

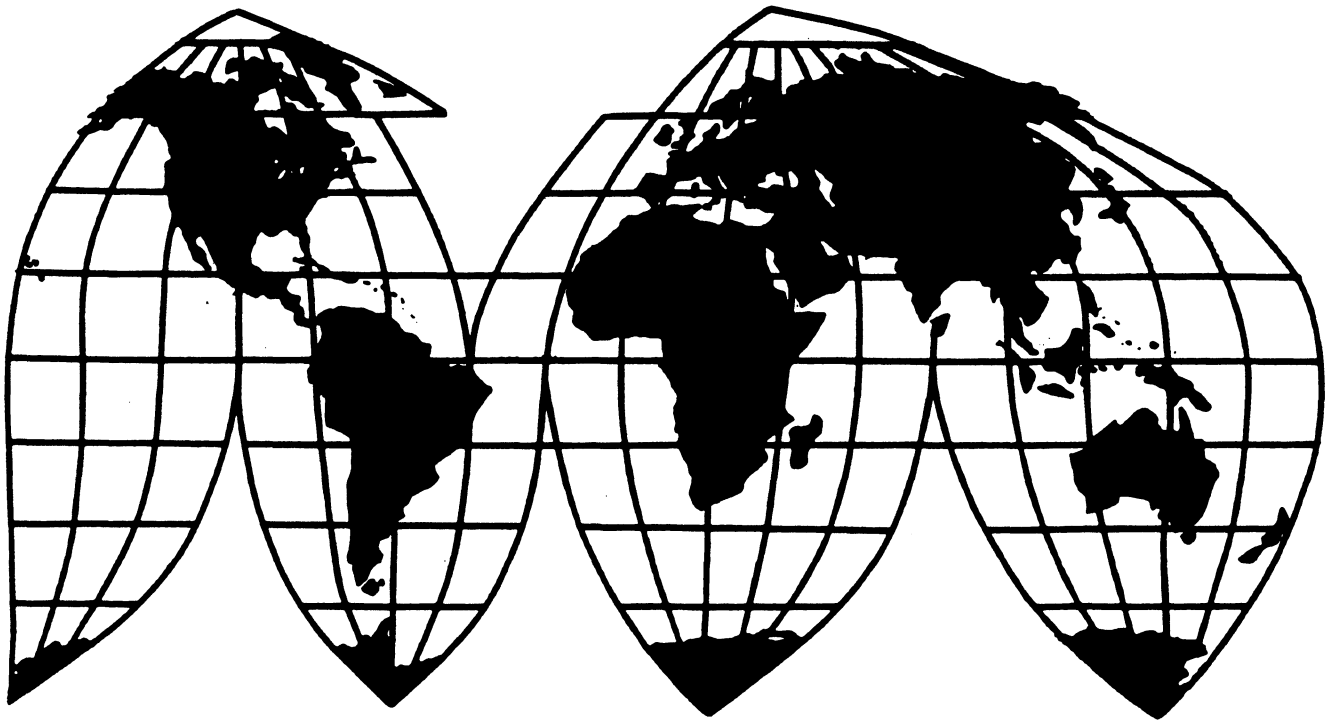
# Grain-Oriented Silicon Electrical Steel From Italy and Japan

Investigations Nos. 701-TA-355 and 731-TA-660 (Final)

Publication 2778

May 1994

**U.S. International Trade Commission**



Washington, DC 20436

# U.S. International Trade Commission

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Washington, DC 20436

## **Grain-Oriented Silicon Electrical Steel From Italy and Japan**



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Note.--Information that would reveal confidential operations of individual concerns may not be published and therefore has been deleted from this report. Such deletions are indicated by asterisks.



**PART I**  
**DETERMINATIONS AND VIEWS OF THE COMMISSION**





# UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigations Nos. 701-TA-355 and 731-TA-660 (Final)

## GRAIN-ORIENTED SILICON ELECTRICAL STEEL FROM ITALY AND JAPAN

### Determination

On the basis of the record<sup>1</sup> developed in the subject investigations, the Commission determines,<sup>2</sup> pursuant to section 705(b) of the Tariff Act of 1930 (19 U.S.C. § 1671d(b)) (the Act), that an industry in the United States is materially injured by reason of imports from Italy of grain-oriented silicon electrical steel, provided for in subheadings 7225.10.00, 7226.10.10, and 7226.10.50 of the Harmonized Tariff Schedule of the United States, that have been found by the Department of Commerce to be subsidized by the Government of Italy. The Commission further determines,<sup>3</sup> pursuant to section 735(b) of the Act (19 U.S.C. § 1673d(b)), that an industry in the United States is materially injured by reason of imports from Japan of grain-oriented silicon electrical steel that have been found by the Department of Commerce to be sold in the United States at less than fair value (LTFV).

### Background

The Commission instituted these investigations effective January 28, 1994, following a preliminary determination by the Department of Commerce that imports of grain-oriented silicon electrical steel from Italy were being subsidized within the meaning of section 703(b) of the Act (19 U.S.C. § 1671b(b)) and that imports of grain-oriented silicon electrical steel from Japan were being sold at LTFV within the meaning of section 733(b) of the Act (19 U.S.C. § 1673b(b)). Notice of the institution of the Commission's investigations and of a public hearing to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the *Federal Register* of February 23, 1994 (59 F.R. 8658). The hearing was held in Washington, DC, on April 12, 1994, and all persons who requested the opportunity were permitted to appear in person or by counsel.

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<sup>1</sup> The record is defined in sec. 207.2(f) of the Commission's Rules of Practice and Procedure (19 CFR § 207.2(f)).

<sup>2</sup> Commissioner Crawford dissenting; Vice Chairman Watson not participating and Commissioner Bragg not participating in the determination in this investigation.

<sup>3</sup> Commissioner Bragg not participating in the determination in this investigation.



## VIEWS OF THE COMMISSION

Based on the record in these final investigations, we determine that the industry in the United States producing grain-oriented silicon electrical steel ("grain-oriented steel") is materially injured by reason of imports of the subject merchandise from Japan that the U.S. Department of Commerce ("Commerce") has determined are being sold in the United States at less than fair value (LTFV).<sup>1 2</sup> We also determine that the industry in the United States producing grain-oriented steel is materially injured by reason of imports of the subject merchandise from Italy that Commerce has determined are subsidized.<sup>3 4 5</sup>

### I. THE LIKE PRODUCT AND DOMESTIC INDUSTRY

#### A. In General

In determining whether an industry in the United States is materially injured or threatened with material injury by reason of the subject imports, the Commission must first define the "like product" and the "industry." Section 771(4)(A) of the Tariff Act of 1930 ("the Act") defines the relevant industry as the "domestic producers as a whole of a like product, or those producers whose collective output of the like product constitutes a major proportion of the total domestic production of that product..."<sup>6</sup> In turn, the Act defines "like product" as "a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation..."<sup>7</sup>

The Commission's like product determinations are factual, and the Commission applies the statutory standard of "like" or "most similar in characteristics and uses" on a case-by-case basis.<sup>8</sup> No single factor is dispositive, and the Commission may consider other factors it deems relevant based on the facts of the particular investigation.<sup>9</sup> Generally, the Commission requires "clear dividing lines among possible like products" and disregards minor variations.<sup>10</sup>

Commerce has defined the imported product subject to these investigations as:

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<sup>1</sup> 19 U.S.C. § 1673d(b). Commissioner Bragg did not participate in this determination.

<sup>2</sup> Whether the establishment of an industry in the United States is materially retarded is not an issue in these investigations.

<sup>3</sup> 19 U.S.C. § 1671d(b). Vice Chairman Watson and Commissioner Bragg did not participate in the determination involving imports of the subject merchandise from Italy.

<sup>4</sup> Commissioner Crawford's dissenting views with respect to the subject imports from Italy are set forth separately.

<sup>5</sup> The Commission's final determination in the antidumping investigation involving Italy will not be made until late July 1994 as the Commerce Department postponed its final LTFV determination in that proceeding.

<sup>6</sup> 19 U.S.C. § 1677(4)(A).

<sup>7</sup> 19 U.S.C. § 1677(10).

<sup>8</sup> Torrington Company v. United States, 747 F. Supp. 744, 748-749 (Ct. Int'l Trade), aff'd 938 F.2d 1278 (1991). In analyzing like product issues, the Commission considers a number of factors including: (1) physical characteristics and uses; (2) interchangeability; (3) channels of distribution; (4) customer or producer perceptions of the products; (5) common manufacturing facilities and production employees; and (6) where appropriate, price. Calabrian Corp. v. United States, 794 F. Supp. at 382, n.4 (Ct. Int'l Trade 1992).

<sup>9</sup> See S. Rep. No. 249, 96th Cong., 1st Sess. 90-91 (1979); Torrington, 747 F. Supp. at 748-749.

<sup>10</sup> Torrington, 747 F. Supp. 748-49.

[G]rain-oriented silicon electrical steel, which are flat-rolled alloy steel products containing by weight at least 0.6 percent of silicon, not more than 0.08 percent of carbon, not more than 1.0 percent of aluminum, and no other element in an amount that would give the steel the characteristics of another alloy steel, of a thickness of no more than 0.560 millimeters, in coils of any width, or in straight lengths which are of a width measuring at least 10 times the thickness....<sup>11</sup>

The subject merchandise is a flat-rolled specialty steel product sold in strip or sheet form, characterized by low carbon content in which the magnetic characteristics, principally low core loss<sup>12</sup> and high-permeability,<sup>13</sup> are achieved by relatively high silicon content and the use of special processing.<sup>14</sup> The processing techniques also determine whether the electrical steel product is grain-oriented or non-oriented.<sup>15</sup>

Grain-oriented steel is produced in a number of different grades that are distinguished based on their relative efficiency in conducting electricity. Conventional grades range from the least efficient M-6 to the comparatively high efficiency M-2, which competes with some high permeability grain-oriented steel. The more efficient, high-permeability grades are characterized by a lower core loss and higher market prices.

## B. Like Product

In these investigations we have considered whether high-permeability and conventional grades of grain-oriented steel constitute one or two like products.<sup>16</sup> In our preliminary determinations, we found a single like product.<sup>17</sup> Additional information obtained in these final

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<sup>11</sup> 59 Fed. Reg. 18357 (April 18, 1994) (Italy) and 59 Fed. Reg. 19693 (April 25, 1994)(Japan).

<sup>12</sup> Core loss refers to the amount of electrical energy lost as heat when magnetic flux flows through the steel.

<sup>13</sup> Permeability refers to the relative ability of different types of steel to conduct an electrical current. If a given category of steel possesses high-permeability, this means that the steel is a particularly efficient conductor of electricity.

<sup>14</sup> Confidential Staff Report (hereinafter referred to as "CR") at II-8 to II-10; Public Staff Report (hereinafter referred to as "PR") at II-6 to II-8.

<sup>15</sup> Oriented steel is steel in which processing has achieved a comparatively uniform molecular arrangement which permits the metal to conduct electricity in a single direction. It is more efficient to use oriented steel in such products as transformers where it is desirable for the electrical flow to be in a single direction.

<sup>16</sup> The domestic producers argue that all grades of grain-oriented steel comprise a single like product because they share the same physical and performance characteristics, are sold in the same channels of distribution, and are produced using predominantly common manufacturing facilities. Petitioners' Prehearing Brief at 1-11.

Nippon Steel Corporation (Nippon Steel) and Kawasaki Steel Corporation (Kawasaki), the two Japanese producers/exporters, contended during the preliminary investigations that there are two separate like products consisting of, respectively, high-permeability and conventional grades of grain-oriented steel. Kawasaki Post-conference Brief ("Kawasaki's Brief") at 4-14; Nippon Steel Post-conference Brief ("Nippon Steel's Brief") at 1. In these final investigations, however, respondents have not presented this argument. Moreover, at least one significant purchaser, General Electric Co. ("GE"), suggested that a single like product finding would be appropriate. Hearing Transcript at 133-134.

<sup>17</sup> Grain-Oriented Silicon Electrical Steel From Italy and Japan, Inv. 701-TA-355 (Preliminary) and 731-TA-659/660 (Preliminary), USITC Pub. 2686 (Oct. 1993) at I-6.

investigations<sup>18</sup> provides further support for our earlier like product finding. As discussed below, we find that the similar physical characteristics and uses, some degree of interchangeability, common U.S. production processes and facilities, and common channels of distribution, all indicate that there are no clear dividing lines among the different grades of grain-oriented steel. Therefore, we determine that grain-oriented steel is a single like product.

Different grades of grain-oriented steel are chemically alike and possess essentially the same physical properties. For example, the various grades are all relatively efficient conductors of electricity and will conduct electricity in a single direction. As with many other products in which there are distinct grades, however, each grade does not have identical performance characteristics. The high-permeability grain-oriented steel is thinner and generally has a higher silicon content than the so-called conventional grain-oriented steel. The high-permeability grain-oriented steel also provides a lower core loss in most applications, i.e. it is a more efficient electrical conductor.<sup>19</sup> A common manufacturing process imparts similar chemical and physical properties to the products.<sup>20 21</sup>

Different grades also are marketed in the same channels of distribution (primarily sold directly to transformer manufacturers) and are treated as a single business enterprise by both Armco, Inc. ("Armco") and Allegheny Ludlum Corp. ("Allegheny"), the only domestic producers.<sup>22 23</sup>

The grades of grain-oriented steel are interchangeable to a certain degree.<sup>24</sup> Grades that are relatively close in performance level, for example, M-2 to M-3 or M-4 to M-5, may be substituted for each other without compromising the design of the transformer in which they are incorporated.<sup>25</sup> Purchasers choose a particular grade based on the total operating cost ("TOC") that an electrical utility, or other customer, will experience over a transformer's lifetime. The total operating cost is determined by the interplay of a number of factors including the cost of the grain-oriented steel, the cost of the electricity that is lost in the transformer

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<sup>18</sup> Information from purchasers of grain-oriented steel was not available for the Commission's preliminary determinations. Questionnaire responses from 29 purchasers were submitted in the Commission's final investigations.

<sup>19</sup> CR at II-6, PR at II-5. Petitioners claim that high-permeability grain-oriented steel may have higher core loss and be less efficient, however, at certain electrical induction levels. CR at II-7, PR at II-5.

<sup>20</sup> Petitioners' Prehearing Brief at 3-4.

<sup>21</sup> Allegheny Ludlum Corp. produces only conventional grades of grain-oriented steel. Armco, Inc. produces primarily conventional grades, but also produces high-permeability grain-oriented steel. Armco produces both conventional and high-permeability grain-oriented steel using most of the same equipment to manufacture both the conventional and high-permeability grades. However, there are alleged to be certain manufacturing processes that are unique to the production of the high-permeability grain-oriented steel. For example, the slightly different chemistries of these two types of grain-oriented steel are partly achieved at the vacuum degassing stage of production in which certain alloys are added to the molten steel in the case of high-permeability grain-oriented steel. Etching by laser and other means is also used to produce high permeability steel. Petitioners contend, however, that some conventional grades of grain-oriented steel are also etched so that the products cannot always be distinguished on this basis. CR at II-10 n.25, PR at II-6 n.25.

<sup>22</sup> Petitioners' Prehearing Brief at 6, 8-9.

<sup>23</sup> CR at II-19, PR at II-13. Both high-permeability and conventional grades, moreover, often are sold to the same manufacturers for use in their various transformer products. CR at II-68 to II-73, PR at II-33 to II-34. GE Prehearing Brief at 1-3.

<sup>24</sup> Petitioners state that there is only a relatively small percentage of the total market for grain-oriented steel that must be supplied with high-permeability, low core loss grades because of the specific requirements of the large transformers there involved. Petitioners' Prehearing Brief at 6-8, 62-70; CR at II-6 and II-7, PR at II-5. Economic Memorandum, EC-R-051 at 26.

<sup>25</sup> CR at II-70, Pr at II-33.

(which will vary with the relative efficiency of the grain-oriented steel), and the cost of other materials, such as copper, used in the manufacture of a transformer.<sup>26</sup> A purchaser can use various combinations of grain-oriented steel grades and other inputs to obtain a transformer with any of many different total operating costs,<sup>27</sup> although some transformer manufacturers state that there are certain transformers in which only the high-permeability grades will satisfy manufacturing requirements.<sup>28 29</sup> Moreover, contract bids by transformer manufacturers appear to substantiate that various forms of grain-oriented steel, including both high-permeability and lower-core loss conventional grades, may be used to produce transformers that are competitive in terms of efficiency.<sup>30</sup>

Use of a less efficient grade in a high performance transformer will require that a transformer manufacturer make certain trade-offs with respect to other components of the finished transformer. Information supplied by the petitioners suggests that the necessary balancing of steel electrical performance with other transformer design components can be achieved within a relatively narrow cost range in many cases.<sup>31</sup> Purchasers differentiate between conventional grades of grain-oriented steel, but may substitute grades that are close to one another in terms of performance.<sup>32</sup> This is particularly true for the mid-range grades and for successive grades of increasing efficiency, e.g. M-5 and M-4, M-3 and M-2.<sup>33</sup>

Although high-permeability grain-oriented steel is viewed by some purchasers as significantly different from conventional grain-oriented steel, and at least in some end uses cannot be replaced with conventional grades, there does not appear to be a clear dividing line in terms of performance between different categories of grain-oriented steel. Instead, the different grades represent a continuum of products where the gradations between each more efficient grade is not significant.

The finding of a single like product, therefore, would be consistent with the Commission's practice in similar cases where there are a multitude of different grades suitable for varied end uses.<sup>34</sup> In these investigations, such a finding is appropriate because there is substantial room to substitute different conventional grades in the various end uses, and to use certain of the more efficient conventional grades in products that compete with transformers incorporating the high permeability grain-oriented steel.

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<sup>26</sup> CR at II-6 and II-7, PR at II-5 and II-6.

<sup>27</sup> Petitioners' Prehearing Brief at 58-60.

<sup>28</sup> GE, for example, stated that for most of its high efficiency transformers high permeability grain-oriented steel is the only grain-oriented category that would be suitable. GE Prehearing Brief at 8-11. CR at II-70 and II-71, PR at 33-34.

<sup>29</sup> The portion of the market that can only be satisfied by the high-permeability grades is estimated to account for approximately one percent of transformer unit shipments in terms of quantity, but as much as 22 percent in terms of transformer value. Economic Memorandum at 26. Information on the quantity of grain-oriented steel accounted for by such transformers was not received from the parties.

<sup>30</sup> Petitioners' Prehearing Brief at 62-71; CR at II-68 to II-73, PR at II-33 and II-34.

<sup>31</sup> Petitioners' Prehearing Brief at 60-61.

<sup>32</sup> Petitioners' Prehearing Brief at 62-63.

<sup>33</sup> CR at II-70, PR at II-33.

<sup>34</sup> See Certain Steel Wire Rod from Brazil and Japan, Invs. 731- TA-646 and 648 (Final); New Steel Rails from Japan, Luxembourg, and the United Kingdom, USITC Pub. 2524 (June 1992); Polyethylene Terephthalate Film, supra note 12; and Granular Polytetrafluorethylene Resin, supra note 12.

## II. DOMESTIC INDUSTRY AND RELATED PARTIES

In its preliminary investigations, the Commission considered whether Armco is a related party by virtue of its joint venture with Vicksmetals, a subsidiary of Sumitomo Corporation, an importer of the subject merchandise from Japan. Under section 771(4)(B), producers who are related to exporters or importers,<sup>35</sup> or who are themselves importers of the subject merchandise, may be excluded from the domestic industry in appropriate circumstances.<sup>36</sup> As discussed below, we are satisfied that Armco is not a related party.

Armco's joint venture does not import or purchase the subject merchandise, but instead offers slitting services to both domestic manufacturers and importers of grain-oriented steel.<sup>37</sup> The joint venture simply charges a fee for the slitting service that it provides and never takes title to any of the grain-oriented steel that it processes.<sup>38</sup> Armco does not possess a financial or other ownership interest in an importer or exporter of the subject merchandise based on the record before us.<sup>39</sup> Given these facts, we find that Armco is not a related party.

## III. CONDITION OF THE DOMESTIC INDUSTRY

In determining whether there is material injury to a domestic industry by reason of the subject imports, the Commission considers all relevant economic factors that have a bearing on the state of the industry in the United States. These factors include output, sales, inventories, capacity utilization, market share, employment, wages, productivity, profits, cash flow, return on investment, ability to raise capital and research and development. No single factor is

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<sup>35</sup> Neither the term "related" nor the term "importer" is defined by the statute or explained in the legislative history. Thus, the Commission, as the agency charged with the administration of this provision, is responsible for filling in any "interpretational gap" in the statute. See, e.g., Suramerica, 966 F.2d 660, 665 (Fed. Cir. 1992).

<sup>36</sup> 19 U.S.C. § 1677(4)(B). The Commission traditionally has examined at least three factors in deciding whether appropriate circumstances exist to exclude a related party. Those factors are:

- (1) the percentage of domestic production attributable to the related producers;
- (2) the reason why importing producers choose to import the articles under investigation--to benefit from unfair trade practice or to enable them to continue production and compete in the domestic market; and
- (3) the position of the related producers vis-a-vis the rest of the industry, i.e., whether exclusion of the related party will skew the data for the rest of the industry.

See, e.g., Torrington Co. v. United States, 790 F. Supp. 1161, 1168 (Ct. Int'l Trade 1992).

<sup>37</sup> Petitioners' Prehearing Brief at 14-15.

<sup>38</sup> Id.

<sup>39</sup> Information collected in Certain Flat-Rolled Carbon Steel Products from Argentina et al., USITC Pub. 2664, Volume I (August 1993) at 96, indicated that Armco and Kawasaki operate certain joint production facilities in connection with hot-rolled, cold-rolled, and corrosion-resistant steel products. In these final investigations, Armco has stated that its participation in those joint ventures does not involve it in any import activities relating to the subject merchandise. In addition, Armco reports that the joint venture with Kawasaki is scheduled to become an independent, publicly-owned company within the near future. Petitioners' Prehearing Brief at 16.

determinative, and the Commission considers all relevant factors "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."<sup>40</sup>

One condition of competition relevant to this industry is the decline in purchases of electrical equipment by utilities.<sup>41</sup> The demand for grain-oriented steel is tied directly to demand for electricity and power and distribution transformers. Electrical transformers purchased by utilities account for approximately 80 percent of consumption of grain-oriented steel.<sup>42</sup> Both the U.S. recession and energy conservation efforts have contributed to reduced growth in demand for electricity and a concomitant reduction in utility equipment requirements, including fewer transformer purchases.<sup>43</sup> Moreover, respondents have argued that there has been a trend toward more efficient transformers which may favor sales of high-permeability products.<sup>44</sup> These developments have translated into reduced demand for grain-oriented steel.<sup>45</sup> We have examined the various indicators of the domestic industry's performance in light of these conditions of competition.

Information was collected in these investigations for a four year period, 1990 through 1993, inclusive. In making our determinations, however, we considered data for the latter part of the period to be the most indicative of the condition of the industry.

Apparent U.S. consumption of grain-oriented steel decreased by almost 14 percent between 1990 and 1991, declining from 273,545 to 235,555 tons, then increased by less than 1 percent to 237,385 tons in 1992 and to 248,490 tons in 1993, but never recovered to 1990 levels.<sup>46</sup>

Domestic production fell by more than \*\*\* percent between 1990 and 1991 and continued to decline during both 1992 and 1993.<sup>47</sup> Average annual capacity to produce grain-oriented steel remained stable during the period of investigation, with only a small increase in 1993.<sup>48</sup> Capacity utilization declined in each year of the investigatory period as production decreased.<sup>49</sup>

The quantity of the domestic industry's U.S. shipments of grain-oriented steel also fell more than \*\*\* percent from 1990 to 1992, but increased somewhat in 1993. The domestic industry's 1993 U.S. shipments, however, remained well below the 1990 level and were only marginally higher than the 1991 level despite an increase of more than 5 percent in apparent consumption between 1992 and 1993.<sup>50</sup> The value of the domestic industry's U.S. shipments exhibited the same general trend as the quantity of shipments.<sup>51</sup> The average unit value of the

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<sup>40</sup> 19 U.S.C. § 1677(7)(C)(iii). Although the foreign producers argued that the decline in the performance of the domestic industry simply reflected a normal business cycle with 1990 representing the most recent peak, respondents provided no substantiation for their argument and the record does not support a finding that the grain-oriented steel industry's performance is linked in a direct manner with general business cycles or that its performance would be largely explained by the fluctuations in demand that normally accompany such cycles.

<sup>41</sup> Conference Transcript at 65-66, 99, and 110; GE Prehearing Brief at 35; Kawasaki/Nippon Prehearing Brief at 20-22.

<sup>42</sup> CR at II-12, PR at II-8.

<sup>43</sup> *Id.*; GE Prehearing Brief at 36-41; Kawasaki/Nippon Prehearing Brief at 20-21, 47-48.

<sup>44</sup> Kawasaki/Nippon Prehearing Brief at 23; GE Prehearing Brief 36-37.

<sup>45</sup> CR at II-19; PR at II-14.

<sup>46</sup> Table 1, CR at II-20, PR at II-15.

<sup>47</sup> Table 2, CR at II-21, PR at II-15.

<sup>48</sup> Table 2, CR at II-21, PR at II-15.

<sup>49</sup> *Id.*

<sup>50</sup> Table 3, CR at II-22, PR at II-15.

<sup>51</sup> *Id.*



domestic industry's U.S. shipments increased from 1990 to 1991, but then declined from 1991 through 1993, reaching a low for the period examined.<sup>52</sup>

The domestic industry's end-of-period inventories of grain-oriented steel fluctuated from 1990 to 1993 both in absolute terms and as a percentage of both production and U.S. shipments.<sup>53</sup> The average number of production and related workers producing grain-oriented steel declined annually between 1990 and 1993 as production and capacity utilization both fell.<sup>54</sup> Hours worked followed essentially the same trend as the average number of workers.<sup>55</sup>

Generally, indicators of the financial condition of the domestic industry have declined, and the improvement in the domestic industry's U.S. shipments in 1993 was not sufficient to alter the downward trend. Thus, a partial recovery in shipments did not restore profitability, and financial losses grew worse for the industry in 1993.

Net sales fell between 1990 and 1992, displayed a small improvement in 1993, but remained well below 1990 and 1991 levels.<sup>56</sup> The decline in sales value resulted in a reduction in gross profits, operating income, and net income for the domestic industry from 1990 to 1993, with the situation becoming more aggravated each year.<sup>57</sup> Gross profits declined from 1990 to 1992 and then disappeared altogether as a loss was reported in 1993.<sup>58</sup> Operating income declined in a similar fashion as the costs of goods sold and SG & A expenses did not decline commensurate with reductions in production and sales.<sup>59</sup> In fact, cost of goods sold increased as a percentage of sales from 1990 to 1993.<sup>60</sup>

Net income declined from 1990 to 1991 and became a loss in both 1992 and 1993.<sup>61</sup> Cash flow followed the same pattern as net income, declining from 1990 to 1991 and turning negative in 1992 and 1993.<sup>62</sup>

Capital investment by the domestic industry declined from 1990 to 1992 and then increased in 1993. Investment in 1993, however, remained at a level substantially below that of 1990.<sup>63</sup> The domestic industry also reduced its research and development expenditures from 1990 to 1993.<sup>64 65</sup>

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<sup>52</sup> Id.

<sup>53</sup> Table 4, CR at II-23, PR at II-16.

<sup>54</sup> Table 5, CR at II-25, PR at II-16.

<sup>55</sup> Id.

<sup>56</sup> Table 7, CR at II-29, PR at II-17. The decline in net sales is partially due to a decline in export shipments of hot rolled bands which are produced on some of the same equipment used to manufacture grain-oriented steel. Hot-rolled bands are not subject to cold-rolling and the successive annealing processes that grain-oriented steel undergoes and are not included in the like product in these investigations.

U.S. producers' exports of grain-oriented steel remained relatively stable throughout the period of investigation. CR at II-22 and II-23 n.57, PR at II-15.

<sup>57</sup> Table 7, CR at II-29, PR at II-17.

<sup>58</sup> Table 7, CR at II-29, PR at II-17.

<sup>59</sup> Id.

<sup>60</sup> Some of the increase in the cost of goods sold is attributable to yield difficulties which the domestic producers encountered in improving the efficiency of grain-oriented steel that they produce. CR at II-33 and II-34, PR at II-18.

<sup>61</sup> Id. Part of the losses experienced in 1992 and 1993 are attributable to one-time charges for post-retirement expenses that the domestic producers incurred. CR at II-30.

<sup>62</sup> Id.

<sup>63</sup> Table 11, CR at II-38, PR at II-18.

<sup>64</sup> Table 12, CR at II-38, PR at II-19.

<sup>65</sup> Based upon the foregoing, Chairman Newquist and Commissioner Rohr determine that the domestic industry producing grain-oriented steel is materially injured.

