UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF NEW YORK UNITED STATES OF AMERICA,

Plaintiff,

WESTINGHOUSE ELECTRIC CORPORATION, ABB ASEA BROWN BOVERI LTD., and ASEA BROWN BOVERI INC.,

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Civil Action No. 89-CIV-1032 Filed: 2/14/89

Defendants.

COMPLAINT

:

The United States of America, plaintiff, by its attorneys, acting under the direction of the Attorney General of the United States, brings this civil action to obtain equitable and other relief as is appropriate against the defendants named herein and complains and alleges as follows:

Ι

JURISDICTION AND VENUE

1. This complaint is filed and this action is instituted under Section 15 of the Clayton Act, as amended, 15 U.S.C. § 25, to prevent and restrain the violation by defendants, as hereinafter alleged, of Section 7 of the Clayton Act, as amended, 15 U.S.C. § 18.

2. Westinghouse Electric Corporation, ABB Asea Brown Boveri Ltd. and Asea Brown Boveri Inc. transact business and are found within the Southern District of New York.

DEFINITIONS

3. "HHI" means the Herfindahl-Hirschman Index, a measure of market concentration. It 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 thirty, thirty, twenty, and twenty percent, the HHI is 2,600 $(30^2 + 30^2 + 20^2 + 20^2 = 2,600)$. The HHI takes into account the relative size and distribution of the firms in a market and approaches zero when a market consists of a large number of firms of relatively equal size. The HHI increases both as the number of firms in the market decreases and as the disparity in size between those firms increases.

4. "Transformer" means a static device used to transfer electric energy from one circuit to another by induction.

5. "Power transformer" means a transformer with a minimum OA power rating of 40 megavolt-amperes ("MVA") or higher.

6. "Converter transformer" means a specialized transformer that is a component of a converter unit, which converts alternating electrical current to direct current or vice versa, for use primarily as a component of high voltage direct current systems.

II

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7. "Steam turbine generator equipment" means steam turbines, 65 megawatts ("MW") or higher, and/or electric generators, 65 MW or higher, used to convert the energy of high temperature pressurized steam to electrical energy.

8. "Steam turbine generator service" means the major repair, retrofitting or modernization of steam turbine generator equipment.

III

THE DEFENDANTS

9. Westinghouse Electric Corporation ("Westinghouse") is made a defendant herein. Westinghouse is a corporation organized and existing under the laws of the Commonwealth of Pennsylvania with its principal offices in Pittsburgh, Pennsylvania. Among its various business interests, Westinghouse is a major United States producer and supplier of electrical power equipment and services, much of which is sold to United States electric utilities. In 1987, Westinghouse's sales of electric power equipment and services accounted for over \$3 billion of its total sales of \$10.7 billion.

10. Asea Brown Boveri Inc. is made a defendant herein. It is a corporation organized and existing under the laws of the State of Delaware, with its principal offices in Purchase, New York. It is a wholly-owned subsidiary of ABB Asea Brown Boveri Ltd. which is headquartered in Zurich, Switzerland. ABB Asea Brown Boveri Ltd. is also made a

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defendant (hereinafter the term "ABB" means ABB Asea Brown Boveri Ltd. and Asea Brown Boveri Inc.). ABB also is a major United States producer and supplier of electrical power equipment and services. In 1987, ABB's United States sales of such equipment and services were about \$1.6 billion. ABB's total sales were over \$18 billion.

IV

TRADE AND COMMERCE

Power Transformers

11. Power transformers, produced principally for sale to electric utilities, perform various power voltage conversions that are essential to utility operations. One such function of power transformers is to convert low voltage electric power produced by a power generating unit to higher voltages that are more efficiently carried over transmission systems. Another is to reduce voltages between transmission and distribution lines in order to enable the safe delivery of electric power to utility customers. In 1987, total sales of power transformers in the United States were approximately \$220 million.

12. The principal purchasers of power transformers in the United States are investor-owned utilities and utilities that are owned and operated by federal, state, county, and municipal governments. To become a supplier of power transformers to a utility, a producer must first be approved

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by the utility as a qualified source. The process of qualification involves intensive technical reviews of a candidate's capabilities, plant inspections, and an examination of the candidate's references.

13. Power transformers are designed to meet precise technical specifications of utilities. For any specific application customers are normally unable to substitute transformers of different specifications. Thus, the power transformer business can be viewed as being comprised of a large set of discrete, customer-based markets. Producers, however, typically make a broad range of transformers, and can readily provide different technical specifications, within the capabilities of a given plant, to meet the requirements of a customer. ABB and Westinghouse can supply power transformers of virtually all required specifications. For the purpose of analyzing the competitive effects of the proposed transaction it is appropriate to group all sizes of power transformers

14. A small but significant and nontransitory increase in the price of power transformers would not cause a significant number of customers to substitute other products.

