup> Street  
Oklahoma City, Oklahoma 73105  
Phone: (405) 522-1013  
Fax: (405) 522-0085  
Email: [tom.bates@oag.ok.gov](mailto:tom.bates@oag.ok.gov)  
[jeremiah.streck@oag.ok.gov](mailto:jeremiah.streck@oag.ok.gov)

LAWRENCE E. LONG  
Attorney General  
State of South Dakota



JEFFREY P. HALLEM  
Assistant Attorney General  
State of South Dakota  
1302 East Highway 14, Suite 1  
Pierre, SD 57501-8501  
Tel: 605-773-3215  
Fax: 605-773-4106

HARDY MYERS  
Attorney General  
State of Oregon



TIM D. NORD  
OR Bar # 882800  
Assistant Attorney General  
Oregon Department of Justice  
1162 Court St. NE  
Salem, OR 97301  
Tel: 503-934-4400  
Fax: 503-378-5017

GREG ABBOTT  
Attorney General of Texas

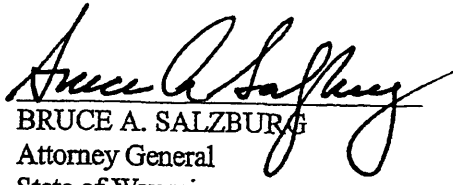
KENT C. SULLIVAN  
First Assistant Attorney General

JEFF L. ROSE  
Deputy Attorney General for Litigation

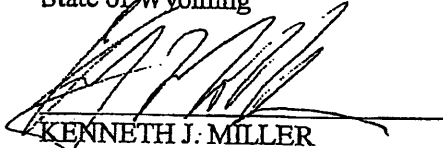
MARK TOBEY  
Chief, Antitrust Division *BarNo. 20082960*



JOHN T. PRUD'HOMME  
Texas Bar No. 24000322  
Office of the Attorney General  
300 W. 15<sup>th</sup> St., 9<sup>th</sup> Fl.  
Austin, TX 78701  
Tel.: (512) 936-1697



BRUCE A. SALZBURG  
Attorney General  
State of Wyoming



KENNETH J. MILLER  
WY Bar # 6-3684  
Senior Assistant Attorney General  
State of Wyoming  
123 Capitol Bldg.  
Cheyenne, WY 82002  
Tel: 307-777-8723  
Fax: 307-777-3435

## APPENDIX A DEFINITION OF HHI

The term “HHI” means the Herfindahl-Hirschman Index, a commonly accepted measure of market concentration. The HHI is calculated by squaring the market share of each firm competing in the market and then summing the resulting numbers. For example, for a market consisting of four firms with shares of 30, 30, 20, and 20%, the HHI is 2,600 ( $30^2 + 30^2 + 20^2 + 20^2 = 2,600$ ). The HHI takes into account the relative size distribution of the firms in a market. It approaches zero when a market is occupied by a large number of firms of relatively equal size and reaches its maximum of 10,000 points when a market is controlled by a single firm. The HHI increases both as the number of firms in the market decreases and as the disparity in size between those firms increases.

Markets in which the HHI is between 1,000 and 1,800 points are considered to be moderately concentrated, and markets in which the HHI is in excess of 1,800 points are considered to be highly concentrated. *See Horizontal Merger Guidelines* ¶ 1.51 (revised Apr. 8, 1997). Transactions that increase the HHI by more than 100 points in highly concentrated markets presumptively raise antitrust concerns under the *Horizontal Merger Guidelines* issued by the Department of Justice and the Federal Trade Commission. *See id.*