#### IV. CUMULATION<sup>66</sup>

##### A. In General

In determining whether there is material injury by reason of the subject imports, the Commission is required to assess cumulatively the volume and price effects of imports from two or more countries of products subject to investigation if such imports compete with each other and with like products of the domestic industry in the U.S. market.<sup>67 68</sup>

In assessing whether imports compete with each other and with the domestic like product, the Commission has generally considered four factors.<sup>69</sup> While no single factor is determinative, and the list of factors is not exclusive, these factors are intended to provide the Commission with a framework for determining whether the imports compete with each other and with the domestic like product.<sup>70</sup>

##### B. Competition Between Imports from Italy and Japan

We have examined whether a reasonable overlap of competition exists between imports from Italy and those from Japan. During the entire period of investigation virtually all of the imports from Italy consisted of the low efficiency, M-6 grade of grain-oriented steel.<sup>71</sup> Italian producers have not sold any low-core loss, high-permeability grain-oriented steel in the U.S. market.<sup>72</sup> The majority of Japanese imports, on the other hand, is composed of high-

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<sup>66</sup> Chairman Newquist does not join the remainder of this opinion. See Additional Views of Chairman Newquist.

<sup>67</sup> 19 U.S.C. § 1677(7)(C)(iv)(I); see Chaparral Steel Co. v. United States, 901 F.2d 1097, 1105 (Fed. Cir. 1990).

<sup>68</sup> Vice Chairman Watson did not participate in the determination involving Italy and, therefore, also does not reach the issue of cumulation.

<sup>69</sup> These factors are:

- (1) the degree of fungibility between the imports from different countries and between imports and the domestic like product, including consideration of specific customer requirements and other quality related questions;
- (2) the presence of sales or offers to sell in the same geographical markets of imports from different countries and the domestic like product;
- (3) the existence of common or similar channels of distribution for imports from different countries and the domestic like product; and
- (4) whether the imports are simultaneously present in the market.

See Certain Cast-Iron Pipe Fittings from Brazil, the Republic of Korea, and Taiwan, Invs. Nos. 731-TA-278-280 (Final), USITC Pub. 1845 (May 1986), aff'd, Fundicao Tupy, S.A. v. United States, 678 F. Supp. 898 (Ct. Int'l Trade 1988), aff'd, 859 F.2d 915 (Fed. Cir. 1988).

<sup>70</sup> See Wieland Werke, AG v. United States, 718 F. Supp. 50 (Ct. Int'l Trade 1989).

<sup>71</sup> CR at II-43, PR at II-21. Conventional grades M-4 and M-5 comprised the remainder of the imports from Italy. Conventional grades of grain-oriented steel are denominated in relative levels of core loss, *i.e.*, efficiency, ranging from the M-6 category, which is the least efficient, to M-2, which is the most efficient. See Armco Advanced Materials Company letter dated October 5, 1993 to Ms. Mary Messer, Office of Investigations.

<sup>72</sup> ILVA, the sole Italian exporter to the United States, is precluded by contract from selling high-permeability grain-oriented steel in the United States. CR at II-43, PR at II-21.

permeability grain-oriented steel.<sup>73</sup> The Japanese also shipped conventional grades, consisting primarily of M-3 grade, into the United States.<sup>74</sup>

We have determined that the low-efficiency Italian M-6 grade and the high-efficiency Japanese high-permeability grain-oriented steel are not sufficiently fungible to support a finding of "reasonable overlap" of competition. Although information received from the parties and from purchasers suggests that some degree of substitutability exists between high-permeability and conventional grades, the record indicates that cross-grade substitutability may be limited to a single grade up or down, thus making substitutions between the inefficient grade M-6 and the high-permeability imports from Japan very unlikely.<sup>75</sup>

Notably, only two purchasers, accounting for a very small percentage of consumption, reported that they bought grain-oriented steel from both Japanese and Italian producers,<sup>76</sup> whereas 22 purchasers stated that the Italian and Japanese products did not compete for the same range of end-uses.<sup>77</sup> Transformer manufacturers that require high-permeability grain-oriented steel do not purchase imports of the subject merchandise from Italy.<sup>78</sup> Similarly, stampers of laminations for use in non-evaluated transformers and electrical appliances do not use high-permeability grain-oriented steel. They confine their purchases to the less expensive M-6 grade because of the less demanding efficiency requirements of the products that they manufacture.<sup>79</sup> Based on the foregoing, we determine that the high-permeability imports from Japan do not compete with the M-6 grade that accounts for almost all imports from Italy.

We further determine that there is not a "reasonable overlap" of competition based solely on the M-3 imports from Japan and the conventional grades imported from Italy. First, we emphasize that the non-M-6 grades imported from Italy represent a very small percentage of total imports from Italy and the proportion of total imports of non-M-6 grades declined during the period of investigation. Additionally, the conventional grade imports from Japan were both limited in quantity and concentrated in a grade distinct from imports of the subject merchandise from Italy.<sup>80</sup> The Commission in prior cases has viewed similar situations as not constituting a reasonable overlap of competition for purposes of cumulation.<sup>81</sup> The lack of competition

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<sup>73</sup> CR at II-49, PR at II-23.

<sup>74</sup> CR at II-49, PR at II-23. Petitioners alleged that some of the Japanese M-3 grade was actually high-permeability grain-oriented steel that was mis-labeled. Petitioners' Postconference Brief at 29. Kawasaki acknowledged that some high-permeability steel that did not meet the full specification guarantees was sold as M-3 grade. Kawasaki also stated that due to delivery problems it sometimes would ship high-permeability grain-oriented steel to customers who purchased M-3 grade. Such situations accounted for between \*\*\* and \*\*\* percent of M-3 shipments from Japan between October 1991 and June 1993. Preliminary Investigation Staff Report at I-69 n.2. Thus, the reported volume of M-3 product is substantially overstated.

In addition, two small shipments of M-6 grade were made by one Japanese producer. CR at II-53, PR at II-26.

<sup>75</sup> CR at II-70, PR at II-33.

<sup>76</sup> CR at II-66, PR at II-32. These two firms accounted for less than 0.3 percent of the grain-oriented steel market during the period of investigation. CR at II-66 n. 83, PR at II-32 n.83.

<sup>77</sup> CR at II-66, PR at II-32 and II-33.

<sup>78</sup> CR at II-68, PR at II-33.

<sup>79</sup> CR at II-67, PR at II-32. The Italian manufacturer also explains that stampers cannot substitute thinner high-permeability grades for M-6 because their manufacturing equipment is designed to process only the thicker M-6 grade. The thinner high-permeability grades do not lend themselves to use in the stamping machines due to their greater brittleness. ILVA Prehearing Brief at 7.

<sup>80</sup> CR at II-53 n. 66, PR at II-26. As indicated in footnote 74 *supra*, the data on conventional grade imports from Japan were overstated.

<sup>81</sup> See, Certain Steel Wire Rod from Brazil and Japan, Inv. No. 731-TA-646 and 648 (Final), USITC Pub. 2761 (March 1994) at I-15 (competition by Japanese imports with only at most 9 percent of imports from Brazil was deemed insufficient on the facts of that case to be "competition."); Ferrosilicon from Egypt, Inv. No. 731-TA-642 (Final), USITC Pub. 2688 (Oct. 1993) (there the Commission considered (continued...))

between imports of the subject merchandise from Japan and Italy is further supported by their distinct channels of distribution. Whereas imports from Japan are sold by importers to purchasers that are transformer manufacturers, almost all of the imports from Italy are bought by stampers who process the grain-oriented steel into laminations to be sold to manufacturers of small transformers and appliance manufacturers.<sup>82</sup> For all of these reasons, we find that there is not a reasonable overlap of competition between imports of the subject merchandise from Italy and Japan and, accordingly, we do not cumulate the volumes, price effects, or the impact of the subject imports from the two countries for purposes of determining whether they are causing material injury to the domestic industry producing grain-oriented steel.

## V. MATERIAL INJURY BY REASON OF IMPORTS OF THE SUBJECT MERCHANDISE<sup>83</sup>

In its determinations of whether the domestic industry is materially injured by reason of the subject imports, the statute directs the Commission to consider the volume of imports of the merchandise which is the subject of the investigations, their effect on prices in the United States for like products, and their impact on domestic producers of the like product, but only in the context of U.S. production operations.<sup>84</sup> Although the Commission may consider causes of injury other than the allegedly LTFV or subsidized imports, it is not to weigh causes.<sup>85 86</sup> Finally, the Commission is directed to "evaluate all relevant factors . . . within the context of the . . . conditions of competition that are distinctive to the affected industry."<sup>87</sup> For the reasons

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<sup>81</sup> (...continued)

that 7.8 percent of Egyptian imports consisting of 75 percent ferrosilicon did not constitute a reasonable overlap in competition with 91.3 percent of Brazilian imports of the same product).

<sup>82</sup> CR at II-67 to II-68, PR at II-32.

<sup>83</sup> Commissioner Crawford does not join these views. See her Additional and Dissenting Views. Commissioner Watson did not participate in the determination with respect to imports of the subject merchandise from Italy.

<sup>84</sup> 19 U.S.C. § 1677(7)(B)(i).

<sup>85</sup> See e.g., Citrosuco Paulista, S.A. v. United States, 704 F. Supp. at 1101.

Commissioner Rohr and Commissioner Nuzum further note that the Commission need not determine that imports are "the principal, a substantial, or a significant cause of material injury." S. Rep. No. 249, at 57, 74. Rather, a finding that imports are a cause of material injury is sufficient. See, e.g., Metallverken Nederland B.V. v. United States, 728 F. Supp. 730, 741 (Ct. Int'l Trade 1989); Citrosuco Paulista, SA. v. United States, 704 F. Supp. at 1101.

<sup>86</sup> Vice Chairman Watson notes that the courts have interpreted the statutory requirement that the Commission consider whether there is material injury "by reason of" the subject imports in a number of different ways. Compare United States Engineering & Forging v. United States, 779 F. Supp. 1375, 1391 (Ct. Int'l Trade 1991)("[I]t must determine whether unfairly-traded imports are contributing to such injury to the domestic industry...Such imports, therefore, need not be the only cause of harm to the domestic industry")(citations omitted) with Metallverken Nederland B.V. v. United States, 728 F. Supp. at 741 (affirming a determination by two Commissioners that "the imports were a cause of material injury") and USX Corp. v. United States, 682 F. Supp. 67, 69 (Ct. Int'l Trade 1988)("any causation analysis must have at its core the issue of whether the imports at issue cause, in a non de minimis manner, the material injury to the industry").

Accordingly, Vice Chairman Watson has determined to adhere to the standard articulated by Congress, in the legislative history of the pertinent provisions, which states that "the Commission must satisfy itself that, in light of all the information presented, there is a sufficient causal link between the less-than-fair-value imports and the requisite injury." S. Rep. No. 249, at 75.

<sup>87</sup> 19 U.S.C. § 1677(7)(C).

discussed below, we find that the domestic grain-oriented steel industry is materially injured by reason of LTFV imports of grain-oriented steel from Japan and subsidized imports of the subject merchandise from Italy.<sup>88</sup>

#### A. Imports of the Subject Merchandise from Italy

Imports of the subject merchandise from Italy are highly concentrated in a single conventional grade of grain-oriented steel, M-6.<sup>89</sup> This grade is the least efficient of the conventional grades and competition between suppliers is based to a significant degree on price.<sup>90</sup> M-6 accounts for a substantial portion of total domestic shipments of grain-oriented steel<sup>91</sup> and the domestic M-6 competes directly with the subject imports from Italy.<sup>92</sup> Purchasers, who bought M-6 from domestic producers and the Italian producer, state that they use those products interchangeably.<sup>93</sup>

Imports of grain-oriented steel from Italy \*\*\* between 1990 and 1993, with the largest \*\*\* occurring in 1993.<sup>94</sup> Given such \*\*\* and the overall decline in apparent domestic consumption, the market share enjoyed by the subject imports from Italy \*\*\* by almost \*\*\* percent, albeit from a small base, as domestic producers simultaneously lost market share.<sup>95</sup> Based on these facts, we find that the volume of the subject imports from Italy was significant.

The subject imports from Italy also had an adverse effect on prices of the domestic like product. The Commission collected price data for both shearing quality M-6 grain-oriented steel as well as M-6 punching quality (used by stampers), which together represent almost all imports of the subject merchandise from Italy. Price comparisons for the two M-6 categories reveal that in 27 of 30 calendar quarters the Italian imports undersold the comparable domestic product.<sup>96</sup>

Margins of underselling were as high as 15.9 percent. Notably, several large purchasers of grain-oriented steel stated that they would have switched to the domestic producers for M-6 grade steel if the price of the imports from Italy increased by 5 to 10 percent.<sup>97</sup> The margin of underselling by the imports from Italy often exceeded these amounts<sup>98</sup> and we find that such underselling, combined with steady decreases in the price of the subject merchandise, depressed prices for the M-6 grade, reducing domestic prices in 1993 to a level lower than they were in 1990.<sup>99</sup> Purchaser price information, moreover, shows that the margin of underselling by the M-6 imports from Italy increased substantially between 1990 and 1993.

This situation prevented, to a significant degree, the domestic producers from increasing prices as their cost of goods increased. Based on the foregoing, we find that imports of the

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<sup>88</sup> Although respondents argue that increases in non-subject imports of grain-oriented steel caused any material injury that the domestic industry may be suffering, we have determined for the reasons set forth below that imports of the subject merchandise are a cause of material injury to the domestic industry. We note that non-subject imports were present in the market and increased their market share during the period examined.

<sup>89</sup> CR at II-43, PR at II-21.

<sup>90</sup> See CR at II-6, PR at II-5.

<sup>91</sup> Appendix F, Table F-1, CR at F-3, PR at F-3.

<sup>92</sup> Stampers, who purchase most of the M-6 grade, stated that price was a determining factor in deciding where to source their grain-oriented steel purchases. CR at II-68, PR at II-32.

<sup>93</sup> CR at II-68, PR at II-32.

<sup>94</sup> Table 16, CR at II-48, PR at II-23.

<sup>95</sup> Table 17, CR at II-51, PR at II-24.

<sup>96</sup> Tables 18 and 19, CR at II-56 and II-57, PR at II-27.

<sup>97</sup> CR at II-68, PR at II-33.

<sup>98</sup> CR at II-65, PR at II-31.

<sup>99</sup> CR at II-74 and II-75, PR at II-35; and CR at II-68, PR at II-32.

subject merchandise from Italy showed significant underselling and that they significantly suppressed prices for the domestic like product.

The impact on the domestic industry from the increased market penetration and price underselling is manifested in the deteriorating condition of the domestic industry. Decline in domestic producer market share and shipment volume is evidenced in reduced revenue, a decline in production and capacity utilization, and increased per-unit costs of production. Because domestic prices were suppressed by the subject imports, the domestic industry could not recapture its increased costs and the industry began to experience losses on operations in 1992. The increase in import market share was achieved and held at the direct expense of U.S. capacity utilization, employment, and sales.<sup>100</sup>

#### B. Imports of the Subject Merchandise from Japan

Imports of the subject merchandise from Japan were concentrated in high-permeability grades and a single conventional grade (M-3) of grain-oriented steel. Domestic producers manufactured an M-3 grade that is directly competitive with the M-3 imported from Japan. Domestic producers also offer high-permeability grades that compete head-to-head with a significant portion of the high-permeability imports from Japan.<sup>101</sup>

The quantity of subject imports from Japan grew during the period examined with the largest yearly increase occurring in 1993.<sup>102</sup> Imports in 1993 were more than 10 percent higher than in the previous year. As in the case of imports from Italy, declining overall consumption and increases in subject imports resulted in a steady increase in market share for imports from Japan between 1990 and 1992.<sup>103</sup> Although the market share of subject imports from Japan declined in 1993, this was the result of reduced U.S. shipments of Japanese imports rather than reduced imports themselves. As noted above, imports from Japan reached their highest level during 1993.<sup>104</sup> Imports of high-permeability grades from Japan represented a still higher percentage of apparent domestic consumption of high-permeability grain-oriented steel.<sup>105</sup> Based on the foregoing, we find the volume of the subject imports from Japan to be significant.<sup>106</sup>

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<sup>100</sup> One of the domestic manufacturers ceased production of M-6 grade grain-oriented steel during the period of investigation due to insufficient demand. Conference transcript at 46. Absent imports of the lower priced M-6 from Italy it is likely that purchasers of the subject imports from Italy would have turned to the domestic industry as their principal source of supply.

<sup>101</sup> CR at II-53 to II-54, PR at II-26.

<sup>102</sup> Table 16, CR at II-48, PR at II-23.

<sup>103</sup> Table 17, CR at II-51, PR at II-24.

<sup>104</sup> Compare Tables 1 and 16, CR at II-20 and II-48, PR at II-15 and II-23. As a result, inventory levels of the subject merchandise achieved unprecedented levels in 1993. Table 13, CR at II-41, PR at II-24.

<sup>105</sup> Only approximately \*\*\* percent of domestic production is devoted to high-permeability grades whereas \*\*\* percent of the subject imports from Japan consist of high-permeability grain-oriented steel.

<sup>106</sup> In assessing the impact of imports on the domestic industry, it is significant that the quantity of grain-oriented steel demanded by domestic consumers is relatively unresponsive to changes in the price of grain-oriented steel. There are a limited number of applications of grain-oriented steel, and for these applications there are no close substitutes for grain-oriented steel. Therefore, increases in lower priced subject imports does not lead to increased consumption of grain-oriented steel. Rather, increases in dumped and subsidized imports come at the expense of sales by domestic producers and fairly traded imports.

The subject imports from Japan also had an adverse effect on prices of the domestic like product. Prices for four grain-oriented steel categories representing 95 percent of total U.S. shipments of the subject merchandise from Japan were examined.<sup>107</sup> Prices for reported M-3 grade imports from Japan declined at a faster rate than prices for domestically manufactured M-3, resulting in substantial instances of underselling in both 1992 and 1993, coincident with a deterioration in the financial performance of the domestic industry. Prices reported by purchasers confirmed the steady decline in prices for the M-3 grade from Japan.

Prices for product 4, a high-permeability grade, offered by both the domestic producers and Japanese manufacturers, increased marginally between 1990 and 1993. Purchaser prices reveal consistent underselling by the subject imports throughout the four year period with the margin of underselling increasing between 1991 and 1993. Because product 4 was the highest volume product shipped by the Japanese producers into the U.S. market (representing approximately one-third of total shipments), the existence of such pervasive underselling had a particularly severe impact on the domestic industry.<sup>108 109</sup> Based on the foregoing, we find that imports of the subject merchandise from Japan undersold domestic product to a significant degree and also significantly suppressed prices for the domestic like product.

The domestic industry's reduced market share due to imports from Japan was reflected in lower production volumes and reduced levels of capacity utilization accompanied by attendant increases in the cost of goods sold. Because of the price underselling involving nearly fifty percent of imports of the subject Japanese merchandise (those considered to be most directly competitive with the U.S. like product), domestic producers were unable to raise prices and experienced losses in 1992 and 1993 as a result. The combined impact on the domestic industry from increased market penetration and price suppression is revealed particularly in the worsening financial condition of the domestic industry and in its reduced capital expenditures and research and development spending.

## CONCLUSION

We find that the relatively low prices of the imports have enabled the subject imports to increase in volume and market share at the expense of the domestic industry and enabled the subject imports to displace domestic sales. As a result, the domestic industry has suffered lower sales, production, capacity utilization, employment, and profitability than otherwise would have prevailed. Therefore, we determine that the information of record in these final investigations establishes that the domestic industry producing grain-oriented steel is materially injured by reason of the non-cumulated subject imports from Japan and Italy.

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<sup>107</sup> The four products were M-3 ( a conventional grade); a domain-refined grain-oriented steel used for stacked transformer cores ( a high-permeability grade); a non-domain refined grade used for wound transformer cores (another high-permeability grade); and domain refined steel also for wound core applications (also a high-permeability grade). The first two products have direct counterparts among domestically produced grades of grain-oriented steel while the last two compete with domestically produced grades but possess somewhat greater efficiency levels and generally exhibit lower core losses.

<sup>108</sup> The ability of transformer manufacturers to switch to another grade of grain-oriented steel with similar performance characteristics means that imports of the M-3 grade from Japan resulted in the displacement of more than one conventional grade produced by the domestic industry.

<sup>109</sup> Several purchasers stated that U.S. producers had responded to price reductions by Japanese exporters and that they would discontinue purchases from the Japanese suppliers if the prices of the subject imports were to increase. CR at II-71 to II-72, PR at II-32.





## ADDITIONAL VIEWS OF CHAIRMAN NEWQUIST

Although I concur with the majority that the domestic industry producing certain grain-oriented electrical steel is materially injured by reason of imports of such steel from Italy and Japan which the Department of Commerce has respectively found to be subsidized<sup>110</sup> and sold in the United States at less-than-fair-value, the bases for my determinations are different than the majority's in one fundamental respect: I have cumulatively assessed the adverse effects of the subject imports on the domestic industry producing the like product in these investigations.

I concur with my colleagues that there is one like product consisting of all grain-oriented electrical steel ("GOES"). The majority opinion exhaustively and persuasively explains why, contrary to the arguments of respondents, high-permeability GOES and conventional GOES do not constitute separate like products. The majority finds that high-permeability and conventional GOES share essentially the same physical properties,<sup>111</sup> are marketed in the same channels of distribution,<sup>112</sup> and are interchangeable in many end uses.<sup>113</sup>

These findings notwithstanding, my colleagues then make the illogical conclusion that, for purposes of cumulation, there is no reasonable overlap of competition between high-permeability and conventional GOES. That is, they determine that imports from Japan, which are primarily high-permeability GOES, cannot be cumulated with imports from Italy, which are primarily conventional GOES, because the imports do not compete with one another. In my view, their conclusion is wholly incongruous with the like product finding, *i.e.*, that high-permeability and conventional GOES constitute one like product. Simply, high-permeability and conventional GOES either compete with one another or they do not -- and, that assessment should apply equally to the like product and cumulation analyses.

Thus, I join the majority's discussion of like product, domestic industry, and condition of the domestic industry, and begin these additional views with cumulation.

### I. CUMULATION

The statute requires that I cumulatively assess the subject imports if: (i) there is competition between the subject imports themselves and the domestic like product,<sup>114</sup> and (ii) no one country's imports are negligible and without discernible adverse impact on the domestic industry.<sup>115</sup>

As I explained in the Flat-Rolled Carbon Steel investigations,<sup>116</sup> I view this language to require scrutiny of primarily geographic and temporal competition between the subject imports and the domestic like products; assessing competition on the basis of the substitutability of these products is a lesser consideration.<sup>117</sup> Nowhere does the cumulation provision state that

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<sup>110</sup> Imports from Italy are also alleged to be sold in the United States at less-than-fair-value. The Department of Commerce made a preliminary affirmative finding of such sales, 59 *Fed. Reg.* 5991 (Feb. 9, 1994), but postponed its final determination until not later than mid-June, 1994.

<sup>111</sup> Majority opinion at I-9.

<sup>112</sup> Id.

<sup>113</sup> Id. at I-10.

<sup>114</sup> 19 U.S.C. § 1677(7)(C)(iv)(I). In addition, I need find only a "reasonable overlap" of competition. Fundicao Tupy, S.A. v. United States, 678 F. Supp. 898, 902 (Ct. Int'l Trade 1988), aff'd, 859 F.2d 915 (Fed. Cir. 1988).

<sup>115</sup> 19 U.S.C. § 1677(7)(C)(v).

<sup>116</sup> USITC Pub. 2616 (August 1993).

<sup>117</sup> My interpretation of this language also reflects my interpretation of the Commission's traditional four factor "competition for cumulation" test. This four factor test has generally been articulated as follows:

(continued...)

competition is a function of interchangeability based upon the imported and domestic products' characteristics and uses. Such competition is appropriately addressed in the like product analysis.<sup>118</sup> In my view, once a like product determination is made, that determination establishes some inherent level of fungibility within that like product. Only in exceptional circumstances could I anticipate finding products to be "like," and then turn around and find that, for purposes of cumulation, there is no reasonable overlap of competition based upon some roving standard of fungibility.

Rather, in my analytical framework, fungibility is more relevant to the assessment of whether imports are negligible. In that analysis, the fungibility within any like product can be pertinent in determining what level of imports may or may not have a discernible adverse effect on the industry producing the like product.<sup>119</sup> In this regard, I note that there is no magical bellwether to determine negligibility. What may be negligible and without discernible adverse impact will vary from industry to industry -- a function of both the characteristics and condition of the industry.

#### A. Reasonable Overlap Of Competition

Contrary to the arguments of respondents,<sup>120</sup> I find that there is a reasonable overlap of competition between GOES imported from Japan and Italy and that produced in the United States. GOES from both Japan and Italy were present in the U.S. market during all quarters of the period of investigation.<sup>121</sup> Imports from Japan were reportedly marketed throughout the U.S.; imports from Italy were marketed in the Northeast, Midwest, and Southwest.<sup>122</sup>

#### B. Negligibility

As discussed above, in my analytical framework, lack of fungibility between subject imports and the domestic like product is more relevant to whether imports from any one country are negligible and without discernible adverse effect on the domestic industry. Both the Japanese and Italian respondents assert that their imports are not fungible,<sup>123</sup> though no respondent argues that its imports are negligible. I discuss both elements in turn.

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<sup>117</sup> (...continued)

(1) the degree of fungibility between the imports from different countries and between imports and the domestic like product, including consideration of specific customer requirements and other quality related questions;

(2) the presence of sales or offers to sell in the same geographic markets of imports from different countries and the domestic like product;

(3) the existence of common or similar channels of distribution for imports from different countries and the domestic like product; and

(4) whether the imports are simultaneously present in the market.

See, e.g., Certain Cast Iron Pipe Fittings from Brazil, Korea, and Taiwan, Invs. Nos. 731-TA-278-280 (Final), USITC Pub. 1845 (May 1986), aff'd, Fundicao Tupy, S.A. v. United States, 678 F. Supp. 898, 902 (Ct. Int'l Trade 1988), aff'd, 859 F.2d 915 (Fed. Cir. 1988).

<sup>118</sup> See 19 U.S.C. § 1677(10).

<sup>119</sup> 19 U.S.C. §§ 1677(7)(C)(v), 1677(7)(F)(iv).

<sup>120</sup> These arguments are discussed in the Negligibility section, infra.

<sup>121</sup> Report at Tables 18-23.

<sup>122</sup> Confidential Report ("CR") at II-53; Public Report ("PR") at II-24.

<sup>123</sup> See, e.g., Japanese respondents' prehearing brief at 27-32; Ilva's prehearing brief at 17-18.

Although Japanese imports are primarily of high-permeability GOES and Italian imports of conventional GOES, there were some U.S. shipments of conventional GOES from Japan during 1993.<sup>124</sup> More significantly, however, it is estimated that the portion of the transformer market that can be satisfied by only high-permeability GOES amounts to less than 5 percent of the total transformer unit shipments.<sup>125</sup> Finally, although Japanese GOES is sold predominately to transformer manufacturers and Italian GOES to stampers of laminations, there is competition between these imports as stampers sell laminations for use in a variety of transformers.<sup>126</sup>

In 1993, the volume and value of GOES from Japan and Italy separately were at levels that, in my view, clearly had discernible adverse effects on the domestic industry.<sup>127</sup> Japanese and Italian GOES also separately accounted for non-negligible levels of the volume and value of U.S. consumption.<sup>128</sup>

Based on the foregoing, I find that there is a reasonable overlap of competition between imports from Japan and Italy themselves and with the domestic like product, and that imports from each country are not negligible. Accordingly, I find it appropriate to cumulatively assess the adverse impact on the domestic industry of imports from both Japan and Italy.

Finally, I note that although imports from Italy are also currently subject to a Department of Commerce final antidumping investigation, the imports covered by that investigation are precisely those covered by the countervailing duty investigation here. Accordingly, cross-cumulation<sup>129</sup> is not an issue in these investigations.

## II. MATERIAL INJURY BY REASON OF THE SUBJECT IMPORTS

In determining whether the domestic industry is materially injured by reason of the subject imports, the statute requires that I consider:

- (I) the volume of imports of the merchandise which is the subject of the investigation;
- (II) the effect of imports of that merchandise on prices in the United States for like products; and
- (III) the impact of the imports of such merchandise on domestic producers of like products, but only in the context of production operations in the United States.<sup>130</sup>

In making this determination, the statute permits me to consider "such other factors as are relevant to the determination . . . ," including those within the conditions of competition that

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<sup>124</sup> Report at Table F1.

<sup>125</sup> Economic Memorandum, EC-R-051 at 26. The precise number is not disclosed to avoid any question as to its confidentiality. In this regard, I would note that, in my view, parties are increasingly too disposed to request that certain data are be treated as "business confidential." While in some instances, disclosure may truly be adverse to a party's business interests, I suspect that these instances are far fewer than alleged by the requesting parties. In particular, omission of so much data from the public opinions prevents the general public from discerning and understanding the factual bases for the Commission's decisions in these investigations.