15. Manufacturers of power transformers compete with one another for sales throughout the United States.

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16. The sale of power transformers constitutes a line of commerce and a relevant product market, and the United States is a section of the country and a relevant geographic market in which power transformers are sold, within the meaning of Section 7 of the Clayton Act.

17. ABB manufactures power transformers at a plant in Waukesha, Wisconsin and at plants in Canada and Europe. ABB is the largest seller of power transformers in the United States, on the basis of unit sales. In 1987, it had about 27 percent of total units sold in the United States. Westinghouse manufactures power transformers at plants in Muncie, Indiana and St. Louis, Missouri. Westinghouse is the second largest seller of power transformers in the United States. In 1987, it had about 26 percent of total units sold in the United States.

18. The United States power transformer market is highly concentrated. Based on 1987 unit sales, the HHI for the sale of power transformers in the United States is 1878. The proposed transaction would increase the HHI by 1386 points to 3264. A market with a post-transaction HHI of 1000 is moderately concentrated, and a market with a post-transaction HHI of 1800 is highly concentrated.

19. Successful entry into the power transformer market is difficult, because of the cost and time required to

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develop the necessary technology to produce power transformers, to construct the physical facilities required for production of power transformers, to assemble the necessary technical, sales and service personnel, and to become a qualified source of power transformers for domestic electric utilities.

20. Manufacturers ship and sell substantial quantities of power transformers across state lines to locations throughout the United States. The production and sale of power transformers are within the flow of and substantially affect interstate commerce.

Converter Transformers

21. The manufacture of converter transformers requires a technology different from that used in the manufacture of power transformers. The principal purchasers of converter transformers are companies that design and install high voltage direct current (HVDC) systems. Because electric power is more efficiently transmitted as direct current than as alternating current, HVDC systems are sometimes employed for long distance transmission. HVDC systems are also used to connect asynchronous transmission systems. Relatively few HVDC systems are sold, but each system costs many millions of dollars. Converter transformers are a major cost item in a HVDC system.

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22. ABB is the largest seller of converter transformers in the United States. Since 1981, ABB has accounted for more than 50 percent of all converter transformers sold in the United States. In 1986 Westinghouse purchased from General Electric Company its converter transformer technology. Westinghouse is one of only a few companies in the world possessing such technology, and since 1986 has been one of only four companies bidding to supply converter transformers in the United States.

23. A small but significant and nontransitory increase in the price of converter transformers would not cause a significant number of customers to substitute other products.

24. Suppliers of converter transformers compete with one another for sales throughout the United States.

25. The sale of converter transformers constitutes a line of commerce and a relevant product market, and the United States is a section of the country and a relevant geographic market in which converter transformers are sold, within the meaning of Section 7 of the Clayton Act.

26. The production and sale of converter transformers are within the flow of and substantially affect interstate commerce.

Steam Turbine Generator Equipment

27. Steam turbine generator equipment consists of a turbine and a connecting generator. Steam passes through

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the turbine, causing the generator rotor and an attached electromagnet to rotate within a stator, thereby generating electricity. Steam turbine generator equipment is the principal means by which nuclear and fossil-fueled utility plants generate electricity from the steam energy produced by nuclear reactor or conventional boiler operations. Nuclear and conventional plants account for over 85 percent of all electric power produced in the United States, with most of the remainder generated by hydroelectric installations. In the period 1983 through 1987, total sales of steam turbine generator equipment in the United States were approximately \$42 million.

28. Steam turbine generator equipment is produced primarily for sale to utilities. It is also sold to cogenerators, independent power producers and industrial customers. To become a supplier of steam turbine generator equipment, a producer must first be approved by the purchaser as a qualified source. The process of qualification involves intensive technical reviews of a candidate's manufacturing and service capabilities, plant inspections, and an examination of the candidate's references.

29. Steam turbine generator equipment is custom designed to meet the needs of particular customers, who are usually unwilling to substitute among units of different

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sizes. Thus, the steam turbine generator equipment business can be viewed as being comprised of a large set of discrete, customer-based markets. Most producers, however, are capable of making a broad range of sizes, and can readily switch from one size to another to meet the requirements of a customer. ABB and Westinghouse can supply virtually all sizes of steam turbine generator equipment. For the purpose of analyzing the competitive effects of the proposed transaction it is appropriate to group all sizes of steam turbine generator equipment.

30. A small but significant and nontransitory increase in the price of steam turbine generator equipment would not cause a significant number of purchasers to substitute other products.

31. Manufacturers of steam turbine generator equipment compete with one another for sales throughout the United States.

32. The sale of steam turbine generator equipment constitutes a line of commerce and a relevant product market, and the United States is a section of the country and a relevant geographic market in which steam turbine generator equipment is sold, within the meaning of Section 7 of the Clayton Act.

33. Westinghouse manufactures steam turbine generator equipment at plants located in Alabama, North Carolina, and

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Florida. Westinghouse is the largest seller of steam turbine generator equipment in the United States. In the period 1983 through 1987 Westinghouse's sales of such equipment constituted about 43 percent of total United States sales, in terms of MW, for that period. ABB manufactures steam turbine generator equipment at plants located in Europe. It is the third largest seller of such equipment in the United States. In the period 1983 through 1987 ABB's United States sales constituted about 19 percent of total United States sales of such equipment for that period.