<sup>126</sup> CR at II-53; PR at II-24.

<sup>127</sup> Report at Table 16. These numbers too cannot be disclosed as they are confidential.

<sup>128</sup> Report at Table 17. Here too precise percentages cannot be disclosed as they are confidential.

<sup>129</sup> See Bingham & Taylor v. United States, 673 F. Supp. 793 (Ct. Int'l Trade 1986), aff'd, 815 F.2d 1482 (Fed. Cir. 1987).

<sup>130</sup> 19 U.S.C. § 1677(7)(B)(i).

are distinctive to the affected industry.<sup>131</sup> I am not required to determine that LTFV imports are "the principal, a substantial or a significant cause of material injury."<sup>132</sup> Rather, a finding that LTFV imports are a cause of material injury is sufficient.<sup>133</sup>

Imports of GOES from Japan and Italy increased by more than 20 percent by volume and 18.6 percent by value between 1990-93.<sup>134</sup> In contrast, domestic production of GOES declined by more than 20 percent during the period.<sup>135</sup> The cumulated imports also accounted for an increasing share of the quantity and value of domestic consumption throughout the period, the former increasing by 18.1 percent and latter by 17.6 percent.<sup>136</sup> I find the increase in volume, value and market share of cumulated imports between 1990-93 significant, particularly in light of declining domestic GOES production and total GOES consumption during the period.<sup>137</sup>

Unit values for both the subject imports and the domestic product decreased irregularly during the period; however, the average unit value of the subject imports declined by nearly three times as a great a percentage as the decline in domestic unit values.<sup>138</sup>

The Commission collected pricing data for six different GOES products, however, direct price comparisons are available for only four of the six products.<sup>139</sup> For two of those four products, the domestic sales price was lower in the last quarter of 1993 than in the first quarter of 1990.<sup>140</sup> For one of the other two products, domestic prices fluctuated wildly during the period, increasing only slightly from the beginning of the period to the end.<sup>141</sup> For the remaining product, domestic prices were stable between 1990-92, then vacillated substantially during 1993.<sup>142</sup>

For the two products with lower domestic prices in 1993 than in 1990, subject import prices generally declined during the same period.<sup>143</sup> In fact, for these two products, the subject imports undersold the domestic like products in approximately two-thirds of the direct price comparisons.<sup>144</sup> As compared to the domestic product which experienced wild price fluctuations during the period, prices for the subject imports remained fairly stable and beneath those of the domestic product, underselling the domestic product in nearly 80 percent of the available comparisons.<sup>145</sup> Finally, for the one domestic product with the stable selling price until 1993, prices for the comparable subject imports demonstrated a somewhat similar trend, albeit increasing earlier than in the period than the domestic price.

I find that, in light of the declining and stagnant sales prices of most of the domestic products for which pricing information was collected, the subject imports' more rapidly decreasing unit values, and the fairly consistent underselling by the subject imports, the subject imports depressed and suppressed domestic prices to a significant degree.

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<sup>131</sup> 19 U.S.C. §§ 1677(7)(B)(ii), 1677(7)(C).  
<sup>132</sup> S. Rep. No. 249, 96th Cong., 1st Sess. 57 and 74 (1979).  
<sup>133</sup> See, e.g., Metallverken Nederland, B.V. v. United States, 728 F. Supp. 730, 741 (Ct. Int'l Trade 1989); Citrosuco Paulista S.A. v. United States, 704 F. Supp. 1075, 1101 (Ct. Int'l Trade 1988).  
<sup>134</sup> Report at Table 16.  
<sup>135</sup> Report at Table 2.  
<sup>136</sup> Report at Table 17.  
<sup>137</sup> Report at Tables 1, 2.  
<sup>138</sup> Report at Tables 3, 16.  
<sup>139</sup> Report at Tables 18-23.  
<sup>140</sup> Report at Tables 18, 20.  
<sup>141</sup> Report at Table 19.  
<sup>142</sup> Report at Table 21.  
<sup>143</sup> Report at Tables 18, 20.  
<sup>144</sup> Id.  
<sup>145</sup> Report at Table 19.

### III. CONCLUSION

Based on the foregoing, I determine that the domestic industry producing grain-oriented silicon electrical steel is materially injured by reason of imports of such steel from Italy and Japan which the Department of Commerce has respectively found to be subsidized and sold in the United States at less-than-fair-value.



## ADDITIONAL AND DISSENTING VIEWS OF COMMISSIONER CRAWFORD

On the basis of information obtained in these final investigations, I determine that an industry in the United States is materially injured by reason of imports of grain-oriented silicon electrical steel ("GOES") from Japan found by the Department of Commerce to be sold at less-than-fair-value (LTFV). I further determine that an industry in the United States is not materially injured or threatened with material injury by reason of subsidized and LTFV<sup>146</sup> imports of GOES from Italy.

I concur in the conclusions of my colleagues with respect to like product, the domestic industry, and related parties. I also concur in their discussion of the condition of the domestic industry, and in the determination not to cumulate subject imports from Italy with subject imports from Japan. I further concur that an industry in the United States is materially injured by reason of subject imports from Japan. However, I dissent from my colleagues' affirmative determination with respect to subject imports from Italy. I determine that an industry in the United States is not materially injured or threatened with material injury by reason of subject imports from Italy. My analysis follows.

### I. ANALYTICAL FRAMEWORK

Evaluating the effects of LTFV imports on domestic prices and the domestic industry requires an understanding of the economic factors affecting the domestic market. It is necessary to understand how purchasers of the product react to an increase or decrease in the price of the product they purchase (i.e. the elasticity of demand). It is also necessary to understand how the imported and domestic products are differentiated from each other and how that affects purchasers' decisions to buy the products. When purchasers can choose between imports and domestic products, differences between those products will affect the price purchasers are willing to pay for each. The extent of those differences determines whether purchasers buy relatively more of the domestic product when the relative price of the imported product increases (i.e. the elasticity of substitution).

Similarly, when evaluating the impact of LTFV imports on the domestic industry, it is necessary to understand whether the industry could increase the volume of its production in response to an increase in the price of the domestic product (i.e. the elasticity of domestic supply). It is also necessary to understand other relevant economic factors, such as the composition of the industry, market segmentation, and the availability of nonsubject imports, that affect domestic prices and output.

Having developed an understanding of the market and the domestic industry, I evaluate the effects of the dumping. To evaluate the effect of the dumping on domestic prices, I compare domestic prices that existed when the imports were dumped with what domestic prices would have been if the imports had been priced fairly. Similarly, to evaluate the impact on the domestic industry, I compare the state of the industry when the imports were dumped with what the state of the industry would have been if the imports had been priced fairly. In this regard, the impact on the domestic industry's prices and sales, and therefore revenues, is critical, because the impact on other industry indicators (e.g. employment, wages, etc.) is derived from the impact on revenues.

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<sup>146</sup> At this point in time, the Department of Commerce has made only its preliminary determination of sales at LTFV. The final determination is scheduled for June 24, 1994; if affirmative, the Commission is scheduled subsequently to make its determination of whether an industry is materially injured or threatened with material injury by reason of LTFV imports from Italy. For purposes of my analysis, I have considered subject imports to be sold at LTFV and have used the preliminary margin.

I then determine whether the price and sales effects of the dumping, either separately or together, demonstrate that the domestic industry would have been materially better off if the imports had been priced fairly. If this is affirmative, I find that the domestic industry is materially injured by reason of dumped imports.

## II. BACKGROUND AND CONDITIONS OF COMPETITION

### A. Elasticity of Demand

The elasticity of demand measures how purchaser demand responds to product price changes. It reflects several factors, including the product's cost as a percentage of total cost of the finished product, and the availability of substitute products and of alternative finished goods.

The demand for GOES is derived from the demand for the downstream products in which it is used, principally distribution and power transformers. Record evidence indicates that GOES represents 6 to 22 percent of the total cost of power transformers, 12 to 30 percent of the total cost of distribution transformers, and an even smaller percentage of the final cost of the electricity. The only practical substitute for GOES is amorphous metals, which are currently used for only a small portion of the distribution transformer market. Although their use is increasing, the high cost of amorphous metals and the need for different production equipment limit significantly their substitutability with GOES. For these reasons, the demand for GOES is relatively inelastic, and purchasers are relatively insensitive to price increases. Therefore, I find that purchasers are unlikely to reduce their purchases of GOES significantly if prices increase.

### B. Elasticity of Substitution

The elasticity of substitution measures how the quantity demanded of one product relative to another product responds to changes in the relative prices of these products. It depends upon the extent of product differentiation such as quality differences, and upon differences in terms and conditions of sale. Products are close substitutes if product attributes and terms and conditions of sale are similar. If products are close substitutes, purchasers will tend to respond more readily to relative price changes. In this investigation I find that the LTFV imports and the domestic products are not close substitutes for each other.

I find that the elasticity of substitution is low for subject imports from Japan and the domestic like product. That is, I find that subject imports are not good substitutes for the domestic product. The substitutability is limited substantially due to the product mix of subject imports and the domestic product and nonprice differences between the two products. The record demonstrates that substitutability between and among grades of GOES is limited primarily to one grade higher or lower in energy efficiency.

The vast majority, \*\*\* percent, of Japanese imports consists of high permeability GOES, and nearly \*\*\* of these imports consists of a product that is not produced domestically. Virtually all of the remaining \*\*\* percent consists of grade M-3. On the other hand, high permeability GOES accounts for only \*\*\* percent of domestic shipments of GOES, while M-3 accounts for about \*\*\* percent of domestic shipments. As a result, the vast majority of Japanese imports competes directly with only a small portion of domestic shipments, while a relatively small portion of Japanese imports competes directly with a more significant portion of domestic shipments.

Overall, Japanese imports compete directly with less than \*\*\* of domestic shipments. The lack of direct competition with more than \*\*\* of domestic shipments reduces substantially the elasticity of substitution between Japanese imports and the domestic product. In addition,



the record demonstrates that Japanese imports generally are more energy efficient than the domestic product, which further reduces the substitutability between the two.<sup>147</sup>

For these reasons, I find that Japanese imports and the domestic product are not close substitutes. Therefore, if the price of Japanese imports increases, at least some Japanese high permeability GOES will likely still be sold, even though purchasers will likely buy considerably more domestic high permeability and M-2 GOES.

I also find that the elasticity of substitution between Italian imports and the domestic product is low. That is, I find that Italian imports and the domestic industry are not good substitutes for each other. The substitutability is substantially limited due to the product mix of subject imports and the domestic product and nonprice differences between the two products.

As previously noted, the record demonstrates that substitutability between and among grades of GOES is limited primarily to one grade higher or lower in energy efficiency. The overwhelming majority, \*\*\* percent, of Italian imports consists of grade M-6, the least energy efficient grade of GOES. The remaining minuscule amount, \*\*\* percent, consists of grade M-3, M-4, and M-5. In other words, virtually all Italian imports consist of M-6. For the domestic industry, on the other hand, M-6 accounts only for about \*\*\* percent of domestic shipments. Therefore, fully \*\*\* percent of domestic shipments does not compete directly with Italian imports. Even including the limited substitutability between M-6 and M-4/M-5, nearly \*\*\* percent of domestic shipments does not compete at all with Italian imports.<sup>148</sup>

In addition, two purchasers that accounted for \*\*\* percent and \*\*\* percent respectively, or \*\*\* percent of total Italian imports collectively, stated that they purchased Italian imports for nonprice reasons. One purchased Italian imports for quality reasons, and the other purchased Italian imports expressly to maintain an alternative source of supply. In other words, \*\*\* of Italian imports did not compete with the same grade of the domestic product, due to quality or product differentiation and other nonprice reasons.<sup>149</sup>

Overall, Italian imports compete directly with about \*\*\* percent of domestic shipments. The lack of direct competition with nearly \*\*\* percent of domestic shipments reduces substantially the elasticity of substitution between Italian imports and the domestic product. In addition, the record demonstrates that \*\*\* of Italian imports does not compete with the same grade of the domestic product, which further reduces the overall substitutability between the two.<sup>150</sup>

For these reasons, I find that Italian imports and the domestic product are not good substitutes. Therefore, if the price of Italian imports increases, purchasers will likely continue to buy some Italian imports and will likely switch to domestic products only if alternative sources of supply are not available.

### C. Elasticity of Domestic Supply

I find that the elasticity of domestic supply is high; that is, the domestic industry would have been able to increase its output as a result of an increase in prices. In 1993, capacity utilization was \*\*\* percent. In addition, there are large inventories available for sale in the market, and significant export markets exist so that the domestic industry is able to shift production into and out of the U.S. market.<sup>151</sup> For these reasons, I find that the domestic industry is readily able to increase its output in response to an increase in prices.

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<sup>147</sup> EC-R-051 at 24 to 29.

<sup>148</sup> EC-R-051 at 5.

<sup>149</sup> EC-R-051 at 23.

<sup>150</sup> EC-R-051 at 22 to 24.

<sup>151</sup> EC-R-051 at 17 to 19.

D. Characteristics of the U.S. Market

There are two producers of GOES in the United States. One firm produces only conventional grades. The other firm produces primarily conventional grades, but also produces high-permeability GOES. Nonsubject imports were concentrated in the least energy efficient grades (i.e. M-4/M-5 and M-6), with \*\*\* nonsubject imports of high permeability GOES. Therefore, nonsubject imports were available as an alternative source of supply to purchasers of Italian imports, but not to purchasers of Japanese imports.

III. MATERIAL INJURY BY REASON OF LTFV IMPORTS FROM JAPAN

In determining whether a domestic industry is materially injured by reason of the LTFV imports, the statute directs the Commission to consider:

- (I) the volume of imports of the merchandise which is the subject of the investigation,
- (II) the effect of imports of that merchandise on prices in the United States for like products, and
- (III) the impact of imports of such merchandise on domestic producers of like products, but only in the context of production operations within the United States . . . .<sup>152</sup>

In assessing the effect of LTFV imports, I compare the current condition of the domestic industry with the condition that would have existed had imports been fairly priced.<sup>153</sup> Then, taking into account the condition of the industry, I determine whether any resulting change of circumstances constitutes material injury. For the reasons discussed below, I find that the domestic industry is materially injured by reason of LTFV imports from Japan.

A. Volume of the Subject Imports

In 1993, the domestic industry's market share was \*\*\* percent by value, and the market share of subject imports from Japan was \*\*\* percent by value. Based on this market share, I find the volume of LTFV imports to be significant.

B. Effect of Subject Imports on Domestic Prices

To analyze the effect of LTFV imports on domestic prices of the like product, I consider a number of factors relating to the industry and the nature of the products. These factors include the availability of substitute products in the market, the degree of substitutability between the LTFV imports and the domestic like product, the presence of fairly traded imports, and the degree of market power that can be exercised by domestic producers. I find the LTFV imports had no significant price effects.

If the price of Japanese imports had been increased to fairly priced levels, one would expect that the domestic industry would have been able to increase its prices because demand is inelastic. However, competition within the domestic industry and the high elasticity of supply due to available capacity would have prevented domestic price increases.

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<sup>152</sup> 19 U.S.C. § 1677(7)(B)(i). In making its determination, the Commission may consider "such other economic factors as are relevant to the determination." 19 U.S.C. § 1677(7)(B)(ii).

<sup>153</sup> 19 U.S.C. § 1677(7)(C)(iii).

The dumping margin of 31.02 percent means that the Japanese imports would have been priced up to 31 percent higher had they been fairly traded. Even though Japanese imports and the domestic products are, on balance, poor substitutes, that price increase would have caused many purchasers to switch from the subject imports to domestic high-permeability GOES and M-2 grade. As a result, substantially fewer Japanese imports would have been sold. Domestic capacity utilization is \*\*\* percent, and thus the domestic industry would have been able to supply the market share held by Japanese imports. Although there are only two domestic producers, record evidence demonstrates that they compete actively in the market. Therefore, attempts by one producer to increase prices would have been met and "beaten back" by the other producer.

C. Impact of Subject Imports on the Domestic Industry

In assessing the impact of LTFV imports on the domestic industry, I consider, among other relevant factors, output, sales, inventories, capacity utilization, market share, employment, wages, productivity, profits, cash flow, return on investment, ability to raise capital and research and development.<sup>154</sup> These factors either encompass or reflect the volume and price effects of the dumped imports, and so I must gauge the impact of the dumping through those effects. In this case, I find that the domestic industry's output was adversely affected by the dumping of Japanese imports.

As discussed above, I find that substantially fewer Japanese imports would have been sold at fairly traded prices. However, because of available capacity and competition between the domestic producers, domestic prices would not have increased if subject imports had been priced fairly. Therefore, any impact of subject imports on the domestic industry would have been on the volume of the domestic industry's output and sales.

There are no nonsubject imports of high permeability GOES, and purchasers have no alternative source of supply to turn to in response to a substantial decrease in the sales of Japanese imports. However, the domestic industry had sufficient available capacity to satisfy the demand increase resulting from reduced Japanese sales. Therefore, the domestic industry would have increased its output and sales significantly, and thereby also its revenues significantly. Consequently, I find that the domestic industry would have been materially better off if Japanese imports had been priced fairly. Therefore, I determine that the domestic industry is materially injured by reason of LTFV imports from Japan.

IV. NO MATERIAL INJURY BY REASON OF SUBSIDIZED AND LTFV IMPORTS FROM ITALY

In my determination that the domestic industry is not materially injured by reason of subject imports from Italy, I have considered the required statutory factors and employed my analysis discussed above. My analysis follows.

A. Volume of the Subject Imports

In 1993, the domestic industry's shipments of GOES accounted for a market share of \*\*\* percent by quantity, and the market share of subject imports from Italy was \*\*\* percent by quantity.<sup>155</sup> Based on this relatively small market share and the low elasticity of substitution, I do not find the volume of subject imports to be significant.

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<sup>154</sup> 19 U.S.C. § 1677(C)(iii).

<sup>155</sup> Report Table C-1.

## B. Effect of Subject Imports on Domestic Prices

To analyze the effect of subject imports on domestic prices of the like product, I consider a number of factors relating to the industry and the nature of the products. These factors include the availability of substitute products in the market, the degree of substitutability between the subject imports and the domestic like product, and the presence of fairly traded imports. For the reasons stated below, I find that the subject imports had no significant price effects on the domestic industry.

Giving the domestic industry the benefit of the doubt, I have assumed that the entire subsidy margin of 24.42 percent has been passed through in the prices of Italian imports. I have also included the effects of the 5.62 percent preliminary dumping margin in my analysis. If subject imports and the domestic product were good substitutes, the combined effects of these margins would likely have been to price Italian imports out of the market. However, as discussed above, the two are poor substitutes, so the effects of eliminating the subsidies and dumping are not as great.

If the price of Italian imports had been increased to fairly priced levels, one would expect that the domestic industry would have been able to increase its prices because demand is inelastic. However, competition in the market between domestic producers and with nonsubject imports and the low elasticity of substitution would have prevented domestic price increases.

Giving petitioners the benefit of the doubt, I have assumed that no Italian imports would have been sold in the domestic market had they been offered at fairly traded prices. Domestic capacity utilization is \*\*\* percent, and therefore the domestic industry would have been able to supply the market share held by Italian imports. Although there are only two domestic producers, record evidence demonstrates that they compete actively in the market. Therefore, attempts by one producer to increase prices would have been met and "beaten back" by the other producer. A further limitation on the ability of domestic producers to increase their prices is the availability of substantial quantities of nonsubject imports in the market giving purchasers access to alternative sources of supply. As a result, I find that competition between the domestic producers themselves, and from nonsubject imports, would have minimized or prevented any price increase for the like product even without the presence of subject imports. Hence, subject imports cannot be found to have had any adverse effect on domestic prices.

## C. Impact of Subject Imports on the Domestic Industry

In assessing the impact of LTFV imports on the domestic industry, I consider, among other relevant factors, output, sales, inventories, capacity utilization, market share, employment, wages, productivity, profits, cash flow, return on investment, ability to raise capital and research and development.<sup>156</sup> These factors either encompass or reflect the volume and price effects of the dumped imports, and so I must gauge the impact of the dumping through those effects.

As discussed above, I have assumed that no subject imports would have been sold in the domestic market at fairly traded prices. Because of competition in the U.S. market, domestic prices would not have increased had subject imports been priced out of the market. As a result, any impact of subject imports on the domestic industry would have been on the volume of the domestic industry's output and sales.

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<sup>156</sup> 19 U.S.C. § 1677(C)(iii).

The domestic industry's capacity utilization rate was \*\*\* percent in 1993. Therefore, if subject imports had been priced out of the market, the domestic industry had more than sufficient available capacity to replace them. Nonsubject imports were also available to satisfy demand had subject imports not been in the market.

Subject imports and the domestic product are poor substitutes. Thus, purchasers are more likely to have purchased nonsubject imports than domestic GOES had subject imports been sold at fairly traded prices. The record includes evidence that fully \*\*\* of Italian imports is bought by purchasers for specific nonprice reasons (quality differences and the need to maintain alternative sources of supply). Consequently, purchasers are unlikely to have switched to the domestic product, even if Italian imports were not available. In fact, the domestic industry would have had the opportunity to compete only for the sales of \*\*\* of subject imports, had they been priced out of the market. I have given petitioners the benefit of the doubt and assumed that the domestic industry would have captured this entire \*\*\* of the market share of subject imports.

If the domestic industry had captured this \*\*\* of the displaced Italian market share, it would have increased its market share by less than \*\*\* percent. This increase in market share is so small that the domestic industry's output and revenues would not have increased significantly. Consequently, I conclude that, even giving the benefit of the doubt to the domestic industry, it would not have been materially better off if subject imports had been fairly priced. Therefore, I determine that the domestic industry is not materially injured by reason of subsidized and LTFV imports of GOES from Italy.

V. NO THREAT OF MATERIAL INJURY BY REASON OF SUBSIDIZED AND LTFV IMPORTS FROM ITALY

I have considered the enumerated statutory factors that the Commission is required to consider in its determination.<sup>157</sup> A determination that an industry "is threatened with material injury shall be made on the basis of evidence that the threat of material injury is real and that actual injury is imminent. Such a determination may not be made on the basis of mere conjecture or supposition."<sup>158</sup>

I am mindful of the statute's requirement that my determination must be based on evidence, not conjecture or supposition. Accordingly, I have distinguished between mere assertions, which constitute conjecture or supposition, and the positive evidence<sup>159</sup> that I am required by law to evaluate in making my determination.

None of the subsidies found by Commerce are export subsidies. However, in my determination of no material injury by reason of subject imports, I gave petitioners the benefit of the doubt by assuming that the entire amount of the subsidies has been passed through to prices of subject imports in the United States. I make the same assumption in my analysis of threat of material injury by reason of subject imports.

There has been no increase in Italian capacity, and capacity utilization was fairly high in 1993. Capacity utilization is projected to \*\*\* in 1994, and so it is likely that some production capacity will be available to increase exports of GOES from Italy. However, I find that the available capacity is not likely to result in a significant increase in imports of Italian GOES into the United States. First, there are significant export markets for Italian GOES, so the foreign producer is not primarily reliant on the U.S. market. Second, Italian exports to the United States are projected to \*\*\* in 1994. Finally, GOES represents a \*\*\* of the Italian producer's total production, evidence that the Italian firm's economic interests lie almost

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<sup>157</sup> 19 U.S.C. § 1677(F)(i).

<sup>158</sup> 19 U.S.C. § 1677(7)(F)(ii).

<sup>159</sup> See American Spring Wire Corporation v. United States, 590 F., Supp. 1273 (1984).

exclusively in producing other products. For these reasons, I find that the information relevant to production capacity and unused or underutilized capacity in the exporting countries does not represent evidence that any threat of material injury is real or that actual injury is imminent.

While the market share of subject imports increased from \*\*\* percent in 1990 to \*\*\* percent in 1993, it only increased by \*\*\* percentage points from 1992 to 1993. I do not find this to be a "rapid increase" in market penetration. In addition, because subject imports and the domestic product are poor substitutes, I find little, if any, likelihood that the market penetration will increase to injurious levels. Therefore, I find that the increase in market penetration does not constitute evidence that any threat of material injury is real or that actual injury is imminent.

There were no inventories of Italian GOES in the United States in 1993. Therefore, there are no U.S. inventories to constitute a threat of material injury.

In my determination that there is no material injury by reason of subject imports, I demonstrated that subject imports have had no significant effect on domestic prices. In light of the domestic industry's capacity utilization rate, the low elasticity of substitution, and the availability of nonsubject imports, I find no positive evidence that this will change in the immediate future. Therefore, I conclude that subject imports will not enter the United States at prices that will have a depressing or suppressing effect on domestic prices.

I find no evidence of any other demonstrable adverse trends that indicate the probability that subject imports will be the cause of actual injury.

For the reasons stated above, I find that the domestic industry is not threatened with material injury by reason of subject imports from Italy.

## VI. CONCLUSION

On the basis of the record, I determine that the domestic industry is materially injured by reason of subject imports from Japan. I further determine that the domestic industry is not materially injured or threatened with material injury by reason of subject imports from Italy.

**PART II**  
**INFORMATION OBTAINED IN THE INVESTIGATIONS**





## INTRODUCTION

### Institution

Following preliminary determinations by the U.S. Department of Commerce (Commerce) that imports of certain grain-oriented silicon electrical steel<sup>1</sup> from Italy are being subsidized by the Government of Italy, and imports of such merchandise from Italy and Japan are being, or likely to be, sold in the United States at less than fair value (LTFV), the U.S. International Trade Commission (Commission), effective January 28, 1994, instituted investigations Nos. 701-TA-355 (Final) and 731-TA-659 and 660 (Final) under sections 705(b) of the Tariff Act of 1930 (19 U.S.C. § 1671d(b)) (the Act) and 735(b) of the Act (19 U.S.C. § 1673d(b)) to determine whether an industry in the United States is materially injured or threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of imports of such merchandise. Notice of the institution of the Commission's investigations, and of the public hearing held in connection therewith, was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the *Federal Register* of February 23, 1994 (59 F.R. 8658).<sup>2</sup> The hearing was held in Washington, DC on April 12, 1994.<sup>3</sup>

Commerce's final countervailing duty determination on Italy and its final antidumping determination on Japan were made on April 11, 1994, and April 18, 1994, respectively.<sup>4</sup> The applicable statute directs that the Commission make its final injury determinations within 45 days after the final determinations by Commerce.

### Background

These investigations result from a petition filed by counsel on behalf of Allegheny Ludlum Corp. (Allegheny), Pittsburgh, PA; Armco, Inc. (Armco), Butler, PA; the Butler Armco Independent Union, Butler, PA; the United Steelworkers of America, Pittsburgh, PA; and the Zanesville Armco Independent Union, Zanesville, OH (collectively hereinafter "petitioners") on August 26, 1993, alleging that an industry in the United States is being materially injured and is threatened with further material injury by reason of subsidized imports from Italy and LTFV imports from Italy and Japan<sup>5</sup> of grain-oriented silicon electrical steel. In response to that petition, the Commission instituted countervailing duty investigation No. 701-TA-355 (Preliminary) under section 703(a) of the Act (19 U.S.C. § 1671b(a)) and antidumping investigations Nos. 731-TA-659 and 660 (Preliminary) under section 733(a) of the Act (19 U.S.C. 1673b(a)) and, on October 12, 1993, determined that there was a reasonable indication of such material injury.

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<sup>1</sup> As defined by Commerce, the grain-oriented silicon electrical steel covered by these investigations is an alloy steel containing by weight at least 0.6 percent of silicon and not more than 0.08 percent of carbon (the steel may also contain by weight not more than 1.0 percent of aluminum but no other element in an amount that would give it the characteristics of another alloy steel), of a thickness of no more than 0.56 millimeter, in coils of any width, or in straight lengths which are of a width measuring at least 10 times the thickness, with its constituent molecular crystals oriented primarily in one direction, provided for in subheadings 7225.10.00, 7226.10.10, and 7226.10.50 of the Harmonized Tariff Schedule of the United States (HTS).

<sup>2</sup> Copies of cited *Federal Register* notices are presented in app. A.

<sup>3</sup> A list of witnesses at the hearing is presented in app. B.

<sup>4</sup> Commerce is scheduled to make its final antidumping determination on Italy on June 24, 1994.

<sup>5</sup> Armco, the Butler Armco Independent Union, and the Zanesville Armco Independent Union are not petitioners in the antidumping investigation concerning Japan. Armco, however, indicated that it supports the antidumping petition concerning Japan filed by Allegheny and the United Steelworkers of America. Conference transcript, p. 48.

## PREVIOUS AND RELATED COMMISSION INVESTIGATIONS

In 1988, Allegheny filed a petition under section 337 of the Act. In the petition, Allegheny alleged that grain-oriented silicon electrical steel produced by Nippon Steel Corp. (Nippon) and imported into the United States was produced in violation of U.S. Patent No. 3,855,018 held by Allegheny. However, the Commission did not initiate a section 337 investigation in response to the complaint because it found that Allegheny did not satisfy the statute's definition of an "industry." That is, although Allegheny produced a product that it felt was competitive with that exported to the United States by Nippon, it was not producing a product pursuant to its own patent. Therefore, the Commission found that in the absence of significant investment in plant and equipment, significant employment of labor and capital, and substantial investment in the exploitation of the patent at issue, Allegheny did not have standing under section 337 of the Act.<sup>6</sup>

## THE PRODUCT

### Description

Grain-oriented silicon electrical steel is a flat-rolled steel product sold in sheet or strip form and having a grain structure that permits it to conduct a magnetic field with a high degree of efficiency. The subject steel is used in the manufacture of power and distribution transformers as well as specialty transformers<sup>7</sup> because of its superior magnetic properties, chiefly its higher permeability<sup>8</sup> and lower core loss,<sup>9</sup> compared with non-grain-oriented silicon electrical steel.

Grain-oriented silicon electrical steel typically ranges in gauge or thickness up to 0.457 millimeter (mm)<sup>10</sup> and is sold in various lengths, in either sheet or strip width. The standard full-width size of grain-oriented silicon electrical steel sheet in the United States is 34 inches.<sup>11</sup> Grain-oriented silicon electrical steel is subjected to specialized rolling and annealing processes which yield grain structures uniformly oriented in the rolling (or lengthwise) direction of the sheet.

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<sup>6</sup> Transcript of the Commission meeting, Docket No. 1479, Jan. 4, 1989, p. 5; and postconference brief of petitioners, attachment 1, p. 1.

<sup>7</sup> Transformers can be of the liquid or dry type. Liquid types have an insulating oil inside and are used for power and distribution transformers. Dry transformers lack insulating/cooling liquids and are used in appliances, electronic components, and motors as well as some power transformers. Telephone conversation with M. Barnett, Steptoe & Johnson, counsel to Nippon Steel, May 6, 1994.

<sup>8</sup> Permeability refers to the ease of magnetization of the grain-oriented silicon electrical steel.

<sup>9</sup> Core loss is a measure of the amount of electrical energy that is lost as heat when magnetic flux flows through the steel. Most transformers include a core made of grain-oriented silicon electrical steel: either a stacked core or a wound core. Stacked cores consist of steel laminations stacked one on top of the other around the perimeter of the transformer. Electric wires are then fitted over the core structure to complete the core; the final shape of the core resembles a box without a top or a bottom. Wound cores are made by winding a continuous length of steel into a circular, or doughnut, form. The doughnut shape is pressed into a rectangular shape, heat treated, then paired with coiled electric wires. Production of the wound core is not as labor-intensive, but the wound core's use is limited to smaller transformers because of the physical drawbacks of winding large amounts of steel. Petition, p. 118; conference transcript, pp. 51-53; and joint prehearing brief of Kawasaki and Nippon, p. 17.

<sup>10</sup> Petition, p. 4. In its definition of the scope of these investigations, Commerce specified that grain-oriented silicon electrical steel can range up to 0.56mm in thickness.

<sup>11</sup> The bulk of the Italian producer ILVA's exports of grain-oriented silicon electrical steel to the United States is in widths greater than 34 inches, which ILVA noted permits additional cuts in customers' slitting patterns. Conference transcript, pp. 152-153, and prehearing brief of ILVA, p. 39. The grain-oriented silicon electrical steel produced in Japan is in standard widths of either 36 inches or 1 meter. Postconference brief of Kawasaki Steel Corp. (Kawasaki), exhibit B, p. 23.

Grain-oriented silicon electrical steel is identified by grades developed by the American Iron and Steel Institute (AISI) and the American Society for Testing and Materials (ASTM).<sup>12</sup> The subject products consist of alloy steel containing by weight at least 0.6 percent but not more than 6 percent of silicon and not more than 0.08 percent of carbon. They may also contain by weight not more than one percent of aluminum but no other element in a proportion that would give the steel the characteristics of another alloy steel.

Grain-oriented silicon electrical steel is normally produced to maximum core loss values specified by the ASTM/AISI designations. The domestic industry produces a wide range of grain-oriented silicon electrical steel from the relatively thick conventional grade M-6, which has the highest core loss (i.e., the lowest energy efficiency), to the thin-gauge conventional grades such as M-2 and to the high-permeability grades having lower core losses.<sup>13</sup> However, within each grade of grain-oriented silicon electrical steel, magnetic characteristics differ in that the same grade made by two producers will have different average core losses.<sup>14</sup>

The petitioners argue that different grades of grain-oriented silicon electrical steel compete directly with one another because materials are selected by manufacturers to yield the lowest "total ownership cost," or TOC, for each customer. The TOC evaluates the steel's core loss and price, among other factors, in the context of the utility company's energy loss specifications to determine the optimum grade of steel required to produce the lowest TOC transformer.<sup>15</sup> Petitioners state that the different grades of the subject product are essentially points along a continuum of varying core losses, all of which compete directly with one another at different pricing points because of the price/performance tradeoff that must be made when selecting a particular grade.<sup>16</sup>

Petitioners state that the core loss of any grade of steel is not a constant but rather is highly dependent upon the magnetic flux density in the steel. Hence, the transformer designer can reduce the total power losses of a transformer not only by switching to a lower-loss grade of steel but also by lowering the flux density at which the steel is operated in the transformer. This latter method is much more effective for conventional steels than high-permeability steel because of the difference between the two steel types in the dependence of their core losses on flux density. This difference allows conventional steels to compete against lower-loss, high-permeability steels. Also, high-permeability steels have significantly higher transformer destruction factors<sup>17</sup> than do conventional steels. This also acts to offset the lower loss of the high-permeability steels.

Japanese respondents, however, state that high-permeability, very low-core-loss grain-oriented silicon electrical steel (used for high-efficiency transformer applications) and low-permeability, conventional-core-loss grain-oriented silicon electrical steel (used for low-efficiency or less-demanding

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<sup>12</sup> Petition, pp. 4-5. The ASTM specification for grain-oriented silicon electrical steel identifies separate core-loss designations for conventional and high-permeability types; the trade designations are M-2 through M-6 and M-0H through M-4H, respectively.

<sup>13</sup> Petition, p. 140. Japanese respondents assert that the U.S. industry produces only one high-permeability low-core-loss product suitable for use only in stacked core transformers and that only the Japanese have developed a high-permeability product for applications in low-core-loss wound core transformers or in ultra-low-core-loss applications. Postconference brief of Kawasaki, pp. 19 and 23.

<sup>14</sup> Conference transcript, p. 57, and hearing transcript, p. 16.

<sup>15</sup> Petition, pp. 140-142, and conference transcript, pp. 84-85. Some transformer customers are indifferent to the cost of operating a transformer. Their transformer requirements are referred to as non-evaluated. Postconference brief of Kawasaki, p. 16, and hearing transcript, p. 83.

<sup>16</sup> Conference transcript, p. 33, and hearing transcript, p. 47.

<sup>17</sup> Destruction factor is a measure of the degree to which the process of building the transformer increases the core loss of the steel (i.e., reduces its efficiency) compared to the guaranteed maximum core loss of the steel as shipped from the mill. The cutting, stacking, and other handling of the steel involved in building a transformer introduces stresses into the steel, which cause its efficiency once built to be less than its efficiency in coil form at the mill. Telephone conversation with Mr. Anthony L. Von Holle, Principal Research Engineer, Electrical Steel Research, Research and Technology, Armco, Mar. 16, 1994.

transformer, motor, and ballast applications) are not substitutable.<sup>18</sup> They assert that the products are distinguished in part by their distinctive permeability, core loss levels, chemistries, and magnetostriction ("noise" generated when electrical energy travels through a transformer).<sup>19</sup>

Because all of the subject steel sold in the United States conforms to ASTM/AISI specifications, domestic and imported products with identical specifications are presumably interchangeable in terms of product characteristics and quality. Petitioners state that the domestic industry manufactures the full spectrum of products and competes directly with all the subject imports for sales in the U.S. market.<sup>20</sup> Respondents for Japan, however, state that in terms of high-permeability grain-oriented steel, domestic products have significantly higher core losses than Japanese products, making the domestic products inappropriate for many applications.<sup>21</sup> Certain high-permeability ultra-low-core-loss grain-oriented products are not produced in the United States. Similarly, permanently domain-refined grain-oriented silicon electrical steel, a specialized product used increasingly<sup>22</sup> in high-efficiency distribution transformers where annealing is part of the transformer manufacturing process, is also not produced in the United States.

### Manufacturing Process<sup>23</sup>

The manufacturing process for grain-oriented silicon electrical steel begins with the melting process, during which scrap and ferroalloys are melted in either an electric furnace or a basic-oxygen furnace (see figure 1). The molten steel is then passed through a vacuum degassing station where the steel's chemistry is refined by the addition of silicon and other ferroalloys and the reduction of contaminants. Either ingot casting or continuous casting follows. Ingots are hot-rolled into slab, whereas continuous cast slabs are cast directly into semifinished shapes having the desired cross-sectional dimensions. The resulting slabs are hot-rolled into a sheet of the desired thickness. The production process for grain-oriented silicon electrical steel and stainless steel, up to this point, is essentially the same in that the two different types of steel can be melted in the same furnace and hot-rolled on the same hot-strip mill.<sup>24</sup>

After hot-rolling, the steel sheet, in the form of a coil, is surface-smoothed, annealed, and pickled. The steel coil then is cold-reduced twice, continuously annealed two times, and decarburized and coated (to prevent sticking and to reduce current flow between steel layers in a transformer core). Next, the steel is high-temperature batch annealed to promote grain growth and the formation of a glass-like insulating coating. The coiled sheet is then thermal flattened and may be laser scribed<sup>25</sup> to improve the steel's magnetic properties; a second coating may be applied to improve electrical resistance. The sheet is inspected, slit to a narrower width if needed, and packaged for shipment.

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<sup>18</sup> Postconference brief of Kawasaki, p. 1, and hearing transcript, pp. 86-87. Japanese respondents further note that high-permeability and conventional grain-oriented silicon electrical steel are not interchangeable products because the transformer producers' strict specifications of core loss, size, weight, noise level, and transformer design preclude such changes. Conference transcript, pp. 106-107, and hearing transcript, p. 91.

<sup>19</sup> Postconference brief of Kawasaki, pp. 4-7.

<sup>20</sup> Conference transcript, p. 18, and hearing transcript, pp. 41-50.

<sup>21</sup> Conference transcript, p. 101, and hearing transcript, p. 93.

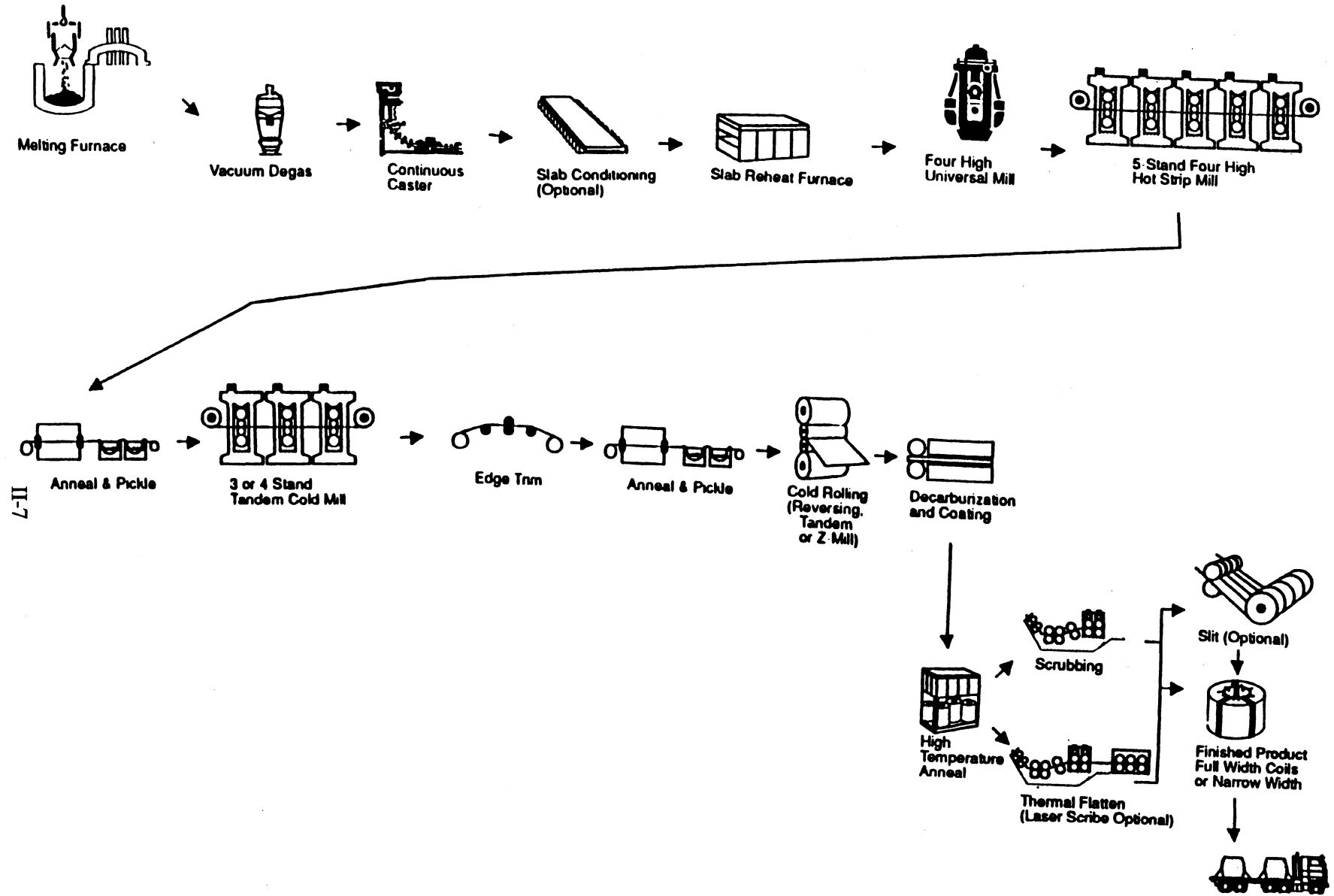
<sup>22</sup> Permanently domain-refined material accounted for 47.5 percent of subject high-permeability exports from Japan in 1993, having increased steadily from 12.3 percent in 1990. Joint posthearing brief of Nippon and Kawasaki, Apr. 20, 1994, Appendix 6.

<sup>23</sup> This section is based on information from the U.S.X. Corp., *The Making, Shaping, and Treating of Steel*; from the American Iron and Steel Institute, *Steel Products Manual: Electrical Steels (January 1983)*; and from a field visit on Mar. 9, 1994, to Armco, a U.S. producer.

<sup>24</sup> \*\*\*.

<sup>25</sup> Laser scribing is a process by which a laser etches tiny lines into the surface of the steel to reduce grain size. It is done primarily on certain high-permeability steel, although petitioners note that this process is also performed on some conventional grain-oriented silicon electrical steel. Postconference brief of petitioners, p. 5.

Figure 1: Flow of steelmaking process for grain-oriented silicon electrical steel



Source: Corporate literature, Armco Advanced Materials Company.

Certain steps in the production process differ for conventional versus high-permeability grain-oriented silicon electrical steel. For example, the different chemistries of these two types of steel are partly achieved at the vacuum degassing stage in which certain alloys are added.<sup>26</sup> Additionally, a specialized type of high-permeability grain-oriented silicon electrical steel, known as permanently domain-refined,<sup>27</sup> requires additional steps, including etching and recoating of the steel's surface.

The production processes used by domestic and foreign producers are essentially the same.<sup>28</sup> Any differences in manufacturing processes generally reflect differences in production equipment and processing technology.

### Uses

Grain-oriented silicon electrical steel is used primarily in the production of the cores of large- and medium-sized electrical energy power transformers and distribution transformers (see figure 2), the designs of which effectively utilize the directional magnetic properties of the grain-oriented silicon electrical steel. These properties help to transform electric power from a high-voltage form generated by a power plant to levels appropriate for local distribution. Distribution transformers, which are smaller than power transformers, further reduce the electrical voltage to levels suitable for commercial and residential consumers. Some grain-oriented silicon electrical steel, principally grade M-6, is used by stampers to punch laminations for use in equipment having smaller transformers, such as appliances and aerospace, aeronautical, and electronic equipment.<sup>29</sup> Transformer manufacturers account for more than 95 percent of the grain-oriented silicon electrical steel market. Of this amount, approximately 80 percent of the shipments are to manufacturers of transformers used by utility companies. Shipments of grain-oriented silicon electrical steel to markets other than the transformer customers are primarily to electric generator manufacturers.<sup>30</sup>

According to the Japanese respondents, the high-permeability product primarily services the evaluated transformer market, of which the utility companies constitute the major portion, and the conventional product primarily services the non-evaluated market, which consists of small electric product manufacturers, low-voltage transformer makers, appliance producers, and similar customers.<sup>31</sup> Petitioners argue, however, that they sell their products to the evaluated transformer market in direct competition with the respondents' product.<sup>32</sup>

### Substitute Products

There are very few practical substitutes for grain-oriented silicon electrical steel because of the electromagnetic properties necessary to transform electric power efficiently from a form that is generated at a power plant to a form that can be used by a consumer. These specialized magnetic properties also preclude interchangeability with any other types of steel, including non-grain-oriented silicon electrical

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<sup>26</sup> Postconference brief of Kawasaki, p. 7, and \*\*\*.

<sup>27</sup> "Domain refining" is the process of reducing the size of the individual domains, or grains, in grain-oriented silicon electrical steel. Methods of accomplishing this include laser scribing (described above), plasma jet scribing, mechanical scribing, and electronic beam scribing. Permanently domain-refined steel (mechanically etched and then recoated) is able to withstand the stress-relief annealing (controlled heating) required for the production of certain transformers without losing its domain-refined characteristics.

<sup>28</sup> Conference transcript, pp. 54 and 168, and postconference brief of Kawasaki, exhibit B, p. 13.

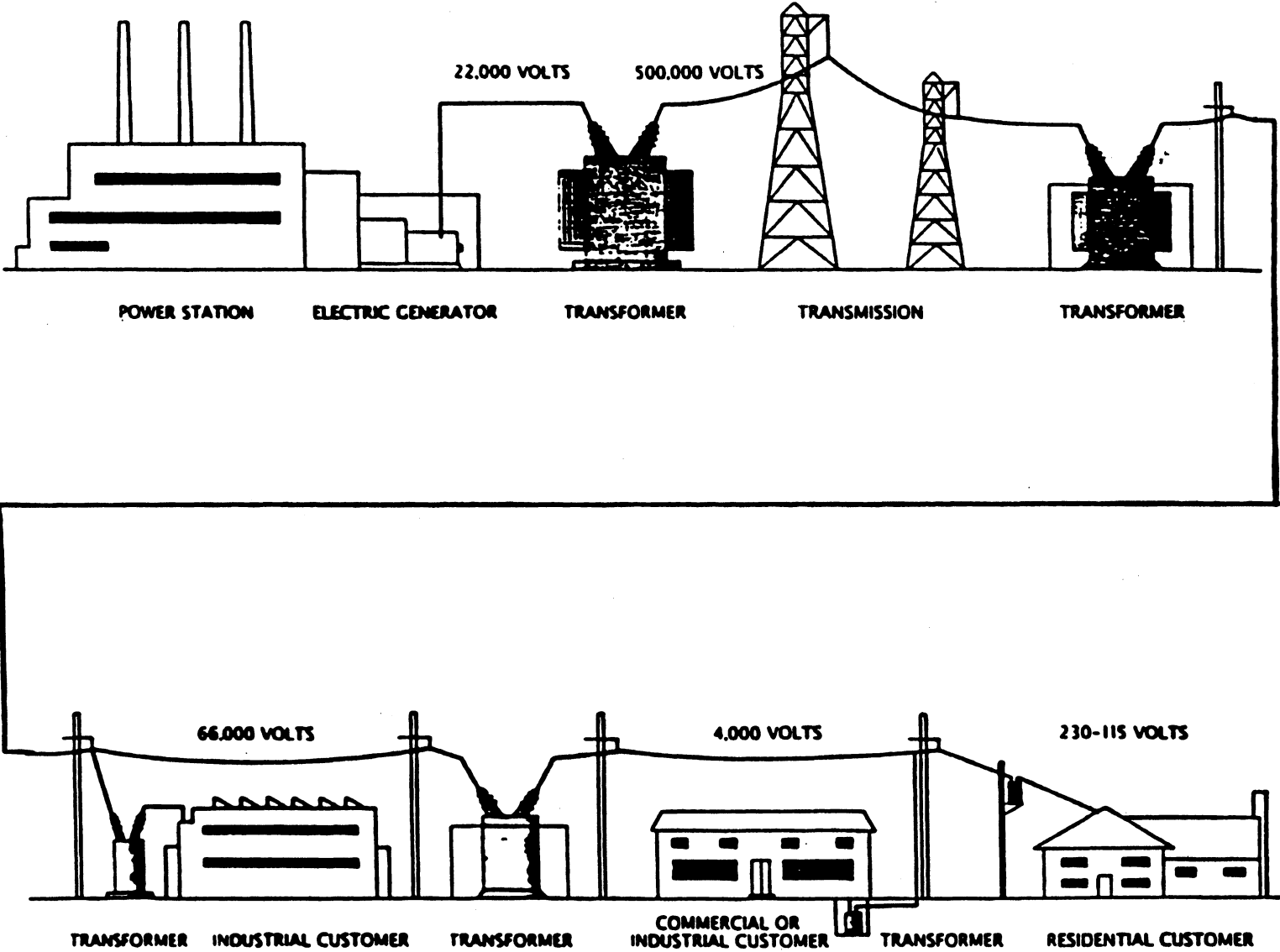
<sup>29</sup> Conference transcript, pp. 60-61.

<sup>30</sup> Conference transcript, pp. 62-63.

<sup>31</sup> Postconference brief of Kawasaki, p. 16.

<sup>32</sup> Conference transcript, pp. 22-24.

Figure 2: Schematic of the transmission of electric power



6-II

Source: Corporate literature, Armco Advanced Materials Company.

steel, carbon steel, and stainless steel.<sup>33</sup> The achievement of acceptable magnetic performance in transformer cores made from steel other than grain-oriented silicon electrical steel would require an enormous amount of material and would make the transformers prohibitively large and heavy.

One substitute, however, amorphous metal, is a non-steel material used to make transformers for which very high operating efficiency is demanded. Unlike grain-oriented silicon electrical steel, amorphous metal has a noncrystalline structure, which gives the metal a lower core loss than grain-oriented silicon electrical steel. Amorphous metal is believed by petitioners to have application in very limited areas of the grain-oriented silicon electrical steel market and to account for approximately 2 percent of the total transformer market.<sup>34</sup> Purchasers and Counsel for GE argues that amorphous metals are growing in importance and estimates that they currently account for \*\*\* of the transformer market.<sup>35</sup> Japanese respondents contend that amorphous metal very actively substitutes for high-permeability grain-oriented silicon electrical steel in high-loss, evaluated transformer applications.<sup>36</sup> Respondents further state that the core loss of amorphous metals can be significantly lower than that of the lowest core loss grain-oriented silicon electrical steel. However, amorphous metals generally are only used for wound core transformers.<sup>37</sup>

### U.S. Tariff Treatment

Imports of grain-oriented silicon electrical steel subject to these investigations are provided in HTS subheadings 7225.10.00, 7226.10.10, and 7226.10.50 (statistical reporting numbers 7225.10.0030, 7226.10.1030, 7226.10.5015, and 7226.10.5065). The column 1-general rates of duty for grain-oriented silicon electrical steel (applicable to imports from both Italy and Japan) are 5.8 percent ad valorem for widths of 300mm or more (7225.10.00 and 7226.10.10) and 7.0 percent ad valorem for widths of less than 300mm (7226.10.50). These statistical reporting numbers were created in 1993, at the request of petitioners, by the interagency Committee for Statistical Annotation of Tariff Schedule.<sup>38</sup>

### THE NATURE AND EXTENT OF SUBSIDIES

On April 18, 1994, Commerce published in the *Federal Register* (59 F.R. 18357) its final determination that benefits which constitute subsidies within the meaning of section 701 of the Act are being provided to manufacturers, producers, or exporters in Italy of grain-oriented silicon electrical steel. Commerce's period of investigation was calendar year 1992. Commerce found the following programs to be countervailable:

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<sup>33</sup> Petition, pp. 116 and 121, and conference transcript, p. 14.

<sup>34</sup> Conference transcript, pp. 69-70, and \*\*\*.

<sup>35</sup> D. Cameron, Morrison & Foerster, counsel to GE, conversation with Commission staff, Apr. 22, 1994.

<sup>36</sup> Conference transcript, p. 116, and prehearing brief of GE, pp. 6-7.

<sup>37</sup> Postconference brief of Kawasaki, exhibit B, p. 10. Staff believes that amorphous metal does compete with both high- and conventional-permeability grain-oriented silicon electrical steel, but that amorphous metal's relatively higher cost to the transformer producer limits its use.

<sup>38</sup> Prior to the creation of the new statistical breakouts, grain-oriented silicon electrical steel was classified with other silicon electrical steels under HTS statistical reporting numbers 7225.10.0000, 7226.10.1000, 7226.10.5030, and 7226.10.5060.



<i>Program</i>	<i>Subsidy (percent ad valorem)</i>
Benefits associated with the 1988-90 restructuring . . . . .	12.10
Interest-free loan to ILVA . . . . .	0.49
Equity infusions . . . . .	9.71
The transfer of Lovere and Trieste to Terni in 1982 . . . . .	0.41
Law 675/77 preferential financing . . . . .	0.59
Urban redevelopment financing under law 181/89 . . . . .	0.10
ECSC article 54 loans . . . . .	<u>1.02</u>
Total . . . . .	24.42

Accordingly, Commerce directed the U.S. Customs Service to suspend liquidation of the subject merchandise and to require a cash deposit or bond in the amount of 24.42 percent *ad valorem*.

### THE NATURE AND EXTENT OF SALES AT LTFV

On April 25, 1994, Commerce published in the *Federal Register* (59 F.R. 19693) its final determination that imports of grain-oriented silicon electrical steel from Japan are being, or are likely to be, sold in the United States at LTFV. Commerce's period of investigation was March 1, 1993, through August 31, 1993. In the case of Italy, Commerce is scheduled to make its final determination on June 24, 1994. Commerce based its calculation of the United States price on purchase prices paid by unrelated customers in the United States. It based its calculation of foreign market value on home market sales, except in those cases in which home market sales were made at prices below the cost of production; in such cases, foreign market value was based on constructed value. In the case of Japan, because both of the major foreign producers failed to respond to Commerce's questionnaire, it based its LTFV calculations on best information available. Commerce's preliminary weighted-average dumping margins for Italy and final margins for Japan are as follows (in percent *ad valorem*):

<i>Country and producer</i>	<i>Margin</i>
Italy:	
ILVA S.p.A and Acciai Speciali Terni . . . . .	5.62
All others . . . . .	5.62
Japan:	
Kawasaki Steel Corp. . . . .	31.08
Nippon Steel Corp. . . . .	31.08
All others . . . . .	31.08

### THE U.S. MARKET

The period for which information was requested in these investigations is 1990-93. A summary of data collected in the investigations and presented in this report concerning grain-oriented silicon electrical steel is presented in appendix C.

### U.S. Producers

Allegheny and Armco, \*\*\* accounting for approximately \*\*\* of the U.S. production and shipments of grain-oriented silicon electrical steel during the period for which data were collected, are the only producers of this product in the United States. These two firms and the nature of their operations are discussed below.

## Allegheny

Allegheny, headquartered in Pittsburgh, PA, is a major producer of a wide range of flat-rolled specialty materials, including stainless steel, grain-oriented silicon electrical steel, and other specialty alloys. The corporate total net sales in fiscal year 1993 were over \$1 billion, compared with its U.S. grain-oriented silicon electrical steel net sales in 1993 of \*\*\*.

Allegheny, a petitioner in the antidumping investigations concerning Italy and Japan and the countervailing duty investigation concerning Italy, owns and operates grain-oriented silicon electrical steel production facilities in the United States at \*\*\*. It is at these locations that the firm produces grain-oriented silicon electrical steel in conventional grades from M-2 to M-6. Allegheny does not produce high-permeability grain-oriented silicon electrical steel.<sup>39</sup> Other products, such as \*\*\*, are also produced at these facilities.<sup>40</sup> These other products share a portion of the machinery, equipment, and production workers with grain-oriented silicon electrical steel, primarily in the early stages of the production process. The portion of the process that gives grain-oriented silicon electrical steel its inherent properties is dedicated to this product. The firm indicated that although its \*\*\* business shares the hot strip mill machinery, equipment, and production workers with grain-oriented silicon electrical steel, \*\*\*.