34. The United States steam turbine generator equipment market is highly concentrated. Based on sales in MW from 1983 through 1987, the HHI for the sale of steam turbine generator equipment in the United States is 3127 points. The proposed transaction would increase the HHI by 1566 points to 4693.

35. Successful entry into the steam turbine generator equipment market in the United States is difficult, because of the cost and time required to develop the necessary technology to produce steam turbine generator equipment, to construct the physical facilities required for production and service of steam turbine generator equipment, to assemble the necessary technical, sales and service personnel, and to become a qualified source of steam turbine generator equipment for domestic electric utilities.

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36. Manufacturers ship and sell substantial quantities of steam turbine generator equipment across state lines to locations throughout the United States. The production and sale of steam turbine generator equipment are within the flow of and substantially affect interstate commerce.

Steam Turbine Generator Service

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37. Owners of existing steam turbine generator equipment may at times require equipment repairs involving the replacement or retrofitting of major components, or equipment modernization efforts aimed at significant efficiency enhancements or life extensions. A substantial proportion of these services is of such technical difficulty or complexity as to be available only from manufacturers of steam turbine generator equipment. In 1987, total sales of such steam turbine generator service in the United States were approximately \$300 million. In the past several years manufacturers of steam turbine generator equipment have begun bidding to provide such service not only for equipment of their own manufacture but also for equipment manufactured by others.

38. Steam turbine generator service is provided primarily to utilities. To become a supplier of steam turbine generator service to a utility, a company must first be approved by the utility as a qualified source. The

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process of qualification usually involves intensive technical reviews of a candidate's capabilities, plant inspections, and an examination of the candidate's references.

39. A small but significant and nontransitory increase in the price of steam turbine generator service would not cause a significant number of purchasers to substitute other services.

40. Suppliers of steam turbine generator service compete with one another for sales throughout the United States.

41. The sale of steam turbine generator service constitutes a line of commerce and is a relevant product market, and the United States is a section of the country and a relevant geographic market in which steam turbine generator service is provided, within the meaning of Section 7 of the Clayton Act.

42. The United States steam turbine generator service market is highly concentrated. Westinghouse and ABB are leading suppliers of steam turbine generator service in the United States. In the period 1983 through 1987 only five firms supplied such service in the United States.

43. Successful entry into the market for steam turbine generator service is difficult because of the cost and time to develop the necessary technology to provide steam turbine generator service, to construct the physical facilities

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required for provision of such service, to assemble the necessary technical, sales and service personnel, and to become a qualified source for steam turbine generator service for domestic electric utilities.

44. Providers of steam turbine generator service ship and sell substantial quantities of products related to such services across state lines to locations throughout the United States. The provision of steam turbine generator service is within the flow of and substantially affects interstate commerce.

V

VIOLATIONS ALLEGED

45. ABB and Westinghouse have agreed to form two partnership joint ventures. One would combine the United States electric power transmission and distribution businesses of ABB and Westinghouse, including their power transformer and converter transformer businesses, in a new joint venture company that would be 55 percent owned by Westinghouse and 45 percent owned by ABB. The other joint venture would combine the United States electric power generation equipment businesses of ABB and Westinghouse, including their steam turbine generator equipment and steam turbine generator service businesses, in a new joint venture company that would be 55 percent owned by Westinghouse and 45 percent owned by ABB. Westinghouse and ABB each would

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convey certain plants, technology and other assets to the new joint venture companies, and ABB would also pay Westinghouse a sum in cash in excess of \$500 million. Each of the joint ventures was expressly conditioned upon the performance of material terms of the other.

46. The effects of the proposed partnership joint venture agreement may be substantially to lessen competition in interstate trade and commerce in violation of Section 7 of the Clayton Act in the following ways, among others:

(a) Actual and potential competition between ABB and Westinghouse in the United States will be eliminated in the markets for power transformers, converter transformers, steam turbine generator equipment and steam turbine generator service; and

(b) Competition generally in the United States may be substantially lessened in the markets for power transformers, converter transformers, steam turbine generator equipment and steam turbine generator service.

VI

PRAYER

WHEREFORE, plaintiff prays:

That each of the proposed partnership joint
ventures of the defendants be adjudged to be in violation of
Section 7 of the Clayton Act;

2. That such injunctive relief and relief by way of preservation of assets and divestiture be ordered as is

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necessary and appropriate to prevent the effects of the unlawful activities alleged in this complaint;

3. That the plaintiff have such other and further relief as the case requires and the Court deems proper; and

That the plaintiff recover the costs of this action.
Dated:

RULE

CHARLES F. RULE Assistant Attorney General

MICHAEL BOUDIN

TOHN W . CLARK

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JOHN W. CLARP

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