During the period for which data were collected, Allegheny reported export sales of grain-oriented silicon electrical steel to \*\*\*. No imports of grain-oriented silicon electrical steel were reported by Allegheny, and the firm indicated that it does not maintain any joint ventures or agreements with the Japanese or Italian producers of grain-oriented silicon electrical steel.<sup>41</sup>

## Armco

Armco, headquartered in Pittsburgh, PA, is a major producer of stainless steel, electrical steel, carbon steel, steel products, and tubular goods. Armco also has joint-venture interests in companies that produce stainless steel, carbon steel flat-rolled sheets, and oil field machinery and equipment. In addition, Armco provides insurance services through businesses it intends to sell. The corporate total net sales in fiscal year 1993 were over \$2 billion, compared with its U.S. grain-oriented silicon electrical steel net sales in 1993 of \*\*\*.

Armco owns and operates grain-oriented silicon electrical steel production facilities in the United States at \*\*\*. At these U.S. locations, Armco produces all grades of conventional and high-permeability grain-oriented silicon electrical steel.<sup>42</sup> Other products, such as \*\*\*, are also produced at these facilities, all of which share a portion of the machinery, equipment, and production workers with grain-oriented silicon electrical steel, primarily in the early stages of production, specifically \*\*\*.

During the period for which data were collected, Armco reported export sales of grain-oriented silicon electrical steel to \*\*\*. No imports of grain-oriented silicon electrical steel were reported by Armco.

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<sup>39</sup> Conference transcript, p. 54.

<sup>40</sup> \*\*\*.

<sup>41</sup> Conference transcript, p. 49.

<sup>42</sup> Conference transcript, p. 54. Respondents assert that Armco only produces high-permeability low-core-loss grain-oriented silicon electrical steel for use in stacked core power transformers and that it does not produce the high-permeability ultra-low-core-loss product for use in wound core distribution transformers. In addition, respondents indicated that the high-permeability product that Armco produces cannot meet the performance standards of the Japanese product and is not produced in sufficient quantities to satisfy consumer requirements. Conference transcript, pp. 100-102, and postconference brief of Nippon, exhibit 1, pp. 3-4. The National Electrical Manufacturers Association (NEMA) indicates that its members believe that Armco could provide only 25 to 50 percent of the domestic requirements for the high-permeability product. Postconference brief of Kawasaki, p. 20. Mr. R. Psyck of Armco stated at the Commission's hearing that "our *TranCor-H* is not used as a core material for wound core distribution transformers." Hearing transcript, p. 43.

\*\*\*.

Armco is a petitioner in the antidumping and countervailing duty investigations concerning Italy. The firm explains that it did not join Allegheny as a petitioner in the case concerning Japan because it has certain technical relationships with a Japanese producer of grain-oriented silicon electrical steel that it wants to preserve. The firm indicated, however, that it was in support of the antidumping petition concerning Japan.<sup>43</sup> Armco's relationship with the Japanese concerns the production of its high-permeability grain-oriented silicon electrical steel under a 1990 technology licensing agreement with Nippon. Nippon has provided Armco with technical assistance and know-how concerning the production of this high-permeability product.<sup>44</sup>

Armco and Vicksmetals<sup>45</sup> formed a joint-venture company (Vicksmetals Armco Associates (VAA)) in August 1990 to perform steel slitting operations in the United States. VAA's sole function is to slit steel that is owned by another party, generally either Armco or Nippon, for a fee. Armco asserts that the VAA joint venture was established to provide additional slitting capacity for Armco that was closer in proximity to its customers. Armco also insists that no older slitting capacity at Armco's facility was decommissioned nor was its workforce reduced. \*\*\*.<sup>46</sup>

### U.S. Importers

The Commission sent questionnaires requesting information concerning U.S. imports of grain-oriented silicon electrical steel to the 2 U.S. producers of the product and to the 14 firms identified in the petition as importers of the product from Italy and Japan. Both producers stated that they did not import the subject products. Of the 14 identified importers, 3 stated that they do not import grain-oriented silicon electrical steel. The remaining 11 firms all provided import information that is presented below.

\*\*\*, the importer of record of \*\*\* entering the United States, provided complete information concerning its imports of the subject product. Information concerning imports of grain-oriented silicon electrical steel from Japan was provided by six importers of the Japanese products.<sup>47</sup> These data are believed to account for all of the subject imports from Japan. Information concerning imports from non-subject countries was provided by four importers of grain-oriented silicon electrical steel from France, Sweden, and the United Kingdom.<sup>48</sup> These data are believed to account for almost all grain-oriented silicon electrical steel imports.<sup>49</sup>

### Channels of Distribution

U.S. producers and importers from Japan generally sell directly to manufacturers of large and medium power and distribution transformers.<sup>50</sup> ILVA sells the majority of its imports of the Italian

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<sup>43</sup> Conference transcript, p. 48.

<sup>44</sup> Conference transcript, pp. 93 and 100, and postconference brief of Kawasaki, p. 20. \*\*\*.

<sup>45</sup> Vicksmetals is wholly owned by Sumitomo Corp. of America (Sumitomo), a trading company that imports the subject product from Japan.

<sup>46</sup> Postconference brief of petitioners, pp. 14-15 and 23, and telephone conversation with \*\*\*, Sept. 27, 1993.

<sup>47</sup> The largest importers of the subject product from Japan are \*\*\*.

<sup>48</sup> In recent years, there have been significant increases of imports from Germany and Russia. Mr. Fabio Balboni, sales manager for ILVA, USA, stated at the Commission's hearing that, "The Russians are starting to make a serious move -- so I'll use the word "aggressive" move on M-6 grades to our customers." Hearing transcript, p. 145.

<sup>49</sup> The HTS tariff classification numbers under which grain-oriented silicon electrical steel fell during the period of investigation include non-grain-oriented silicon electrical steel, a product not included in the scope of these investigations. Therefore, only questionnaire data for imports are presented. Official import statistics of the U.S. Department of Commerce for imports of all silicon electrical steel are presented in app. D.

<sup>50</sup> Conference transcript, pp. 15 and 96.

product to stampers of laminations.<sup>51</sup> U.S. producers also sell to this channel of distribution. Stampers sell the laminations for use in small stacked core transformers used in appliances, lighting, electronic equipment, and aerospace and aeronautical applications.

### **Apparent U.S. Consumption**

Data concerning apparent U.S. consumption of grain-oriented silicon electrical steel are calculated based on questionnaire responses containing data concerning U.S. shipments of U.S. producers and U.S. shipments of U.S. importers of product from France, Italy, Japan, Sweden, and the United Kingdom. The calculated apparent U.S. consumption data are presented in table 1.

The quantity of apparent U.S. consumption of grain-oriented silicon electrical steel fell by 13.9 percent from 1990 to 1991 and then increased by 5.5 percent from 1991 to 1993. By value, apparent U.S. consumption fell by 12.1 percent from 1990 to 1991 and then rose by 2.4 percent from 1991 to 1993. The decline in apparent U.S. consumption in 1991 may be explained by a fall in housing starts, nonresidential building, power plant construction, electric motor and small transformer production, electricity usage, and utility spending, and core loss improvements.<sup>52</sup>

### **CONSIDERATION OF ALLEGED MATERIAL INJURY**

Data presented in this section of the report consist of data provided by Allegheny and Armco. Each firm's data are presented separately in appendix E. Data provided by Armco concerning its conventional and high-permeability grain-oriented silicon electrical steel are also presented in appendix E.

### **U.S. Capacity and Production**

Data concerning U.S. capacity, production, and capacity utilization of grain-oriented silicon electrical steel are presented in table 2. Capacity data reported by Allegheny are calculated based on \*\*\*. Allegheny's basis for determining its capacity for grain-oriented silicon electrical steel is the capacity of \*\*\*.<sup>53</sup> Armco reported capacity data based on operating \*\*\*. Armco's capacity constraint for producing grain-oriented silicon electrical steel is based on its equipment dedicated to the production of this product.<sup>54</sup> The U.S. producers' capacity to produce grain-oriented silicon electrical steel \*\*\* during 1990-92 and then \*\*\*. Production \*\*\*, while capacity utilization \*\*\*.

### **U.S. Producers' Shipments**

Shipments of U.S.-produced grain-oriented silicon electrical steel are presented in table 3.<sup>55</sup> The quantity of the U.S. producers' U.S. shipments \*\*\*. The value of U.S. producers' U.S. shipments followed a similar trend.

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<sup>51</sup> ILVA indicated in its questionnaire response that its 1993 shipments were as follows: \*\*\*.

<sup>52</sup> Conference transcript, pp. 109-110, and \*\*\*.

<sup>53</sup> Allegheny points out \*\*\*.

<sup>54</sup> Armco indicates that its melt shop and hot-rolling mill are used in the production of other products in addition to grain-oriented silicon electrical steel. Postconference brief of petitioners, p. 24. Respondents argue that Armco's melt shop and hot-rolling mill are operating at full capacity with the production of grain-oriented silicon electrical steel and stainless steel products. Respondents further indicated that \*\*\*. Postconference brief of Nippon, pp. 18-21 and exhibit 5.

Armco indicated that it \*\*\*.

<sup>55</sup> Summary shipment data, by grade, are presented in app. F.

Table 1

Grain-oriented silicon electrical steel: U.S. shipments of domestic product, U.S. shipments of imports, by sources, and apparent U.S. consumption, 1990-93

Item	1990	1991	1992	1993
<i>Quantity (short tons)</i>				
Producers' U.S. shipments . . . . .	***	***	***	***
Importers' U.S. shipments:				
Italy . . . . .	***	***	***	***
Japan . . . . .	***	***	***	***
Subtotal . . . . .	***	***	***	***
Other sources . . . . .	***	***	***	***
Total . . . . .	***	***	***	***
Apparent consumption . . . . .	273,545	235,555	237,385	248,490
<i>Value (1,000 dollars)</i>				
Producers' U.S. shipments . . . . .	***	***	***	***
Importers' U.S. shipments:				
Italy . . . . .	***	***	***	***
Japan . . . . .	***	***	***	***
Subtotal . . . . .	***	***	***	***
Other sources . . . . .	***	***	***	***
Total . . . . .	***	***	***	***
Apparent consumption . . . . .	419,992	369,351	369,391	378,172

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Table 2

Grain-oriented silicon electrical steel: U.S. capacity, production, and capacity utilization, 1990-93

\* \* \* \* \*

Table 3

Grain-oriented silicon electrical steel: Shipments by U.S. producers, by types, 1990-93

\* \* \* \* \*

The quantity of exports \*\*\*. During the period for which data were collected, Allegheny exported \*\*\*.<sup>56</sup> In 1990 and 1991, \*\*\*. In 1992, Allegheny's export market for \*\*\*.<sup>57</sup> The \*\*\* in the unit values of exports in 1992 and 1993 \*\*\*.

<sup>56</sup> \*\*\*.

<sup>57</sup> \*\*\*.

## U.S. Producers' Inventories

End-of-period inventories of grain-oriented silicon electrical steel held by U.S. producers are presented in table 4.<sup>58</sup> These inventories \*\*\*. The ratios of inventories to total shipments and of inventories to production \*\*\*.

Table 4

Grain-oriented silicon electrical steel: End-of-period inventories of U.S. producers, 1990-93

\* \* \* \* \*

## U.S. Employment, Wages, and Productivity

Allegheny indicated that its production and related workers that produce grain-oriented silicon electrical steel are represented by the United Steelworkers of America,<sup>59</sup> and Armco indicated that its workers are represented by the Butler Armco Independent Union and the Zanesville Armco Independent Union. All three unions that represent these workers in the United States are also petitioners in at least two of these investigations. The production and related workers that produce grain-oriented silicon electrical steel at Armco's and Allegheny's facilities are also employed in the production of other products. At Armco, these other products consist of \*\*\*. At Allegheny, these other products consist of \*\*\*.

Allegheny reported a total of \*\*\*. Armco reported a total of \*\*\*.

Data concerning employment and productivity are presented in table 5. The data presented indicate a \*\*\*,<sup>60</sup> \*\*\*.

Table 5

Average number of total employees and production and related workers in U.S. establishments wherein grain-oriented silicon electrical steel is produced, hours worked, wages and total compensation paid to such employees, and hourly wages, productivity, and unit production costs, by products, 1990-93

\* \* \* \* \*

## Financial Experience of U.S. Producers

\* \* \* \* \*

Although Armco is primarily a producer of specialty steels, it also produces carbon steel and carbon steel products. Armco produces grain-oriented silicon electrical steel at its plants in Butler, PA, and Zanesville, OH. Armco's overall net sales fell irregularly from about \$3.2 billion in 1988 to \$1.7 billion in 1993 as the company sold off some business components and acquired others. About \*\*\* percent of the total consisted of export sales. Armco had net profits from 1987 to 1989, but has

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<sup>58</sup> According to industry reporting standards, inventory data include work-in-progress as well as finished materials.

<sup>59</sup> The union contract expired Apr. 1, 1994. Union members are currently on strike.

<sup>60</sup> \*\*\*.

had net losses totaling \$1.5 billion since then. Armco's net sales of grain-oriented silicon electrical steel \*\*\*.

Both Armco's and Allegheny's data were verified by Commission staff following the hearing. As a result of the verifications, \*\*\* cost of production data.

**Overall Establishment Operations**

Armco was able to provide financial data for its establishments that produced grain-oriented silicon electrical steel, but Allegheny was not. Instead, Allegheny provided data for its overall corporation. The data provided by the two producers are shown in table 6. \*\*\*.

\* \* \* \* \*

Table 6  
Income-and-loss experience of U.S. producers on the overall operations of their establishments wherein grain-oriented silicon electrical steel is produced, fiscal years 1990-93

\* \* \* \* \*

**Operations on Grain-Oriented Silicon Electrical Steel**

Income-and-loss data for operations on grain-oriented silicon electrical steel are shown in table 7. \*\*\*.

Table 7  
Income-and-loss experience of U.S. producers on their operations producing grain-oriented silicon electrical steel, fiscal years 1990-93

\* \* \* \* \*

\* \* \* \* \*

Table 8 presents selected income-and-loss data for both producers. \*\*\*.

Table 8  
Income-and-loss experience of U.S. producers on their operations producing grain-oriented silicon electrical steel, by firms, fiscal years 1990-93

\* \* \* \* \*

\* \* \* \* \* \*<sup>61 62</sup>

<sup>61</sup> The foregoing remarks were per \*\*\*, at Allegheny's verification on Apr. 22, 1994.  
<sup>62</sup> Per \*\*\*, at Armco's verification on Apr. 21, 1994.

Profit-and-loss data on the hot-rolled band operations of the two producers are presented in table 9. \*\*\*.

Table 9

Income-and-loss experience of U.S. producers on their operations producing hot-rolled bands of grain-oriented silicon electrical steel, fiscal years 1990-93

\* \* \* \* \*

Allegheny's cost of production data on its grain-oriented silicon electrical steel operations are presented in appendix G. Armco's data were not useable.

**Investment in Productive Facilities and Net Return on Assets**

Data on investment in productive facilities and return on assets are shown in table 10. The book value of Armco's investment in grain-oriented silicon electrical steel property, plant, and equipment is \*\*\* Allegheny's.

Table 10

Value of assets and return on assets of U.S. producers' operations producing grain-oriented silicon electrical steel, by products, fiscal years 1990-93

\* \* \* \* \*

**Capital Expenditures**

The capital expenditures for both producers are shown in table 11. \*\*\*.

Table 11

Capital expenditures by U.S. producers of grain-oriented silicon electrical steel, by products, fiscal years 1990-93

\* \* \* \* \*

**Research and Development Expenses**

The research and development (R&D) expenses for both producers are shown in table 12. \*\*\*.

Table 12

Research and development expenses of U.S. producers of grain-oriented silicon electrical steel, by products, fiscal years 1990-93

\* \* \* \* \*



## Capital and Investment

The Commission requested U.S. producers to describe any actual or potential negative effects of imports of grain-oriented silicon electrical steel from Italy and Japan on their growth, investment, ability to raise capital, or existing development and production efforts (including efforts to develop a derivative or more advanced version of the product). The responses are in appendix H.

### CONSIDERATION OF THE QUESTION OF THREAT OF MATERIAL INJURY

Section 771(7)(F)(i) of the Act (19 U.S.C. § 1677(7)(F)(i)) provides that--

In determining whether an industry in the United States is threatened with material injury by reason of imports (or sales for importation) of the merchandise, the Commission shall consider, among other relevant economic factors<sup>63</sup>--

- (I) If a subsidy is involved, such information as may be presented to it by the administering authority as to the nature of the subsidy (particularly as to whether the subsidy is an export subsidy inconsistent with the Agreement),
- (II) any increase in production capacity or existing unused capacity in the exporting country likely to result in a significant increase in imports of the merchandise to the United States,
- (III) any rapid increase in United States market penetration and the likelihood that the penetration will increase to an injurious level,
- (IV) the probability that imports of the merchandise will enter the United States at prices that will have a depressing or suppressing effect on domestic prices of the merchandise,
- (V) any substantial increase in inventories of the merchandise in the United States,
- (VI) the presence of underutilized capacity for producing the merchandise in the exporting country,
- (VII) any other demonstrable adverse trends that indicate the probability that the importation (or sale for importation) of the merchandise (whether or not it is actually being imported at the time) will be the cause of actual injury,

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<sup>63</sup> Section 771(7)(F)(ii) of the Act (19 U.S.C. § 1677(7)(F)(ii)) provides that "Any determination by the Commission under this title that an industry in the United States is threatened with material injury shall be made on the basis of evidence that the threat of material injury is real and that actual injury is imminent. Such a determination may not be made on the basis of mere conjecture or supposition."

(VIII) the potential for product-shifting if production facilities owned or controlled by the foreign manufacturers, which can be used to produce products subject to investigation(s) under section 701 or 731 or to final orders under section 706 or 736, are also used to produce the merchandise under investigation,

(IX) in any investigation under this title which involves imports of both a raw agricultural product (within the meaning of paragraph (4)(E)(iv)) and any product processed from such raw agricultural product, the likelihood that there will be increased imports, by reason of product shifting, if there is an affirmative determination by the Commission under section 705(b)(1) or 735(b)(1) with respect to either the raw agricultural product or the processed agricultural product (but not both), and

(X) the actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the like product.<sup>64</sup>

The available information on the nature of the subsidies (item (I) above) is presented in the section of this report entitled "The Nature and Extent of Subsidies;" information on the volume, U.S. market penetration, and pricing of imports of the subject merchandise (items (III) and (IV) above) is presented in the section entitled "Consideration of the Causal Relationship Between Imports of the Subject Merchandise and the Alleged Material Injury;" and information on the effects of imports of the subject merchandise on U.S. producers' existing development and production efforts (item (X)) is presented in appendix H. Available information on U.S. inventories of the subject products (item (V)); foreign producers' operations, including the potential for "product-shifting" (items (II), (VI), and (VIII) above); any other threat indicators, if applicable (item (VII) above); and any dumping in third-country markets, follows. Item (IX) is not applicable.

### U.S. Importers' Inventories

Data concerning U.S. inventories held by importers of Italian and Japanese grain-oriented silicon electrical steel are presented in table 13. Additionally, figure 3 shows producers' and importers' inventories during 1990-93.

Table 13

Grain-oriented silicon electrical steel: End-of-period inventories of U.S. importers, by sources, 1990-93

\* \* \* \* \*

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<sup>64</sup> Section 771(7)(F)(iii) of the Act (19 U.S.C. § 1677(7)(F)(iii)) further provides that, in antidumping investigations, ". . . the Commission shall consider whether dumping in the markets of foreign countries (as evidenced by dumping findings or antidumping remedies in other GATT member markets against the same class or kind of merchandise manufactured or exported by the same party as under investigation) suggests a threat of material injury to the domestic industry."

Figure 3  
 Grain-oriented silicon electrical steel: Producers' and importers' inventories, 1990-93

\* \* \* \* \*

The inventories of the Italian product \*\*\*. ILVA indicated \*\*\*.  
 The inventories of the Japanese product \*\*\*.  
 The trend concerning total inventories of the subject product held in the United States \*\*\*.

**Ability of Producers in Italy and Japan to Generate Exports  
 and the Availability of Export Markets Other Than the United States**

**Italy**

ILVA, the only producer of grain-oriented silicon electrical steel in Italy, also produces \*\*\*. The firm's production of grain-oriented silicon electrical steel accounts for approximately \*\*\* of its total net sales. ILVA produces a full range of grain-oriented silicon electrical steel, including all grades of the conventional product and the high-permeability low-core-loss product. ILVA's high-permeability product is produced under a technology license with Nippon; however, the license does not permit sales of this product into the United States.<sup>65</sup> ILVA indicates that over \*\*\* percent of its exports to the United States are of conventional grade M-6 grain-oriented silicon electrical steel and the remaining amounts are conventional grades M-3, M-4, and M-5 products.<sup>66</sup> ILVA supplied data concerning its Italian grain-oriented silicon electrical steel production, inventories, and shipments. These data are shown in table 14.

ILVA reported capacity data on the basis of operating \*\*\*. ILVA's annual capacity to produce grain-oriented silicon electrical steel \*\*\* during the period for which data were collected. The firm also indicated \*\*\*.

Production of the subject product in Italy \*\*\*. Projections reveal \*\*\*.  
 Inventories held in Italy \*\*\*. ILVA indicated \*\*\*.

Table 14  
 Grain-oriented silicon electrical steel: Italian capacity, production, inventories, capacity utilization, and shipments, 1990-93 and projected 1994

\* \* \* \* \*

Exports of grain-oriented silicon electrical steel to the United States, which represented \*\*\*. ILVA's projections indicate \*\*\*.

**Japan**

Kawasaki and Nippon are the only Japanese producers of grain-oriented silicon electrical steel, a product which accounts for \*\*\* of their corporate net sales. \*\*\*. Nippon and Kawasaki produce the

<sup>65</sup> Conference transcript, p. 171, and posthearing brief of ILVA, p. 14.  
<sup>66</sup> Telephone conversation with Mr. R. Trainor, Rogers and Wells, on Mar. 31, 1994.

conventional grades as well as the high-permeability grain-oriented silicon electrical steel.<sup>67</sup> Import data collected \*\*\*,<sup>68</sup> \*\*\*.<sup>69</sup> Both Japanese producers of grain-oriented silicon electrical steel supplied data concerning their production, inventories, and shipments. These data are shown in table 15.

The Japanese producers' capacity to produce grain-oriented silicon electrical steel \*\*\*.  
Production of the subject product in Japan \*\*\*.

Table 15

Grain-oriented silicon electrical steel: Japanese capacity, production, inventories, capacity utilization, and shipments, 1990-93, and projected 1994

\* \* \* \* \*

Inventories held in Japan \*\*\*.

Exports of grain-oriented silicon electrical steel to the United States \*\*\*.

### CONSIDERATION OF THE CAUSAL RELATIONSHIP BETWEEN IMPORTS OF THE SUBJECT MERCHANDISE AND THE ALLEGED MATERIAL INJURY

#### U.S. Imports

The import data received from six importers of the subject Japanese product and ILVA, the only importer of the subject product from Italy, are believed to account for all imports of the subject product from these two countries. Import data were also received from four importers of grain-oriented silicon electrical steel from France, Sweden, or the United Kingdom. These data received from questionnaire responses are believed to account for essentially all of the imports from non-subject countries. These data are presented in table 16.

ILVA's U.S. imports consisted of \*\*\* percent conventional grade M-6 grain-oriented silicon electrical steel during 1990-92 and \*\*\* percent in 1993. The remainder was primarily conventional grades M-4 and M-5; \*\*\* tons of M-3 was shipped during 1991-92. ILVA sells the M-6 product to five customers in the United States, all of which are stampers.<sup>70</sup>

The quantity of U.S. imports of grain-oriented silicon electrical steel \*\*\*,<sup>71</sup> \*\*\*,<sup>72</sup>

Table 16

Grain-oriented silicon electrical steel: U.S. imports, by sources, 1990-93

\* \* \* \* \*

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<sup>67</sup> Petitioners contend that although the imported Japanese product is sold primarily at the high end of the spectrum and that the imported Italian product is sold primarily at the low end, there have recently been imports of conventional grade M-6 grain-oriented silicon electrical steel from Japan that compete directly with the Italian M-6 product. Conference transcript, p. 183, and postconference brief of petitioners, p. 18. Respondents argue that the Japanese M-6 product sold in the United States was a small quantity of old inventory. Postconference brief of Kawasaki, p. 32, and \*\*\*.

<sup>68</sup> \*\*\*.

<sup>69</sup> \*\*\*.

<sup>70</sup> Telephone conversation with Mr. R. Trainor, Rogers and Wells, on Mar. 31, 1994.

<sup>71</sup> Conference transcript, p. 155, and posthearing brief of ILVA, exhibit 5, pp. 3-5.

<sup>72</sup> Conference transcript, p. 156, and hearing transcript, p. 115.

Data collected in these investigations indicate that U.S. shipments of imports from Japan in 1993 \*\*\*.<sup>73</sup> The Japanese grain-oriented silicon electrical steel is sold in the United States primarily to large power and distribution transformer manufacturers.<sup>74</sup>

Imports of the subject product from Japan, by quantity, \*\*\*.

U.S. imports of the subject product from Italy and Japan combined \*\*\*.

Average unit values reported by ILVA for imports from Italy \*\*\*.

### Voluntary Restraint Agreements

Electrical steel was included in the Voluntary Restraint Agreements (VRAs) that were in effect between 1984 and 1992. VRAs on electrical steel exports from Japan were in effect from October 1, 1984, through March 31, 1992. In June 1985, the United States and Japan reached an agreement limiting Japan's exports of steel, including electrical steel, to the United States. The agreement was enforced retroactively, covering Japan's exports beginning on October 1, 1984, and extending for 5 years through September 30, 1989. On October 1, 1989, the agreement was extended until March 31, 1992. According to petitioners, Japan did not fully utilize its export limit for electrical steel during the extended agreement.<sup>75</sup> Electrical steel from Italy was initially covered in the 1985 Complementary Arrangement, which supplemented the existing Steel Products Arrangement of 1982. As of January 1, 1986, the Italian restraints were converted to a VRA, which remained in effect until March 31, 1992.

### U.S. Market Penetration by the Subject Imports

Market penetration data are calculated based on questionnaire responses containing data concerning U.S. shipments by U.S. producers and U.S. shipments by U.S. importers from France, Italy, Japan, Sweden, and the United Kingdom. These data are presented in table 17 and figure 4.

Table 17

Grain-oriented silicon electrical steel: U.S. market shares, 1990-93

\* \* \* \* \*

Figure 4

Grain-oriented silicon electrical steel: U.S. market shares, 1990-93

\* \* \* \* \*

From 1990 to 1993, the U.S. importers' share of apparent U.S. consumption of grain-oriented silicon electrical steel, by quantity, \*\*\*.

<sup>73</sup> \*\*\*.

<sup>74</sup> Conference transcript, p. 96, and hearing transcript, pp. 82-86.

<sup>75</sup> Postconference brief of petitioners, attachment 1, pp. 13-15.

## Prices

### Marketing Practices

Most grain-oriented silicon electrical steel is sold directly to transformer manufacturers. These manufacturers design transformers to meet the requirements of each utility to which they sell. The specifications of a particular transformer will depend, among other factors, on the utility's long-term energy supply cost and system capacity.<sup>76</sup> Purchasers report that the cost of grain-oriented silicon electrical steel typically comprises 12 to 30 percent of the cost of distribution transformers and 6 to 22 percent of the cost of power transformers.

Grain-oriented silicon electrical steel is used in transformers because of its "ability to conduct a magnetic field in a specific direction with a high degree of efficiency."<sup>77</sup> Efficiency is defined by core loss,<sup>78</sup> a measurement of the amount of electrical energy lost in the core steel of the transformer. Core loss is the attribute that differentiates the grades of grain-oriented silicon electrical steel and is the main performance consideration for the purchaser.

The various grades of grain-oriented silicon electrical steel are often identified as either conventional grades (M-2 through M-6) or high-permeability grades. Allegheny produces all of the conventional grades from M-2 to M-6, and Armco produces the conventional grades as well as the high-permeability grades H0 and H1. During the period for which data were requested, imports from Italy consisted mostly of the M-6 grade,<sup>79</sup> while imports from Japan were mainly high-permeability products.<sup>80</sup>

As stated above, most sales of grain-oriented silicon electrical steel are made directly to transformer manufacturers. However, ILVA sells most of its imports of the Italian product to stampers of laminations, a market also served by the U.S. producers. These stampers generally purchase only grade M-6 grain-oriented silicon electrical steel and produce various shaped laminations, such as E and I shapes. These laminations are then sold for use in small stacked core transformers used in appliances, electronic equipment, and aerospace and aeronautical applications.

Most sales by producers and importers are on a contract basis. Producers report that contracts are usually for 1-2 years, while importers of the Japanese products report that their contracts are usually for 6 months, and ILVA reports shorter contracts of 3-6 months. Contracts usually state a fixed price and, in some cases, quantity may also be fixed. Only \*\*\* reported that their contracts contained meet-or-release clauses.

Reported U.S. inland transportation costs accounted for \*\*\* percent of the total delivered cost of U.S.-produced grain-oriented silicon electrical steel, \*\*\* percent of the cost of imports from Japan, and \*\*\* percent of the cost of imports from Italy. Both U.S. producers quote prices on an f.o.b. basis while ILVA and four of the six importers from Japan quote prices on a delivered basis. U.S. producers and importers from Japan indicated that they serve the entire U.S. market; ILVA serves its customers located in \*\*\*. U.S. producers' lead times range from 2 to 3 weeks, while lead times from Italy and Japan range from 3 to 6 months.

### Quality Considerations

Both U.S. producers reported in their questionnaire responses that the domestic and imported products are used interchangeably and that differences in quality were not a significant factor in their sales of the subject products. \*\*\* additionally reported that high-permeability laser-scribed material

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<sup>76</sup> Conference transcript, p. 23.

<sup>77</sup> Petition, p. 5.

<sup>78</sup> The maximum or average core loss is measured for a given induction level (the intensity of the magnetic field in the transformer).

<sup>79</sup> In addition, ILVA reported some imports of M-4 and M-5 grades.

<sup>80</sup> Importers of the Japanese product also reported shipments of grade M-3 and two shipments of grade M-6.

from Japan had lower core losses than \*\*\* M-3 product but that this would only be an advantage if the high-permeability material was priced too low.

ILVA reported that \*\*\* its product has a superior coating and is offered in wider size coils than the U.S. products. All of the importers from Japan agreed that their products were not interchangeable with the U.S.-produced products. These importers stated that the Japanese products had lower core losses, higher permeability, and better performance characteristics that facilitate the design of more compact transformers which use less steel and have decreased "noise" levels. One importer stated that the quality of Armco's high-permeability products has not been acceptable to end users and that Armco only offers 0.23mm thick material while market demand is for the 0.20mm size provided by Japanese suppliers. In addition, they state that there are no imports from Japan of M-2 or M-4 and only limited imports of M-6, and that Kawasaki's M-3 has a lower core loss rating than domestic M-3.

### U.S. Producer and Importer Price Data

The Commission requested U.S. producers and importers to provide quarterly price data between January 1990 and December 1993 for the following six products:

Product 1: M-6, 0.35mm thickness, maximum core loss 0.66 (1.5T; 60 Hz), punching quality.

Product 2: M-6, 0.35mm thickness, maximum core loss 0.66 (1.5T; 60 Hz), shearing quality.

Product 3: M-3, 0.23mm thickness, maximum core loss 0.46-0.49 (1.5T; 60 Hz).

Product 4: Domain-refined grain-oriented silicon electrical steel for stacked core application with high permeability (1850 $\mu$ p at 10 Oe), maximum core loss 0.50 (1.7T; 60 Hz), 0.23mm thickness.

Product 5: Non-domain refined grain-oriented silicon electrical steel for wound core application with high permeability (1850 $\mu$ p at 10 Oe), maximum core loss 0.35-0.39 (1.5T; 60 Hz), 0.20mm thickness.

Product 6: Domain refined grain-oriented silicon electrical steel for wound core application with high permeability (1850 $\mu$ p at 10 Oe), maximum core loss 0.35-0.39 (1.5T; 60 Hz), 0.20mm thickness.

The price data were requested on a net U.S. f.o.b. and delivered basis for each responding firm's largest sale and its total quarterly sales to end users and stampers/service centers.<sup>81</sup> Weighted-average net U.S. f.o.b. prices, quantities sold, and margins of underselling/overselling are presented in tables 18-23 and figures 5-7. Pricing data reported by U.S. producers and importers accounted for \*\*\* percent of total shipments of U.S.-produced grain-oriented silicon electrical steel during 1990-93, \*\*\* percent of total U.S. shipments of the imported Italian product, and \*\*\* percent of total U.S. shipments of the imported product from Japan.

Table 18

Product 1: Weighted-average net prices for sales to stampers/service centers reported by U.S. producers and importers, and margins of underselling, by quarters, Jan. 1990-Dec. 1993

\* \* \* \* \*

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<sup>81</sup> Producers and importers reported sales of both slit sizes and full-width sizes. Therefore, slitting charges were deducted where applicable so that prices shown in the tables represent prices for full-width material.

Table 19

Product 2: Weighted-average net prices for sales to stampers/service centers reported by U.S. producers and importers, and margins of underselling (overselling), by quarters, Jan. 1990-Dec. 1993

\* \* \* \* \*

Figure 5

Weighted-average f.o.b. prices for sales to stampers/service centers of products 1 and 2 reported by U.S. producers and importers, by quarters, Jan. 1990-Dec. 1993

\* \* \* \* \*

Table 20

Product 3: Weighted-average net prices for sales to end users reported by U.S. producers and importers, and margins of underselling (overselling), by quarters, Jan. 1990-Dec. 1993

\* \* \* \* \*

Table 21

Product 4: Weighted-average net prices for sales to end users reported by U.S. producers and importers, and margins of underselling (overselling), by quarters, Jan. 1990-Dec. 1993

Period	United States		Japan		
	Price	Quantity	Price	Quantity	Margin
	<i>Per pound</i>	<i>1,000 pounds</i>	<i>Per pound</i>	<i>1,000 pounds</i>	<i>Per-cent</i>
<b>1990:</b>					
Jan.-Mar. . . . .	***	***	\$0.94	6,995	***
Apr.-June . . . . .	***	***	0.94	8,295	***
July-Sept. . . . .	***	***	0.94	4,081	***
Oct.-Dec. . . . .	***	***	0.94	7,549	***
<b>1991:</b>					
Jan.-Mar. . . . .	***	***	0.95	9,001	***
Apr.-June . . . . .	***	***	0.97	6,686	***
July-Sept. . . . .	***	***	0.97	6,122	***
Oct.-Dec. . . . .	***	***	0.97	5,766	***
<b>1992:</b>					
Jan.-Mar. . . . .	***	***	0.97	9,017	***
Apr.-June . . . . .	***	***	0.98	8,474	***
July-Sept. . . . .	***	***	0.98	6,844	***
Oct.-Dec. . . . .	***	***	0.98	5,185	***
<b>1993:</b>					
Jan.-Mar. . . . .	***	***	0.98	7,554	***
Apr.-June . . . . .	***	***	0.98	6,098	***
July-Sept. . . . .	***	***	0.97	5,474	***
Oct.-Dec. . . . .	***	***	0.97	9,093	***

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.



Figure 6

Weighted-average f.o.b. prices for sales to end users of products 3 and 4 reported by U.S. producers and importers, by quarters, Jan. 1990-Dec. 1993

\* \* \* \* \*

Table 22

Product 5: Weighted-average net prices for sales to end users reported by U.S. producers and importers,<sup>1</sup> by quarters, Jan. 1990-Dec. 1993

Period	United States		Japan	
	Price	Quan- tity	Price	Quan- tity
	<i>Per pound</i>	<i>1,000 pounds</i>	<i>Per pound</i>	<i>1,000 pounds</i>
<b>1990:</b>				
Jan.-Mar. . . . .	***	***	\$0.89	5,157
Apr.-June . . . . .	***	***	0.88	4,732
July-Sept. . . . .	***	***	0.89	5,428
Oct.-Dec. . . . .	***	***	0.92	6,903
<b>1991:</b>				
Jan.-Mar. . . . .	***	***	0.89	4,102
Apr.-June . . . . .	***	***	0.89	3,693
July-Sept. . . . .	***	***	0.91	3,648
Oct.-Dec. . . . .	***	***	0.89	4,226
<b>1992:</b>				
Jan.-Mar. . . . .	***	***	0.92	2,024
Apr.-June . . . . .	***	***	0.94	3,387
July-Sept. . . . .	***	***	0.93	2,170
Oct.-Dec. . . . .	***	***	0.93	2,171
<b>1993:</b>				
Jan.-Mar. . . . .	***	***	0.93	1,259
Apr.-June . . . . .	***	***	0.94	1,207
July-Sept. . . . .	***	***	0.93	1,907
Oct.-Dec. . . . .	***	***	0.94	1,297

<sup>1</sup> U.S. producers do not produce a high-permeability product meeting the same specifications as product 5. Prices reported are for an M-2 product which, according to U.S. producers, competes with product 5 imported from Japan. However, due to the different specifications, direct price comparisons would not be meaningful.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Table 23

Product 6: Weighted-average net prices for sales to end users reported by U.S. producers and importers,<sup>1</sup> by quarters, Jan. 1990-Dec. 1993

Period	United States		Japan	
	Price	Quan- tity	Price	Quan- tity
	<i>Per pound</i>	<i>1,000 pounds</i>	<i>Per pound</i>	<i>1,000 pounds</i>
<b>1990:</b>				
Jan.-Mar. . . . .	***	***	\$0.92	1,875
Apr.-June . . . . .	***	***	0.94	3,140
July-Sept. . . . .	***	***	0.93	4,541
Oct.-Dec. . . . .	***	***	0.95	2,186
<b>1991:</b>				
Jan.-Mar. . . . .	***	***	0.95	2,388
Apr.-June . . . . .	***	***	0.96	3,147
July-Sept. . . . .	***	***	0.96	2,387
Oct.-Dec. . . . .	***	***	0.98	2,360
<b>1992:</b>				
Jan.-Mar. . . . .	***	***	0.97	4,604
Apr.-June . . . . .	***	***	0.97	4,565
July-Sept. . . . .	***	***	0.96	5,281
Oct.-Dec. . . . .	***	***	0.96	4,635
<b>1993:</b>				
Jan.-Mar. . . . .	***	***	0.96	5,026
Apr.-June . . . . .	***	***	0.95	5,287
July-Sept. . . . .	***	***	0.95	4,366
Oct.-Dec. . . . .	***	***	0.95	5,597

<sup>1</sup> U.S. producers do not produce a high-permeability product meeting the same specifications as product 6. Prices reported are for an M-2 product which, according to U.S. producers, competes with product 6 imported from Japan. However, due to the different specifications, direct price comparisons would not be meaningful.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Figure 7

Weighted-average f.o.b. prices for sales to end users of products 5 and 6 reported by U.S. producers and importers, by quarters, Jan. 1990-Dec. 1993

\* \* \* \* \*

## Price Trends

### United States

U.S. producers' sales prices of product 1, M-6 punching quality, and product 3, M-3, \*\*\* per pound, during the period for which data were collected. Prices of product 2 were \*\*\* during 1990-93. U.S. prices of product 4, a high-permeability product, \*\*\*. Prices of the U.S. producers' M-2 products which were reported for products 5 and 6 \*\*\*.

## *Italy*

Product 1, M-6 punching quality, and product 2, M-6 shearing quality, are the only two of the six products for which pricing was requested which are imported from Italy. The vast majority of imports of grain-oriented silicon electrical steel from Italy are of M-6 grade. Prices of product 1 imported from Italy \*\*\*. Product 2 prices \*\*\*.

## *Japan*

Import prices of product 3, M-3, \*\*\* during 1990-93. Import prices of the high-permeability products 4-6 generally increased during 1990-92. Prices of products 4 and 5 then stayed at about the same level in 1993, while prices of product 6 declined slightly during 1992-93.

## **Price Comparisons**

Prices of product 1, M-6 punching quality, and product 2, M-6 shearing quality, imported from Italy were lower than U.S. producer prices in 27 of 30 quarters for which data were reported. Margins of underselling ranged from \*\*\* percent. In the three instances of overselling, margins ranged from \*\*\* percent.

The prices of imports from Japan were \*\*\* percent lower than prices of the U.S.-produced products in two possible comparisons for product 2. In all other price comparisons, the price of the Japanese product was generally higher than that of the U.S.-produced product. Margins of overselling for product 3, M-3, ranged from \*\*\* percent in 10 quarters. In six instances M-3 imported from Japan was priced below the U.S.-produced product by margins ranging from \*\*\* percent. The price of the Japanese product declined at a faster rate than that of the U.S.-produced product and therefore, much of the underselling occurred during 1992-93.

Japanese prices of product 4, a high-permeability product, were \*\*\* percent higher than U.S.-producer prices during 11 of 16 quarters for which prices were collected. In 5 quarters, the Japanese product was priced \*\*\* percent lower than the U.S.-produced product. Direct price comparisons for products 5 and 6 are not possible since the pricing reported by U.S. producers is for a conventional grade with a higher core loss rating than the high-permeability products imported from Japan. However, the price of each of the Japanese products increased relative to that of the U.S.-produced M-2 product during the period for which data were collected. In addition, there was a marked shift in import shipments from the lower-priced non-domain refined product 5 to the higher-priced, domain refined product 6.

## **U.S. Purchasers**

The Commission received questionnaires from 30 purchasers of grain-oriented silicon electrical steel.<sup>82</sup> These purchasers accounted for approximately 84 percent of 1990-93 total apparent consumption (by volume), specifically 84 percent of U.S.-produced grain-oriented silicon electrical steel, 86 percent of consumption of the Italian product, 93 percent of consumption of the product from Japan, and 57 percent of consumption of imports from non-subject countries. All but one of the firms reported purchasing U.S.-produced grain-oriented silicon electrical steel, 8 reported purchasing Italian product, 10 purchased Japanese product, and 13 purchased non-subject imports.<sup>83</sup> Only two firms reported purchasing both Italian and Japanese product.<sup>84</sup>

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<sup>82</sup> Fourteen of the 30 firms manufacture distribution transformers, 13 manufacture power transformers, 7 are stampers and/or slitters, and 7 reported manufacturing such products as specialty transformers, ballasts, voltage regulators, silicon steel cores, instrument transformers, and watt hour meters.

<sup>83</sup> Data reported by purchasers indicate that non-subject imports were concentrated in grade M-6, with lesser amounts of M-3, M-4, and M-5.

<sup>84</sup> \*\*\*.

The reported distribution of purchases by grade and by year is shown in the following tabulation (in percent):

Grade	1990	1991	1992	1993
High permeability . . .	15.5	16.4	18.7	15.2
M-2 . . . . .	9.5	6.6	7.8	10.4
M-3 . . . . .	32.9	32.7	31.1	31.7
M-4 . . . . .	11.0	11.7	8.1	6.5
M-5 . . . . .	1.0	0.9	0.8	1.1
M-6 . . . . .	27.8	29.6	31.7	32.7
Other . . . . .	<u>2.4</u>	<u>2.0</u>	<u>1.9</u>	<u>2.3</u>
Total . . . . .	100.0	100.0	100.0	100.0

Note: Due to rounding, shares may not add to the totals shown.

Detailed data on U.S. producer and importer shipments of high-permeability, M-2, M-3, and M-6 grades are presented in appendix F.

### Stampers/slitters

A relatively small proportion of grain-oriented silicon electrical steel is sold through companies which stamp laminations and/or slit steel for resale to end users. In the questionnaire responses, these firms reported purchases from U.S. producers, ILVA, and importers of non-subject products; no purchases of Japanese product were reported. Significant stampers/service centers and purchasers of Italian product include \*\*\*. Other stampers/slitters which purchased Italian product during 1990-93 include \*\*\*.<sup>85</sup>

The shares of 1990-93 consumption of Italian imports accounted for by stampers/slitters responding to the questionnaire are as follows: \*\*\*.<sup>86</sup> \*\*\* only purchase one grade of grain-oriented silicon electrical steel, M-6, and nearly all of the M-6 is stamped into laminations.<sup>87</sup> These stampers/slitters report that their sales are mainly to transformer manufacturers which produce small units for non-utility customers and to other end users. \*\*\*.<sup>88</sup> \*\*\*.

\*\*\*. \*\*\* reported that it purchases M-6 \*\*\* from ILVA because \*\*\*. \*\*\* reported that ILVA steel is \*\*\*. Nevertheless, \*\*\* reported that it would have purchased the U.S.-produced product instead of the Italian product if the price of the Italian product increased by \*\*\* percent.

\*\*\*.<sup>89</sup> \*\*\*.

### Transformer manufacturers

Three purchasers accounted for \*\*\* percent of the volume of total apparent U.S. consumption during 1990-93: \*\*\*. Other significant end users of grain-oriented silicon electrical steel include \*\*\*.<sup>90</sup>

Transformer manufacturers typically negotiate annual or semi-annual price agreements with U.S. producers and/or importers. Manufacturers of industrial transformers generally do not evaluate losses, and thus generally choose the lowest grade steel, M-6. Power and distribution transformer bids solicited

<sup>85</sup> \*\*\*.

<sup>86</sup> \*\*\*.

<sup>87</sup> Staff conversations with \*\*\*, and questionnaire responses.

<sup>88</sup> Staff conversation with \*\*\*.

<sup>89</sup> Letter submitted by Tempel Steel dated Mar. 31, 1994.

<sup>90</sup> \*\*\* produce both power and distribution transformers. \*\*\* produce only distribution transformers.

by utilities, however, are usually evaluated using a "total ownership cost" model.<sup>91</sup> While utilities usually do not specify the grade of steel to be used in a transformer design,<sup>92</sup> other parameters which affect the grade of steel selected by the transformer manufacturer are specified. Utilities usually specify the values, in dollars per watt, at which load (core) loss and no-load (windings) loss are evaluated. Utilities may specify maximum limits on no-load loss, load loss, impedance, exciting current, dimensions, and weight. Therefore, almost all transformers sold to utilities are custom-designed, depending on the requirements contained in each utility's request for quotes.

Transformer manufacturers use a computer model which incorporates the particular specifications of the utility and will evaluate many different designs for each transformer rating and loss evaluation factor specified by the utility. The grade of steel used in any particular transformer bid to a utility will depend on the price and losses of each grade of steel in combination with the other components of the transformer which meet the utility specifications at the lowest cost.

Technically, a range of conventional and high-permeability steels could be used in most designs.<sup>93</sup> However, for each transformer manufacturer, not all grades provide the optimum transformer design at the lowest cost. In order to substitute a lower grade steel for a higher grade, a larger quantity of the lower grade steel must be used to achieve the same loss level. Because of the increased size of the core, the windings surrounding the core also must be increased, and therefore losses in the windings increase. In addition, the size and weight of the transformer are increased. Once a bid is submitted and a contract received from the utility, the transformer manufacturer cannot easily change the core steel.

The major transformer manufacturers reported a range of answers regarding the substitutability of various grades and sources of grain-oriented silicon electrical steel. \*\*\*.<sup>94</sup>

\*\*\*. In distribution transformers, it reports that in 1993, it used \*\*\*.

\*\*\*. \*\*\* also reported that within a particular grade, products can vary by supplier. Specifically, it stated that M-2 from Armco is superior to M-2 from Allegheny. In addition, \*\*\* stated that the losses of Armco's products have worsened since a plant shutdown in the middle of 1992. It also reported that it frequently builds a bias into its optimization programs which favors domestic steel over Japanese steel because of a limited supply of Japanese product. Finally, it reported that \*\*\*.

\*\*\*.<sup>95</sup> \*\*\*.

\*\*\*.

Purchasers were asked in the questionnaire what percentage of their transformers manufactured in 1993 had specifications requiring high-permeability product. Responses indicated that only 1 percent of the total number of transformers, but 22 percent by value, required high-permeability product. Purchasers reported that high-permeability products are used in medium and large power transformers and some distribution transformers. In most cases, these purchasers reported that conventional products could be used in these transformers, but that it would be much more difficult to meet the utility's specifications and that use of conventional products does not yield the lowest TOC in these transformers.

Size and weight restrictions on power transformers and, in some cases, distribution transformers may limit the use of conventional grades. \*\*\* reported that approximately \*\*\* percent of its power transformers have such size constraints. \*\*\* said that such size constraints would affect \*\*\* percent of its power transformers and \*\*\* percent of its overall sales of transformers. \*\*\* reported that size

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<sup>91</sup> According to questionnaire responses, approximately 73 percent of grain-oriented silicon electrical steel purchased by end users was used in transformer designs which were evaluated using a TOC model.

<sup>92</sup> Utilities may specify whether or not amorphous metals can be used as a substitute for grain-oriented silicon electrical steel in distribution transformers. Amorphous metals are not used in power transformers. Most transformer manufacturers use amorphous metals in only a small percentage of transformers. However, GE used amorphous metals in \*\*\* percent of its distribution transformers in 1993. GE reported that its purchases of amorphous metals \*\*\* since 1990, and it expects this trend to continue.

<sup>93</sup> Grade M-2 cannot be used in power transformers (stacked core). Also, Armco's high-permeability product cannot be used in distribution transformers (wound core). Hearing transcript, p. 43, and posthearing brief of petitioners, exhibit 1.

<sup>94</sup> Conversation with \*\*\*.

<sup>95</sup> \*\*\*.

constraints would limit the use of conventional grades of steel in \*\*\* percent of its transformers. \*\*\*. Several other smaller manufacturers also reported such size constraints.

### Purchaser Price Data

Purchase prices reported by U.S. stampers/service centers for products 1 and 2 and by U.S. transformer manufacturers for products 3-6 are presented in appendix I.

### Lost Sales and Lost Revenues

Allegheny and Armco alleged 11 lost sales and 2 instances of lost revenues involving imports from Italy, and 4 lost sales and 7 instances of lost revenues involving imports from Japan. Fifteen purchasers were named in the allegations. The value and quantity of alleged lost sales and lost revenues for each country are shown in the following tabulation:

	<i>Value</i>	<i>Quantity</i> <i>(short tons)</i>
Lost sales:		
Italy . . . . .	***	***
Japan . . . . .	***	***
Lost revenues:		
Italy . . . . .	***	***
Japan . . . . .	***	***

### Lost Sales and Lost Revenues Involving Imports from Italy

\*   \*   \*   \*   \*   \*   \*

### Lost Sales and Lost Revenues Involving Imports from Japan

\*   \*   \*   \*   \*   \*   \*

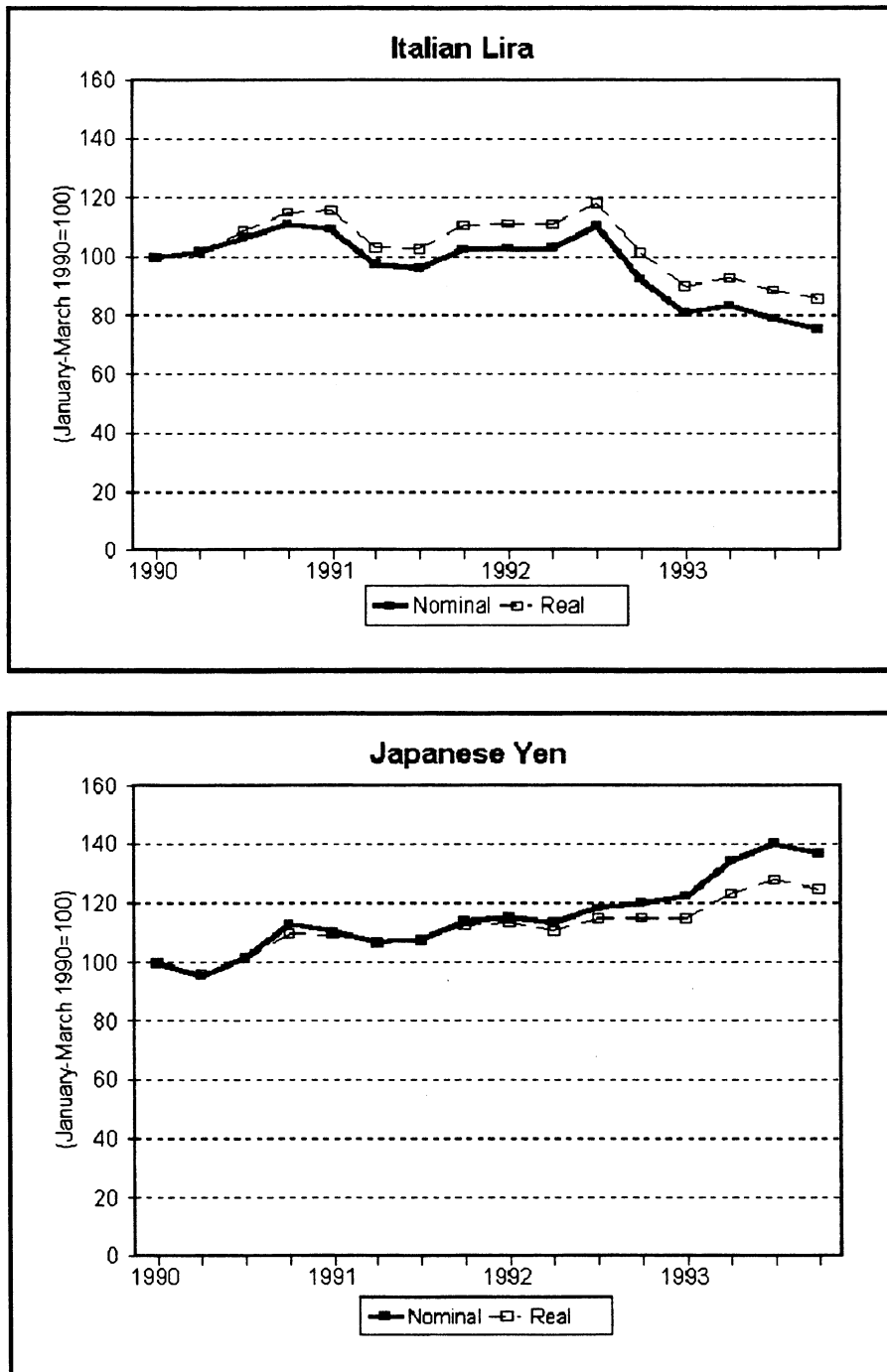
### Exchange Rates

Quarterly exchange rates between the Italian lira, Japanese yen, and U.S. dollar reported by the International Monetary Fund for the period January 1990-December 1993 are shown in figure 8. The nominal value of the Italian lira fluctuated but depreciated overall by 25 percent against the U.S. dollar while the nominal value of the Japanese yen appreciated by 37 percent. When adjusted for movements in producer price indexes in the United States and the specified countries, the real value of the Italian currency fluctuated but depreciated overall by 14 percent, while the Japanese currency appreciated by 25 percent relative to the dollar during the period for which data were collected.

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<sup>96</sup> \*\*\*.

Figure 8  
 Exchange rates: Indexes of nominal and real exchange rates of the Italian lira and Japanese yen, by quarters, Jan. 1990-Dec. 1993



Source: International Monetary Fund, *International Financial Statistics*, Apr. 1994.





**APPENDIX A**  
***FEDERAL REGISTER NOTICES***



Investigations Nos. 701-7A-388 and 731-7A-689-689 (Final)

Grain-Oriented Silicon Electrical Steel From Italy and Japan

AGENCY: International Trade Commission.

**ACTION:** Institution and scheduling of final countervailing duty and antidumping investigations.

**SUMMARY:** The Commission hereby gives notice of the institution of final countervailing duty investigation No. 701-7A-388 (Final) under section 705(b) of the Tariff Act of 1930 (19 U.S.C. 1671d(b)) (the Act) to determine whether an industry in the United States is materially injured, or is threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of imports from Italy of grain-oriented silicon electrical steel.<sup>1</sup>

The Commission further gives notice of the institution of final antidumping investigations Nos. 731-7A-689 and 680 (Final) under section 735(b) of the Act (19 U.S.C. 1673d(b)) to determine whether an industry in the United States is materially injured, or is threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of imports from Italy and Japan of grain-oriented silicon electrical steel.<sup>1</sup> For further information concerning the conduct of these investigations, hearing procedures, and rules of general application, consult the Commission's Rules of Practice and Procedure, part 201, subparts A through E (19 CFR part 201), and part 207, subparts A and C (19 CFR part 207).

**EFFECTIVE DATE:** January 28, 1994.

**FOR FURTHER INFORMATION CONTACT:** Fred Ruggles (202-205-3167), Office of Investigations, U.S. International Trade Commission, 500 E Street SW., Washington, DC 20436. Hearing-impaired persons can obtain

information on this matter by contacting the Commission's TDD terminal on 202-205-1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202-205-2000.

**SUPPLEMENTARY INFORMATION:**  
Background

These investigations are being instituted as a result of an affirmative preliminary determination by the Department of Commerce that certain benefits which constitute subsidies within the meaning of section 703 of the Act (19 U.S.C. 1671b) are being provided to manufacturers, producers, or exporters in Italy of grain-oriented silicon electrical steel, and as a result of affirmative preliminary determinations by the Department of Commerce that imports of grain-oriented silicon electrical steel from Italy and Japan are being sold in the United States at less than fair value within the meaning of section 733 of the Act (19 U.S.C. 1673b). The investigations were requested in a petition filed on August 28, 1993, by counsel on behalf of Allegheny Ludlum Corp., Pittsburgh, PA; Armco, Inc., Butler, PA; the Butler Armco Independent Union, Butler, PA; the United Steelworkers of America, Pittsburgh, PA; and the Zanesville Armco Independent Union, Zanesville, OH.

**Participation in the Investigations and Public Services List**

Persons wishing to participate in the investigations as parties must file an entry of appearance with the Secretary to the Commission, as provided in section 201.11 of the Commission's rules, not later than twenty-one (21) days after publication of this notice in the Federal Register. The Secretary will prepare a public services list containing the names and addresses of all persons, or their representatives, who are parties to these investigations upon the expiration of the period for filing entries of appearance.

**Limited Disclosure of Business Proprietary Information (BPI) Under an Administrative Protective Order (APO) and BPI Services List**

Pursuant to section 207.7(e) of the Commission's rules, the Secretary will make BPI gathered in these final investigations available to authorized applicants under the APO issued in the investigations, provided that the application is made not later than twenty-one (21) days after the publication of this notice in the Federal Register. A separate services list will be

maintained by the Secretary for those parties authorized to receive BPI under the APO.

**Staff Report**

The prehearing staff report in these investigations will be placed in the nonpublic record on March 30, 1994, and a public version will be issued thereafter, pursuant to section 207.21 of the Commission's rules.

**Hearing**

The Commission will hold a hearing in connection with these investigations beginning at 9:30 a.m. on April 12, 1994, at the U.S. International Trade Commission Building. Requests to appear at the hearing should be filed in writing with the Secretary to the Commission on or before April 4, 1994. A nonparty who has testimony that may aid the Commission's deliberations may request permission to present a short statement at the hearing. All parties and nonparties desiring to appear at the hearing and make oral presentations should attend a prehearing conference to be held at 9:30 a.m. on April 6, 1994 at the U.S. International Trade Commission Building. Oral testimony and written materials to be submitted at the public hearing are governed by sections 201.6(b)(2), 201.13(d), and 207.23(b) of the Commission's rules. Parties are strongly encouraged to submit as early in the investigations as possible any requests to present a portion of their hearing testimony in camera.

**Written Submissions**

Each party is encouraged to submit a prehearing brief to the Commission. Prehearing briefs must conform with the provisions of section 207.22 of the Commission's rules; the deadline for filing is April 6, 1994. Parties may also file written testimony in connection with their presentation at the hearing, as provided in section 207.25(b) of the Commission's rules, and posthearing briefs, which must conform with the provisions of section 207.24 of the Commission's rules. The deadline for filing posthearing briefs is April 20, 1994; witness testimony must be filed no later than three (3) days before the hearing. In addition, any person who has not entered an appearance as a party to the investigations may submit a written statement of information pertinent to the subject of the investigations on or before April 20, 1994. All written submissions must conform with the provisions of section 201.8 of the Commission's rules; any submissions that contain BPI must also conform with the requirements of

<sup>1</sup> The products covered by these investigations are grain-oriented silicon electrical steel, which are flat-rolled alloy steel products consisting by weight of least 0.5 percent of silicon, not more than 0.05 percent of carbon, not more than 1.0 percent of aluminum, and no other element in an amount that would give the steel the characteristics of another alloy steel, of a thickness of no more than 0.860 millimeter, in coils of any width, or in straight lengths which are of a width measuring at least 10 times the thickness. The subject products are provided for in subheadings 7215.10.00, 7225.10.10, and 7225.10.50 of the Harmonized Tariff Schedule of the United States. In the scope section of its preliminary antidumping determinations, the Department of Commerce noted that the HTS numbers identified in the scope of the countervailing duty determination will be construed with those listed in the antidumping determinations.

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sections 201.6, 207.3; and 207.7 of the Commission's rules.

In accordance with sections 201.16(c) and 207.3 of the rules, each document filed by a party to the investigations must be served on all other parties to the investigations (as identified by either the public or BPI service list), and a certificate of service must be timely filed. The Secretary will not accept a document for filing without a certificate of service.

**Authority:** These investigations are being conducted under authority of the Tariff Act of 1930, title VII. This notice is published pursuant to section 207.20 of the Commission's rules.

By order of the Commission.

Issued: February 16, 1994..

Donna R. Kechnke,  
Secretary.

[FR Doc. 94-3993 Filed 2-22-94; 8:45 am]

SELLING CODE 7899-00-P

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domestic industry or industries; (2) confidential pricing, capacity, and capacity utilization data; and (3) confidential data regarding profitability, cost of goods sold, and sales, general and administrative expenses relating to a small number of domestic producers. In making this decision, the Commission nevertheless reaffirms its belief that whenever possible, its business should be conducted in public.

**Authority:** The General Counsel has certified, pursuant to Commission Rule 201.39 (19 CFR 201.39) that, in her opinion, a portion of the Commission's hearing in the above-captioned investigation be closed to the public to prevent the disclosure of business proprietary information.

By order of the Commission.

Issued: April 7, 1994.

**Donna R. Koehnke,**  
*Secretary.*

[FR Doc. 94-8812 Filed 4-12-94; 8:45 am]

BILLING CODE 7020-02-P

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#### **INTERNATIONAL TRADE COMMISSION**

[Investigation No. 701-TA-355 (Final), and  
731-TA-659 and 660 (Final)]

**Grain-Oriented Silicon Electrical Steel  
From Italy and Japan; Commission  
Determination to Conduct a Portion of  
the Hearing in Camera**

**AGENCY:** U.S. International Trade  
Commission.

**ACTION:** Closure of a portion of a  
Commission hearing to the public.

**SUMMARY:** Upon the request of two  
respondents and petitioners in the  
above-captioned final investigations, the  
Commission has unanimously  
determined to conduct a portion of its  
hearing scheduled for April 12, 1994, *in  
camera*. See Commission rules 201.13  
and 201.35(b)(3) (19 CFR 201.13 and  
201.35(b)(3)). The remainder of the  
hearing will be open to the public.

**FOR FURTHER INFORMATION CONTACT:**  
James Lyons, Esq., Office of the General  
Counsel, U.S. International Trade  
Commission, telephone 202-205-3094.  
Hearing impaired individuals are  
advised that information on this matter  
may be obtained by contacting the  
Commission's TDD terminal on (202)  
205-1810.

**SUPPLEMENTARY INFORMATION:** The  
Commission believes that unusual  
circumstances are present in these  
investigations so as to make it  
appropriate to hold a portion of the  
hearing *in camera*. This decision is  
made in light of the desirability of  
affording a full discussion at the hearing  
of business proprietary information  
(BPI) concerning (1) the condition of the

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**International Trade Administration**  
[C-475-812]

**Final Affirmative Countervailing Duty Determination: Grain-Oriented Electrical Steel From Italy**

**AGENCY:** Import Administration, International Trade Administration, Department of Commerce.

**EFFECTIVE DATE:** March 18, 1994.

**FOR FURTHER INFORMATION CONTACT:** Annika L. O'Hara or David R. Boyland, Office of Countervailing Investigations, Import Administration, U.S. Department of Commerce, room 3099, 14th Street and Constitution Avenue NW., Washington, DC 20230; telephone (202) 482-4198 and (202) 482-0588, respectively.

**FINAL DETERMINATION:** The Department determines that benefits which constitute subsidies within the meaning of section 701 of the Tariff Act of 1930, as amended ("the Act"), are being provided to manufacturers, producers, or exporters in Italy of grain-oriented electrical steel. For information on the estimated net subsidy, please see the *Suspension of Liquidation* section of this notice.

**Case History**

Since the publication of the preliminary determination in the Federal Register on February 1, 1994 (59 FR 4682), the following events have occurred.

We conducted verification of the responses submitted on behalf of the Government of Italy ("GOI"), ILVA S.p.A. ("ILVA"), and the European

Community ("EC") from February 7 through February 21, 1994.

On March 22 and March 28, 1994, we received case and rebuttal briefs, respectively, from petitioners and respondents. Neither petitioners nor respondents requested a hearing in this investigation.

On March 29, 1994, we returned to petitioners certain factual information submitted in their briefs because it was untimely pursuant to § 355.31(a)(i) of the Department's regulations.

**Scope of Investigation**

This investigation concerns the following class or kind of merchandise: grain-oriented electrical steel ("electrical steel") from Italy.

The product covered by this investigation is grain-oriented silicon electrical steel, which is a flat-rolled alloy steel product containing by weight at least 0.6 percent of silicon, not more than 0.08 percent of carbon, not more than 1.0 percent of aluminum, and no other element in an amount that would give the steel the characteristics of another alloy steel, of a thickness of no more than 0.56 millimeter, in coils of any width, or in straight lengths which are of a width measuring at least 10 times the thickness, as currently classifiable in the Harmonized Tariff Schedule ("HTS") under item numbers 7225.10.0030, 7226.10.1030, 7226.10.5015, and 7226.10.5065. Although the HTS subheadings are provided for convenience and Customs purposes, our written description of the scope of this proceeding is dispositive.

**Injury Test**

Because Italy is a "country under the Agreement" within the meaning of section 701(b) of the Act, the U.S. International Trade Commission ("ITC") is required to determine whether imports of electrical steel from Italy materially injure, or threaten material injury to, a U.S. industry. On October 12, 1993, the ITC preliminarily determined that there is a reasonable indication that an industry in the United States is being materially injured or threatened with material injury by reason of imports from Italy of the subject merchandise (58 FR 54168, October 20, 1993).

**Corporate History of Respondent ILVA**

Prior to 1987, electrical steel in Italy was produced by Terni S.p.A. ("Terni"), a main operating company of Finsider. Finsider was a government-owned holding company which controlled all state-owned steel companies in Italy. In a restructuring of the Italian steel industry in 1982, Terni took over two

plants, Lovere and Trieste, from Nuova Italsider, another Finsider-owned steel producer.

As part of a subsequent restructuring in 1987, Terni transferred its assets to a new company, Terni Acciai Speciali ("TAS") which thereafter held all the assets for electrical steel production in Italy. As part of the restructuring, Lovere and Trieste became TAS' two principal subsidiaries.

In 1988, another restructuring took place in which Finsider and its main operating companies (TAS, Italsider, and Nuova Deltasider) entered into liquidation and a new company, ILVA, was formed. ILVA took over some of the assets and liabilities of the liquidating companies. With respect to TAS, part of its liabilities and the majority of its viable assets, including all the assets associated with the production of electrical steel, were transferred to ILVA on January 1, 1989. ILVA itself became operational on that same day. Part of TAS' remaining assets and liabilities were transferred to ILVA on April 1, 1990. After that date, TAS no longer had any manufacturing activities. Only certain non-operating assets (e.g., land, buildings, inventories), remained in TAS.

From 1989 to 1994, ILVA consisted of several operating divisions. The Specialty Steels Division, located in Terni, produced the subject merchandise. ILVA was also the majority owner of a large number of separately incorporated subsidiaries. The subsidiaries produced various types of steel products and also included service centers, trading companies, an electric power company, etc. ILVA together with its subsidiaries constituted the ILVA Group. The ILVA Group was owned by the Istituto per la Ricostruzione Industriale ("IRI"), a holding company wholly-owned by the GOI.

As of January 1, 1994, ILVA entered into liquidation and its divisions formed three companies. ILVA's former Specialty Steels Division is now a separately incorporated company, Acciai Speciali Terni, which produces electrical steel.

#### Spin-Offs

ILVA sold several "productive units," as defined in the General Issues Appendix to the Final Affirmative Countervailing Duty Determination: Certain Steel Products from Austria ("GIA"), 58 FR 37225, 37265-8 (July 9, 1993), from 1990 through 1992. At verification, we established that one of the companies had been sold to a government entity and one other company had been sold by Italsider

rather than ILVA. Our spin-off methodology does not apply in these situations. For the other companies, i.e., those sold to private parties, we have applied the pass-through methodology described in the GIA to calculate the proportion of subsidies received by ILVA that "left" the company as a result of the sales of these productive units.

#### Period of Investigation

For purposes of this final determination, the period for which we are measuring subsidies (the period of investigation ("POI")) is calendar year 1992. We have calculated the amount of subsidies bestowed on the subject merchandise by cumulating benefits provided to Terni, TAS and ILVA from 1978 through 1992.

#### Analysis of Programs

Based on our analysis of the petition, the responses to our questionnaires, verification, and comments by interested parties, we determine the following.

#### Equityworthiness

Pursuant to section 355.44(e)(1) of the Proposed Regulations (Countervailing Duties; Notice of Proposed Rulemaking and Request for Public Comments ("Proposed Regulations"), 54 FR 23366, May 31, 1989), we preliminarily determined that Terni, TAS, and ILVA were unequityworthy from 1978 through 1992, except in 1979, 1983, 1988, and 1989 when equity infusions were not an issue. From the perspective of a reasonable private investor examining the firm at the time of the equity infusions, neither Terni, TAS, nor ILVA showed an ability to earn a reasonable rate of return over a reasonable period of time. We did not learn anything at verification that would lead us to reverse this finding.

As we stated in the preliminary determination, the companies which were restructured to form ILVA sustained losses from 1978 onward. Although ILVA had a brief period of operating profits for 1989 through 1991, its return on equity during this period declined until there was a negative return. Terni and ILVA's debt to equity ratios were relatively high. Read in conjunction with other financial indicators, such as net losses for numerous years, negative rates of return on equity and sales, the companies' financial performance was weak. Given this, we continue to find that Terni, TAS, and ILVA were unequityworthy from 1978 through 1992. Because the companies received no equity infusions during 1979, 1983, 1989, and 1990, we did not determine equityworthiness for

those years. (See also Memorandum to Director of Accounting dated April 11, 1994 on file in Room B-099 of the Main Commerce Building concerning the Department's evaluation of Terni's, TAS', and ILVA's equityworthiness.)

For the preliminary determination, we did not include 1988 in our equityworthy analysis because petitioners did not allege an infusion had occurred in that year and we were not aware of any such investment. However, in our review of ILVA's annual reports at verification, we learned that IRI contributed capital to ILVA in 1988 in the form of an equity infusion. Therefore, in accordance with § 355.44(e)(2) of the Proposed Regulations, we have considered whether ILVA was equityworthy in that year to determine whether the equity infusion was made on terms inconsistent with commercial considerations. As explained below, we have determined that ILVA was not equityworthy in that year.

#### Creditworthiness

Pursuant to section 355.44(b)(6)(i) of the Proposed Regulations, we preliminarily determined that Terni, TAS, and ILVA were uncreditworthy, i.e., that they did not have sufficient revenues or resources to meet their costs and fixed financial obligations, from 1978 through 1992. In making that determination, we examined Terni's, TAS', and ILVA's current, quick, times interest earned and debt to equity ratios. We determined, for example, that the companies' times interest earned ratios were anemic for approximately 16 years, indicating a weak long-term solvency. Furthermore, the debt to equity ratios for both Terni and ILVA were relatively high.

We did not learn anything at verification that would lead us to reconsider our preliminary determination. Therefore, we continue to find that Terni, TAS, and ILVA were uncreditworthy from 1978 through 1992. (See also Memorandum to Director of Accounting dated April 11, 1994, on file in Room B-099 of the Main Commerce Building concerning the Department's evaluation of Terni's, TAS', and ILVA's creditworthiness.)

#### Benchmarks and Discount Rates

For uncreditworthy companies, § 355.44(b)(6)(iv)(A)(1) of the Proposed Regulations directs us to use, as the benchmark interest rate, the highest long-term fixed interest rate commonly available to firms in the country plus an amount equal to 12 percent of the prime rate. Because we were unable to obtain information on the highest long-term

interest rate commonly available in the country, we used the Bank of Italy reference rate which is the highest average long-term fixed interest rate we were able to verify. We then added to this rate an amount equal to 12 percent of the Italian Bankers Association ("ABI") prime rate. We have used the resulting interest rate as the benchmark for our long-term loans. In calculations where we have not used this rate, we have otherwise indicated. We have also used this amount as the discount rate for allocating over time the benefit from equity infusions and non-recurring grants for the same reasons explained in Final Affirmative Countervailing Duty Determination: Certain Steel Products From Spain, 58 FR 37374, 37376 (July 9, 1993).

#### Calculation Methodology

In determining the benefits to the subject merchandise from the programs described below, we used the following calculation methodology. We first calculated the benefit attributable to the POI for each countervailable program, using the methodologies described in each program section below. For those subsidies received by ILVA that were allocated over time, we then performed the pass-through analysis discussed in the GIA at 37269. The pass-through analysis accounts for any reduction in ILVA's subsidies that resulted from the sale of several productive units.

For the subsidies remaining with ILVA, we divided the benefit allocable to the POI by the sales of ILVA or the sales of the Specialty Steels Division of ILVA, depending on which company had received the benefit. (The program sections below indicate which denominator has been used for each program.) Next, we added the benefits for all programs, including the benefits for programs which were not allocated over time, to arrive at ILVA's total subsidy rate. Because ILVA is the only respondent company in this investigation, this rate equals the country-wide rate.

#### I. Programs Determined To Be Countervailable

##### A. Benefits Associated With the 1988-90 Restructuring

As discussed above under the "Corporate History" section of this notice, the GOI liquidated Finsider and its main operating companies in 1988 and assembled the group's most productive assets into a new operating company, ILVA. In 1990, additional assets and liabilities of TAS, Italsider, and Finsider went to ILVA.

In the preliminary determination, we found that a countervailable benefit was provided to ILVA through the 1988-1990 restructuring. In reaching this determination, we did not look at the transformation of Finsider as a whole into ILVA. Instead, we focused on the restructuring of TAS into the Specialty Steels Division of ILVA. We found that although TAS' net worth was negative prior to the restructuring, ILVA received a division with assets in excess of liabilities. In effect, TAS' balance sheet was rewritten so as to change its equity from negative 99,886 million lire to positive 317,836 million lire. For the preliminary determination, we treated the difference (417,722 million lire) as a countervailable benefit to ILVA.

We have reconsidered the methodology employed in the preliminary determination and have revised it for the final determination. We now believe that the approach taken in the preliminary determination understated the benefit to ILVA from the restructuring. It failed to take into account a portion of the liabilities not assumed by ILVA, that would otherwise have had to be repaid, and the losses incurred by TAS in connection with a write down of its assets in the restructuring process.

The purpose of the 1988-90 restructuring was to create a new, viable steel company (ILVA) by having it take over most of the productive assets of Finsider's operating companies like TAS, but only some of the liabilities. In April 1990, after all of TAS' manufacturing activities had either been transferred or shut down, TAS was nothing but a shell company in the process of liquidation, with liabilities exceeding its assets. ILVA, on the other hand, had received most of TAS' assets without being burdened by TAS' liabilities.

The liabilities remaining with TAS through the restructuring process had to be repaid, assumed, or forgiven. We have identified one specific instance of forgiveness. This occurred in 1989 when Finsider forgave 99,886 million lire of debt owed to it by TAS. Even with this forgiveness, TAS retained a substantial amount of liabilities after the 1990 transfer of assets and liabilities to ILVA. While no specific act eliminated this debt—indeed some of it is still outstanding—we believe that ILVA (and consequently the subject merchandise) received a benefit as a result of the debt being left behind in TAS.

In addition, we learned at verification that losses had been left behind in TAS, because the value of the assets transferred to ILVA had been written down. TAS gave up assets whose book

value was higher than their appraised value. As a result, TAS was forced to absorb losses. The loss from the first transfer was reflected as an extraordinary loss in TAS' 1988 Annual Report. With respect to the 1990 transfer, TAS had created a reserve in 1989 for the anticipated loss. At verification, we found that this loss was included in the liabilities that were left in TAS after the 1990 transfer.

In summary, in restructuring TAS into the Specialty Steels Division of ILVA, liabilities and losses due to asset write downs were left behind in TAS, a shell company. Although there was only one specific act of debt forgiveness, which only covered a portion of the liabilities in TAS, we believe that ILVA received a benefit when it was able to leave the debt and losses remaining in TAS. Because this benefit was specific to ILVA, we find a countervailable subsidy to ILVA in the amount of the debt and losses that should have been taken by ILVA when it took on the assets of TAS.

Treating these liabilities and losses as a subsidy to ILVA is consistent with the Department's determination in Certain Steel from Austria at 37221. In that case, we examined a government-owned operating company (VAAG) which was split up into numerous operating companies, one of which was subject to the investigation. In order to effect this split-up, the assets and liabilities of the original company were divided among the new companies. We determined that the creation of the new companies was merely a redistribution of existing assets which, in and of itself, did not give rise to any benefits. However, we also determined that a benefit arose because losses that had been incurred by VAAG were not distributed to the new companies. Therefore, we determined that the company under investigation effectively received a grant in the amount of the losses that should have been distributed to it.

Similarly, in the case of TAS and ILVA, the transfer of assets to ILVA is, in itself, a redistribution of assets which does not give rise to subsidies. However, a substantial portion of the liabilities and the losses associated with the assets were not distributed to ILVA. Instead, they remained behind in TAS. We are countervailing these amounts as grants to ILVA.

To calculate the benefit during the POI, we used our standard grant methodology (see section 355.49(b) of the Proposed Regulations). Finsider's 1989 forgiveness of TAS' debt and the loss resulting from the 1989 write down were treated as grants received in 1989. The second asset write down and the debt outstanding after the 1990 transfer



(adjusted as described below) were treated as grants received in 1990.

After the 1990 transfer, certain non-operating assets (e.g., land, buildings, inventories), remained in TAS. These assets are being disposed of in the liquidation process and the proceeds from the sale of the assets are available to pay off TAS' remaining liabilities.

In order to account for the fact that certain assets were left behind in TAS, we have adjusted the amount of liabilities outstanding after the 1990 transfer. We did this by writing down the value of the assets by taking a weighted average of the earlier write downs and subtracted this amount from the outstanding liabilities.

We then divided the benefits by ILVA's sales in the POI. On this basis, we determine the estimated net subsidy to be 12.10 *ad valorem* for all manufacturers, producers, and exporters in Italy of the subject merchandise.

#### B. Interest-Free Loans to ILVA

In 1992, ILVA received a 300 billion lire payment from IRI. At verification, we reviewed documents which established this payment as a "provisional" or "anticipated" capital increase. The reason that the payment was provisional was that before it could be considered as an equity infusion, authorization was needed from: (1) The shareholders, and (2) the EC.

IRI clearly intended that the money become share capital, as there were no arrangements for repayment (e.g., a repayment schedule), nor was interest to be paid. Therefore, as IRI was the sole shareholder in ILVA, its approval was a formality and the only real condition was the EC approval. If the EC approval was not received, the amount would have to be repaid to IRI. Although the GOI asked for the EC's approval, it was not granted during the POI.

ILVA's 1992 Annual Report shows that the company received a similar payment from IRI in 1991 which was entered in its accounting records in the same way as the 300 billion payment received in 1992. At verification, we learned that the background to the 1991 payment was the same as for the 1992 payment.

Because these payments were not converted to equity prior to the end of the POI, we cannot find the payments to be equity infusions. Thus, we have determined to treat the payments as short-term interest-free loans, which are being rolled over until such time as they are repaid or converted to equity upon EC approval.

The typical maturity in Italy for short-term loans is at most six months and roll-overs are common. In accordance

with § 355.44(b)(3)(i) of the Proposed Regulations, we used the 1992 International Monetary Fund's annualized "lending rate," converted to a semi-annual interest rate as the short-term benchmark interest rate. Since ILVA paid zero interest, the benefit to ILVA was the interest it would have owed on both payments. These benefits were then divided by ILVA's sales in the POI. On this basis, we determine the estimated net subsidy to be 0.49 percent *ad valorem* for all manufacturers, producers, and exporters in Italy of the subject merchandise.

#### C. Equity Infusions

The GOI, through IRI, provided new equity capital to Terni, TAS, or ILVA in every year from 1978 through 1991, except in 1979, 1983, 1989, and 1990. Respondents have not provided any argument refuting our preliminary determination that the GOI's equity investments were provided specifically to the steel industry.

As discussed above, we have determined that Terni, TAS, and ILVA were unequityworthy in each year that they received new equity capital. Therefore, these provisions of equity were inconsistent with commercial considerations and are countervailable.

To calculate the benefit for the POI, we treated each of the equity amounts as a grant and allocated the benefits over a 15-year period. (Our treatment of equity as grants and our choice of allocation period is discussed in the GIA, at 37239 and 37225, respectively.)

In the preliminary determination, we treated a capital increase received by ILVA in the amount of 205,097 million lire in 1990 as a countervailable equity infusion because ILVA reported it as an equity infusion in its responses. At verification, we established that the amount reported as an equity infusion was, in fact, due to the transfer of residual assets from Italsider, TAS, and Finsider, which were all in liquidation. As explained in connection with the 1988-1990 restructuring, we do not consider the transfer of assets in connection with a restructuring to be an "equity infusion" since the transfer merely redistributes existing assets. Therefore, we have excluded the amount of this capital contribution from our calculations.

For the equity infusions provided to Terni and TAS, we have divided the benefit allocated to the POI by the sales of the Specialty Steels Division of ILVA. We chose this sales denominator because this division most closely resembles the former companies, Terni and TAS. For equity infusions into ILVA, we used ILVA's sales as our

denominator, as benefits from these investments are not tied to any division of ILVA. On this basis, we find the estimated net subsidy to be 9.71 percent *ad valorem* for all manufacturers, producers, and exporters in Italy of the subject merchandise.

#### D. The Transfer of Lovere and Trieste to Terni in 1982

As discussed in the "Corporate History" section of this notice, Lovere and Trieste were transferred from Italsider to Terni as part of a 1982 restructuring.

We have determined that this transaction is correctly characterized as an internal corporate restructuring. No new equity capital was provided to Terni through the transfer of these assets. However, just as subsidies given to Terni and TAS continued to bestow a benefit on ILVA when ILVA received TAS' assets, subsidies received by Italsider flowed to Terni when Terni received Lovere and Trieste.

We determined the amount of Italsider's subsidies attributable to Lovere and Trieste by calculating the percentage of assets these two companies represented of the total Italsider assets. We applied this percentage to the "untied" subsidies received by Italsider to calculate the portion of the benefit that flowed to Terni when it received Lovere and Trieste.

The benefit allocated to the POI was divided by the total sales of the Specialty Steels Division of ILVA. On this basis, we find the estimated net subsidy to be 0.41 percent *ad valorem* for all manufacturers, producers, and exporters in Italy of the subject merchandise.

#### E. Law 675/77 Preferential Financing

Law 675/77 was designed to bring industrial assistance measures from the GOI under a single system. The program had at its core three main objectives: (1) the reorganization and development of the industrial sector as a whole; (2) the increase of employment in the South; and (3) the promotion of employment in depressed areas. To achieve these goals, Law 675/77 provided six types of benefits: (1) grants to pay interest on bank loans; (2) mortgage loans provided by the Ministry of Industry ("MOI") at subsidized interest rates; (3) other grants to pay interest on loans financed by IRI bond issues; (4) capital grants for the South; (5) VAT reductions on capital good purchases for companies in the South; and (6) personnel retraining grants. (The fourth, fifth, and sixth components of Law 675/77 are discussed below.)

As we stated in our preliminary determination, the GOI identified a number of different sectors as having received benefits under Law 675/77. These sectors were: (1) Electronic technology; (2) the mechanical instruments industry; (3) the agro-food industry; (4) the chemical industry; (5) the steel industry; (6) the pulp and paper industry; (7) the fashion sector; (8) the automobile industry; and (9) the aviation sector. Law 675/77 also sought to promote optimal exploitation of energy resources, and ecological and environmental recovery.

Despite the fact that Law 675/77 benefits were available to and used by numerous and varied industries, we preliminarily determined Law 675/77 benefits specific within the meaning of section 771(5)(A)(ii) of the Act, and therefore, countervailable because the steel industry was a dominant user pursuant to section 355.43(b)(2)(iii) of the Proposed Regulations. It received 34 percent of the benefits provided under the interest subsidy and capital grant components of the program.

The GOI has argued that the steel and automobile industries did not receive a disproportionate share of benefits when the extent of investment in those industries is compared to the extent of investment in other industries.

We did not consider the level of investment in the industries receiving benefits under Law 675/77. Instead, we followed the policy explained in Final Affirmative Countervailing Duty Determination: Certain Steel Products from Brazil, 58 FR 37295, 37295 (July 9, 1993), of comparing the share of benefits received by the steel industry to the collective share of benefits provided to other users of the program. Consistent with our determination in Final Affirmative Countervailing Duty Determination: Certain Steel Products from Italy ("Certain Steel from Italy"), 58 FR 37327 (July 9, 1993), we found that the steel industry accounted for 34 percent of the benefits and the auto industry accounted for 33 percent of the benefits. Thus, these two industries represented 77 percent of the assistance while the remainder was spread among the other seven industries.

On this basis, we determine that the steel industry was a dominant user of programs under Law 675/77 and, therefore, that benefits received by ILVA under this law are being provided to a specific enterprise or industry or group of enterprises or industries. Therefore, we find Law 675/77 financing to be countervailable to the extent that it is provided on terms inconsistent with commercial considerations.

### 1. Grants to Pay Interest on Bank Loans

Italian commercial banks provided long-term loans at market interest rates to industries designated under Law 675/77. The interest owed by the recipient companies on these loans was offset by contributions from the GOI. Terni received bank loans with Law 675/77 interest contributions which were outstanding in the POI.

To determine whether this assistance conferred a benefit, we compared the effective interest rate paid on these loans to the benchmark interest rate, described above. Based on this comparison, we determine that the financing provided under this program is inconsistent with commercial considerations, *i.e.*, on terms more favorable than the benchmark financing.

Because Terni knew that it would receive the interest contributions when it obtained the loans, we consider the contributions to constitute reductions in the interest rates charged rather than grants (see Certain Steel from Italy at 37331).

Therefore, to calculate the benefit, we used our standard long-term loan methodology as described in § 355.49(c)(1) of the Proposed Regulations. We divided the benefit allocated to the POI by the sales of the Specialty Steels Division of ILVA. On this basis, we determine the estimated net subsidy to be 0.03 percent *ad valorem* for all manufacturers, producers, and exporters in Italy of the subject merchandise.

### 2. Mortgage Loans from the Ministry of Industry Under Law 675/77,

companies could obtain long-term low-interest mortgage loans from the Ministry of Industry. Terni received several loans which were still outstanding in the POI.

To determine whether these loans were provided on terms inconsistent with commercial considerations, we used the benchmark interest rates described above. Because the interest rates paid on the Law 675/77 loans were below the benchmark interest rates, we determine that loans provided under this program are countervailable.

We calculated the benefit using our standard long-term loan methodology. We then divided the benefit allocated to the POI by the sales of the Specialty Steels Division of ILVA. On this basis, we determine the estimated net subsidy from this program to be 0.30 percent *ad valorem* for all manufacturers, producers, and exporters in Italy of the subject merchandise.

### 3. Interest Contributions on IRI Loans/Bond Issues

Under Law 675/77, IRI was allowed to issue bonds to finance restructuring measures of companies within the IRI Group. The proceeds from the sale of the bonds were then re-lent to IRI companies. The effective interest rate on such loans was reduced by interest contributions made by the GOI. Terni had two of these loans outstanding during the POI. Both loans had variable interest rates.

To determine whether these loans were countervailable, the Department used a long-term variable rate benchmark as described in § 355.44(B) of the Proposed Regulations. We compared this benchmark rate to the effective rates paid by Terni in the years these loans were taken out and found that these loans were provided on terms inconsistent with commercial considerations.

To determine the benefit, we first calculated the difference between what was paid on these loans during the POI and what would have been paid during the POI had the loans been provided on commercial terms. We divided the resulting difference by the sales of the Specialty Steels Division of ILVA. On this basis, we determine the estimated net subsidy from this program to be 0.26 percent *ad valorem* for all manufacturers, producers, and exporters in Italy of the subject merchandise.

### F. Urban Redevelopment Financing Under Law 181/89

Law 181/89 was implemented to ease the impact of employment reductions in the steel crisis areas of Naples, Taranto, Terni, and Genoa. The program had four main components: (1) reindustrialization projects; (2) job promotion; (3) training; and (4) early retirement. (Early retirement under Law 181/89 was not used by ILVA and the job promotion component has been found not countervailable (see relevant sections below).

Because benefits under this program are limited to specific regions, we determine that assistance under this program is limited to a group of industries in accordance with section 355.43(b)(3).

#### 1. Reindustrialization Under Law 181/89

Under the reindustrialization component of Law 181/89, the GOI partially subsidized certain investments. ILVA received payments under Law 181/89 for a training center to update the technical skills of its workers. Training also took place at this center to

improve workers' skills for employment outside the steel industry.

Since the information provided to the Department indicates that the center supported the training of steel workers who continued to be employed by ILVA, we determine that ILVA received a benefit from reindustrialization payments under Law 181/89.

In addition, we established that ILVA received payments under Law 181/89 for service centers. However, these service centers were involved in steel processing unrelated to electrical steel. Therefore, payments to these service centers were not included in our calculations.

To calculate the benefit to ILVA during the POI, we used our standard grant methodology (see § 355.49(b) of the Proposed Regulations) and the discount rate described above. It is the Department's practice to treat training benefits as recurring grants (see GIA at 37226).

Accordingly, we divided the amount received in the POI by the 1992 sales of the ILVA. On this basis, we determine the estimated net subsidy to be 0.00 percent *ad valorem* for all manufacturers, producers, and exporters on Italy of the subject merchandise.

## 2. Worker Training

Retraining grants were provided to ILVA under Law 181/89. These funds constituted the GOI's matching contribution to ECSC Article 56(2)(b) training grants (see ECSC Article 56 Redeployment Aid section below).

Since information provided at verification indicates that these funds were used to train workers remaining at ILVA, we determine that the GOI's training contribution under Law 181/89 constitutes a benefit to ILVA.

It is the Department's practice to treat training benefits as recurring grants (see GIA at 37226). Accordingly, we divided the amount received by the sales of the Specialty Steels Division of ILVA. On this basis, we determine the estimated net subsidy from this program to be 0.10 percent *ad valorem* for all manufacturers, producers, and exporters in Italy of the subject merchandise.

## G. ECSC Article 54 Loans

Under Article 54 of the 1951 ECSC Treaty, the European Commission can provide loans directly to iron and steel companies for modernization and the purchase of new equipment. The loans finance up to 50 percent of an investment project. The remaining financing needs must be met from other sources. The Article 54 loan program is financed by loans taken by the Commission, which are then re-lent to

iron and steel companies in the member states at a slightly higher interest rate than that at which the Commission obtained them.

ILVA had outstanding Article 54 loans in the POI. These loans were transferred to ILVA as part of the partial transfer of Terni's assets and liabilities in 1989. Two of these loans were denominated in U.S. dollars and two in European Currency Units ("ECU").

Because Article 54 loans are limited to iron and steel companies, we find these loans to be specific and, therefore, countervailable to the extent that they were provided on terms inconsistent with commercial considerations.

Because these loans were denominated in foreign currencies, we used foreign currency benchmarks for our preliminary determination. However, the Article 54 loans had exchange rate guarantees that allowed Terni to calculate the maximum lire amount payable (see Law 796/76 Exchange Rate Guarantee Program described below). Since these loans were effectively insulated from any future changes in the exchange rate, we are not using foreign currency benchmark interest rates as we did in the preliminary determination. Rather we are using the uncreditworthy benchmark discussed in the *Benchmark and Discount Rate* section above.

At verification we found that one of the U.S. dollar loans had been assumed by Terni when it became the parent company of the original debtor. We are using the uncreditworthy benchmark interest rate for the year in which the loan was assumed by Terni in order to calculate the benefit from this loan, as that was the year in which Terni incurred the liability.

Because the interest rates paid on all the Article 54 loans were below the benchmark interest rates, we determine that the loans provided under this program are countervailable. We calculated the benefit using our standard long-term loan methodology. We then divided the benefit allocated to the POI by the sales made by the Specialty Steels Division of ILVA. On this basis, we determine the estimated net subsidy to be 1.02 percent *ad valorem* for all manufacturers, producers, and exporters in Italy of the subject merchandise.

## II. Programs Determined To Be Not Countervailable

### A. Early Retirement

In Certain Steel from Italy, we determined that the threat of strikes and social unrest prevented Italian steel companies from laying off surplus labor.

As a result, these companies were effectively obligated to retain their workers until the workers reached retirement age. Given this obligation, when the GOI created a program to allow for early retirement, we determined that the steel companies had been relieved of the burden of retaining these employees at full salary until the normal retirement age.

In the preliminary determination of this investigation, we relied on Certain Steel from Italy and determined that early retirement provided a countervailable benefit which we measured as the savings to ILVA arising from not having to pay wages to the workers who took early retirement in the POI.

At verification in this case, the GOI provided evidence showing that companies in Italy have the legal right to fire workers. Small companies (those with less than 15 employees) could simply eliminate surplus workers. Large companies, however, go through certain steps and procedures before they can lay workers off (other than for cause). The procedures and the benefits paid to employees laid off by these companies are provided for in Law 223/91.

Law 223/91 provides two means of removing surplus workers: early retirement and lay-offs under CIG-S.

### 1. Early Retirement

Early retirement is regulated in two separate articles of Law 223/91, both of which were used by ILVA workers in the POI. Each article has different eligibility criteria, but essentially the program is available to companies in high-technologies and competitive industries that are undergoing restructuring. Under both articles, the companies pay 30 percent of the early retirement benefits, while the GOI pays the rest. The GOI sets an annual cap on the number of workers that can be retired under this provision. In 1992, 21 percent of the quota was set aside for steel workers.

### 2. CIG-S

CIG-S (the extraordinary compensation fund) is also regulated by Law 223/91. CIG-S provides for lay-offs by companies that (1) are undergoing restructuring, (2) have more than 15 employees, and (3) belong to a wide range of industries. The GOI must approve use of this program, under which laid-off workers receive a certain percentage of their wages for three years. Thereafter, they may receive further compensation under a follow-up program (mobility). The GOI pays 80 percent and the companies 20 percent of the benefits.

In a meeting with a U.S. Embassy official at verification, we learned that approximately 25 percent of the Italian workforce is employed in companies eligible for the provisions under Law 223/91. The remaining 75 percent work for companies that do not have to offer their employees any benefits upon separation except the obligatory severance payment that is also paid to workers who take early retirement or are placed on the CIG-S. Employees in these smaller companies who are laid off receive only government-provided unemployment compensation.

ILVA, on the other hand, belongs to that category of companies (larger companies in structural and economic crisis), that have to undertake certain specific steps before actually getting rid of surplus labor. Therefore, the alternatives facing ILVA are early retirement and the permanent lay offs under CIG-S, provided under Law 223/91.

In determining whether worker benefits such as early retirement confer a subsidy on the company, we look to whether the company has been relieved of an obligation it would otherwise incur. (See section 355.44(j) of the Proposed Regulations.) In this instance, we find that, in the absence of the early retirement program, the obligation that would be incurred is that imposed by the alternative available to ILVA, the CIG-S program. We have found that large companies in a wide variety of industries that are undergoing restructuring can use the CIG-S program to lay off workers. Therefore, we believe that this program establishes the benchmark for the obligations ILVA would otherwise have towards the workers it retires early.

Based on the information we have received, we have not been able to make an exact comparison of the financial obligations ILVA would incur under CIG-S as opposed to the early retirement scheme. Because the benefits paid to a worker under early retirement can extend from one to more than ten years (whereas CIG-S payments are limited to three years) and because the percentage paid by the company is based on different amounts (the worker's pension, which varies from worker to worker, for early retirement and the worker's salary for CIG-S), we are doubtful that exact comparisons can be made. However, we have used the information we have and made certain limited assumptions to calculate the financial obligations on ILVA imposed by early retirement exceed the financial obligations that would be imposed by CIG-S. (See Memorandum from Team to Barbara R. Stafford dated April 11, 1994

on file in room B-099 of the main Commerce Building.) Therefore, we find that the early retirement program is not countervailable.

#### B. Law 796/76 Exchange Rate Guarantee Program

This program applies to foreign currency loans taken out by Italian companies. Under the program, repayment amounts are calculated by reference to the exchange rate in effect at the time the loan is taken out. If the exchange rate changes over time, the program sets a ceiling and a floor to limit the effect of the exchange rate change on the borrower. For example, if the lire depreciates five percent against the DM (the currency in which the loan is taken out), borrowers would normally find that they would have to repay five percent more (in lire terms). However, under the Exchange Rate Guarantee Program, the ceiling would act to limit the increased repayment amount to two percent. There is also a floor in the program which would apply if the lire appreciated against the DM. The floor would limit any windfall to the borrower.

In the preliminary determination (as in *Certain Steel*), we found this program to be *de jure* specific because we believed the program was limited to ECSC loans. However, we discovered at the verification in this investigation that we had overlooked information in the response which indicated that guarantees under this program were also available for loans made by the Council of Europe Resettlement Fund ("CER"). We attempted to learn more about the program's *de facto* specificity at verification as it became clear that the program was not *de jure* specific.

We established that exchange rate guarantees for CER loans are provided for in Law 796, the same law that provides guarantees for ECSC loans. We learned that CER loans are designed to improve social conditions in the weakest sectors of society by providing loans to small- and medium-sized businesses to create employment opportunities. Officials named the following examples of areas/activities that receive funds from the CER: agriculture, handicraft, tourism. We examined certain loan documents and established that guarantees were in effect on CER loans. However, given the limited time and the manner in which the data were organized, Italian officials were not able to provide information regarding the distribution of benefits provided to CER and ECSC borrowers.

Based on the information we have, the exchange risk guarantees may be non-specific. Moreover, we cannot draw

adverse inferences regarding the distribution of benefits under the program because the GOI was not uncooperative or otherwise remiss in providing the requested data. Therefore, we determine that the program is not countervailable.

Given the circumstances under which we have reached this determination, *i.e.*, lacking certain important information, this finding of non-countervailability will not carry over to future investigations. Therefore, until a fuller record is developed which allows us to undertake a thorough analysis, petitioners will not have to provide new evidence in order for us to investigate this program. In addition, we intend to reinvestigate this program in the first administrative review requested should this investigation result in a countervailing duty order.

#### C. Finsider Loan Guarantees

Certain loans made to Terni were assumed by ILVA, and were still outstanding during the POI. At the time the loans were taken out they were guaranteed by Finsider, the holding company of Terni and then T.A.S. Finsider entered into liquidation in 1988. Nevertheless, ILVA continued to pay the guarantee fees for these loans to Finsider until 1991. At that time, ILVA ceased to pay guarantee fees to Finsider and, in essence, "self-guaranteed" these loans.

Petitioners argue that the Department should countervail these loan guarantees because: (1) The fees paid for the guarantees were less than what would have been paid to a commercial guarantor; and (2) guarantees to Terni, an uncreditworthy company, constitute government intervention ensuring the extension of the loans.

Although information obtained at verification indicates that ILVA paid Finsider less than it would have paid a commercial guarantor, we have concluded that ILVA received no benefit. Given that Finsider was in liquidation and presumably could not have carried out the guarantee, ILVA was receiving nothing in exchange for its payments. Therefore, we find that these loan guarantees are not countervailable.

#### D. Interest Grants for "Indirect Debts" Under Law 750/81

At verification, we established that Law 750/81 was passed as a result of the 1981 Iron and Steel plan to provide interest grants to sectors within the steel industry which were designated as strategic sectors. The program was in place from 1981 through 1983.

One of the sectors designated as a strategic sector was forgings and castings, as these steel products were used in the construction of electrical power plants. Since Terni was the only producer of this type of forgings and castings, the GOI provided assistance to Terni to allow it to reach full production capacity.

Because these benefits were provided for the production of forgings and castings, we determine that they do not provide a benefit to the subject merchandise.

#### *E. ECSC Article 56 Redeployment Aid*

Under Article 56(2)(b) of the ECSC Treaty, redeployment assistance is provided to workers affected by the restructuring of the coal and steel industries in the ECSC member states. The assistance consists of the following types of grants: (1) income support grants for workers affected by unemployment, re-employment at a lower salary or early retirement; (2) grants to enable companies to continue paying workers who have been laid off temporarily; (3) vocational training grants; and (4) resettlement grants. The decision to grant Article 56 assistance is contingent upon a matching contribution from the member state.

The portion of Article 56 redeployment grants funded by the ECSC comes from the European Commission's operational budget for the ECSC steel program. This budget is funded by (1) levies imposed on coal and steel producers in the member countries; (2) income from ECSC's investments; (3) guarantee fees and fines paid to the ECSC; and (4) interest received from companies that have obtained loans from the ECSC.

Because payments from the ECSC under Article 56 are sourced from producer levies, we find them to be not countervailable (see *Certain Steel from Italy* at 37336). (The matching contributions from the GOI for the training elements of Article 56 were discussed above under Law 181/89.)

#### *F. European Social Fund ("ESF") Grants*

The ESF was established by the 1957 European Economic Community Treaty to increase employment and help raise the living standards of workers.

We found in *Certain Steel from Italy* that the ESF receives its funds from the EC's general budget, whose main revenue sources are customs duties, agricultural levies, value-added taxes collected by the member states, and other member state contributions.

The member states are responsible for selecting the projects to be funded by the EC. The EC then disburses the grants

to the member states which manage the funds and implement the projects. According to the EC, ESF grants are available to (1) people over 25 who have been unemployed for more than 12 months; (2) people under 25 who have reached the minimum school-leaving age and who are seeking a job; and (3) certain workers in rural areas and regions characterized by industrial decline or lagging development.

ESF grants received by Italy were used for two purposes: (1) training laid-off employees for jobs outside the sector in which they had previously been working; and (2) training of workers to perform new jobs within the same company.

Every region in Italy has received ESF funds. Therefore, we determine that this program is not regionally specific within the meaning of § 355.43(b)(3) of the Proposed Regulations. Furthermore, we note that to the extent there is any disproportionality in the regional distribution of ESF benefits (*i.e.*, to the regions of southern Italy), it has not resulted in a countervailable benefit to the production of the subject merchandise, which is produced in northern Italy.

#### *G. Aid Under the National Research Plan*

In 1985, the Ministry of University, Technology and Scientific Research assigned 19 billion lire to Terni under the National Research Plan for steel. The research funds covered costs of personnel assigned to specific research projects in research laboratories. The research under this plan was contracted out to Terni as the result of a competitive bidding process.

At verification, we established that the assistance under the National Research Plan was provided under Law 46/82. Under the same law, the GOI has supported similar research plans for 17 other industries or sectors. Moreover, documentation provided by the GOI showed that the steel industry did not receive a disproportionate share of the funds provided for research plans.

Thus, we determine that benefits under the program are not limited to a specific enterprise or industry or group of enterprises or industries. Therefore, we find this program to be not countervailable.

#### *H. Job Promotion Under Law 181/89*

The job promotion component of Law 181/89 involved a number of measures designed to promote self-employment among workers in Naples, Taranto, Terni, and Genoa. These measures included, among others, assisting former workers in starting their own

businesses, providing specialized management training, and increasing the level of financing available to new businesses. In general, these measures were coordinated by an IRI-owned company, *Societa Finanziaria di Promozione e Sviluppo Imprenditoriale*.

Based on the information provided at verification, we determine that the "job promotion" component of Law 181/89 provides for workers leaving the steel industry. Moreover, there is no indication that ILVA (or other companies in Italy) had an obligation, legal or otherwise, to provide assistance to workers leaving the steel industry. Therefore, we determine that ILVA did not receive a benefit from assistance provided under the job promotion component of Law 181/89.

#### *III. Programs Which Were Not Used or Which Did Not Benefit the Subject Merchandise in the POI*

A. We established at verification that the following programs were not used during the POI.

1. *Subsidized Export Financing Under Law 227/77*
2. *Early Retirement Provision under Law 181/89*
3. *Personnel Retraining Grants under Law 675/77*

B. We established at verification that loans provided under the following programs were not outstanding in the POI.

1. *Finsider Loans*
2. *Interest Subsidies under Law 617/81*
3. *Financing under Law 464/72*

C. We established at verification that the following programs were directed to the South of Italy. Since production of the subject merchandise takes place outside the South, we determine that these programs did not benefit the subject merchandise.

1. *Law 675/77 Capital Grants*
2. *Reductions of the Value Added Tax ("VAT") under Law 675/77*
3. *Interest Contributions under the Sabatini Law (Law 1329/65)*
4. *Social Security Exemptions*
5. *ILOR and IRPEG Exemptions*

#### *Interested Party Comments*

##### *Comment 1*

Petitioners argue that the Department's preliminary decision to measure subsidization by a comparison of TAS' equity before and after restructuring, which they labeled the "snapshot" approach, was improperly substituted for, and contrasts sharply with, the cash flow approach the Department has historically used to measure subsidies. Petitioners allege

that by focusing only on the differences in TAS' balance sheet at two different points in time, to the exclusion of a review of the intermediate activities undertaken by the GOI to bestow funds on ILVA, the Department ignored the full measure of debt forgiveness and other assistance provided to ILVA.

Petitioners also argue that the problem with the Department's approach is that it ignored the sizeable liabilities and negative equity position left behind in the "empty shell" of TAS which were brought about by the restructuring as a result of the artificial separation of TAS' assets and liabilities. Petitioners maintain the Department's approach focuses exclusively on net changes in equity, regardless of the individual transactions that caused the changes which would have been captured in a cash flow analysis. According to petitioners, the only way to accurately measure the subsidies provided to Terni/TAS is to identify and measure the value of each individual transaction, be it a grant, equity infusion, debt forgiveness, or loss coverage.

Respondents contend that the Department should exclude from the calculation of any countervailable subsidy any of the TAS assets transferred to ILVA or assets remaining in TAS. In addition, respondents argue that changes in TAS' equity position resulting from the official appraisal of assets and liabilities conferred no countervailable benefit to ILVA. Furthermore, according to respondents, assets and liabilities remaining in TAS could not have conferred a countervailable benefit to ILVA. Finally, respondents argue that § 355.48 of the Proposed Regulations explicitly provides for a departure from the cash flow methodology in "unusual circumstances." Respondents argue that it would be unreasonable to review each of the transactions as suggested by petitioners because of the extreme complexity of the transactions involved in this case. Respondents maintain the Department has performed a transaction-specific analysis wherever practicable.

#### *DOC Position*

Insofar as our preliminary determination focused on the change in the net equity position of TAS, it failed to account for certain liabilities and losses left behind in TAS. In this final determination, we have addressed this shortcoming. We recognize that the restructuring resulted in TAS holding liabilities and absorbing losses, and that those liabilities and losses would somehow have to be covered. As ILVA

would not be covering them, ILVA received a benefit in that amount.

However, we disagree with petitioners that the so-called snapshot approach cannot be substituted for the cash flow approach traditionally used by the Department. First, our approach in this final determination is consistent with the methodology used to assess countervailable benefits arising out of restructuring in Certain Steel from Austria. Second, it fully and accurately measures the benefits conferred on the production of the subject merchandise. Finally, petitioners misuse the concept of the cash flow effect.

As explained above, in Certain Steel from Austria, when the company producing steel was restructured, we found that a benefit to the new company arose because the new company did not receive any of the losses accumulated by the former company. There was no specific act of payment or loss coverage undertaken by the Government of Austria to eliminate those losses as part of the restructuring. Instead, the losses were simply left behind in the former company. In Certain Steel from Austria, these losses left in the "shell" company were determined to be countervailable.

Similarly, in the case of restructuring TAS into the Specialty Steels Division of ILVA, the liabilities and losses left behind in TAS have been found to give rise to a benefit to ILVA. There was one specific act of debt forgiveness between Finsider and TAS. That was accounted for in our calculations, but only as a part of the totality of the restructuring action.

We further believe that the snapshot approach has fully captured the benefit to the subject merchandise. Based primarily on the annual reports of IRI, Finsider and TAS, petitioners have developed a long list of "subsidies" that include IRI's forgiveness of Finsider's debt and numerous and varied forms of payments to TAS throughout and subsequent to the restructuring. We have concluded that countervailing subsidies from IRI to Finsider and from Finsider to TAS would lead to an overstatement of the benefit. (See DOC response to Comment 2.)

With respect to the subsidies received by TAS after the second asset transfer to ILVA (e.g., interest paid to TAS on its shares in ILVA, capital gain on real estate received by TAS, etc.), we recognize that these payments did, in fact, reduce the liabilities in TAS. However, because we included in the restructuring benefit the amount of liabilities remaining in TAS after the second transfer, we have already captured the benefits from these subsidies.

This is similar to the situation that occurred in Certain Steel from Austria. As discussed above, we treated as a subsidy the amount of losses left behind in the former company, without regard to whether there was a specific act by the government to cover those losses. In fact, the Government of Austria did make a payment a few years later to that company. Recognizing that the second transaction was basically to clean up the company's books for an event that had occurred earlier (the failure to transfer losses), we did not countervail the payment by the Government of Austria as it would have amounted to double-counting.

Finally, petitioners misuse the concept of cash flow effect when they argue that this concept prohibits us from using a snapshot approach. Cash flow effects do not identify subsidies. Instead, the cash flow concept tells us when to assign the benefit from a particular subsidy. For example, the cash flow concept tells us to assign the benefits received from a subsidized loan to the point in time when the company would have made the interest payment because this is when the company's cash flow is affected. In this case, the effect on ILVA of not assuming TAS' liabilities and losses occurred when the assets were transferred, in 1989 and 1990, and we have assigned the benefits to these years.

#### *Comment 2*

Petitioners argue that the Department did not directly address the question of the benefit to the Finsider group as a whole, and through the Finsider group to TAS, of a multi-billion lire debt forgiveness provided in connection with the 1988/90 steel industry restructuring. The only debt forgiveness that was included in the Department's preliminary calculations was the 99.9 billion lire in debt forgiveness provided to TAS.

Petitioners claim that the Department should countervail a debt forgiveness in the amount of 6.2 trillion lire to the Finsider Group in 1988 and allocate the resulting benefit over a sales denominator reflecting the scope of operations of the Finsider companies that were liquidated and merged into ILVA. Moreover, petitioners argue that the Department should countervail the 99.9 billion lire debt forgiveness provided specifically to TAS in 1989 as a separate benefit.

Respondents argue that petitioners have failed to establish that the forgiveness of Finsider's debt is tied to the subject merchandise. Respondents argue that the 1988 debt forgiveness to Finsider pre-dates the restructuring of



Finsider into ILVA by nearly one year. Thus, Finsider at the time of the debt forgiveness was not the same company as it was when its assets were transferred into ILVA. Respondents maintain that Finsider and TAS existed and functioned as two separate corporate entities and, therefore, argue that TAS was never potentially responsible for the assumption of Finsider's debt. Respondents assert that only the 99.9 billion lire debt forgiveness provided directly to TAS should be treated as a countervailable debt forgiveness.

#### DOC Position

In the early stages of this investigation, it became clear to us that there were two alternative approaches to addressing the allegations in the petition regarding subsidies to the producers of electrical steel. One approach would have been to analyze the restructuring of the entire Finsider group into ILVA and to examine all subsidies provided to Finsider by IRI and the GOI. Using this approach we would, in essence, be measuring subsidies provided to the Finsider group as a whole. Therefore, we would not have allocated subsidies to any of the group's operating companies, such as TAS.

The second approach would measure the subsidies provided to the producer of the subject merchandise. In other words, our analysis would focus on subsidies such as equity infusions, loans, and grants specifically provided to the producer of the subject merchandise, *i.e.*, Terni/TAS and the Specialty Steels Division of ILVA.

We chose the second approach for several reasons. First, it is the Department's policy to try to "tie" subsidies to the subject merchandise whenever possible (see GIA at 37267). Second, since the Finsider group was very large, consisting of numerous state-owned steel producers, only one of which produced the subject merchandise, we believed it would be more appropriate to focus our analysis on the producer of the subject merchandise. Finally, due to the extremely complex restructuring which occurred at the Finsider group level, we felt we would be able to more accurately measure the subsidies provided to the producer of the subject merchandise by following the second approach.

Petitioners have argued that the Department should countervail the subsidies emanating from the debt forgiveness provided to Finsider. Petitioners also argue that we should countervail the 99.9 billion lire debt forgiveness provided to TAS as well.

However, countervailing both instances of debt forgiveness would overstate the benefit to TAS because we would then be looking at the forgiveness from two different levels of analysis at the same time. As stated in the verification reports, the 99.9 billion debt forgiveness to TAS was part of the larger debt forgiveness provided to Finsider. Therefore, in order to be consistent with the approach chosen in this investigation, *i.e.*, to focus on the producer of the subject merchandise, we are countervailing only the debt and loss forgiveness provided to TAS.

#### Comment 3

Petitioners argue that the 300 billion lire payment from IRI to ILVA in 1992 should be countervailed as an equity infusion and not as an interest-free loan. Petitioners maintain that this capital contribution in 1992 was called an "interest free loan" because, at that time, it had not been expressly approved as an equity infusion. Also, petitioners point to the fact that there was no loan agreement. Petitioners maintain that the Department should not base its decision on "technicalities" such as the EC's delayed approval and the continued absence of a shareholders' decision approving a capital increase. Petitioners conclude that since the Department determined at verification that the EC has recently sanctioned this amount as an equity infusion, the Department should treat it as such.

Petitioners also argue that the 10,900 million lire "payment on capital account" to ILVA in 1991, which the Department found at verification, should be countervailed as an equity infusion. The nature of this payment was identical to that of the 1992 payment. Respondents argue that the Department's verification confirmed that this 1992 infusion was a liability as opposed to an equity infusion. Additionally, respondents state that there were two conditions which had to be met before the 1992 capital contribution could be considered an equity infusion: (1) Authorization from the EC; and (2) authorization from the company's shareholder. Neither of these two conditions was met during the POI and the amount was considered a "provisional capital increase." Thus, the Department properly recognized the legal limitations placed on this fund and, treated it as a short-term loan.

Respondents state that EC's preliminary approval of the capital contribution in 1993 did not occur until nearly a year and a half after the POI. Citing Countervailing Duty Determinations: Certain Steel Products from France ("Certain Steel from

France"), 58 FR 37313 (July 9, 1993), respondents argue that it is the reclassification of debt into equity which itself constitutes the potentially countervailable event in this case. According to respondents, since the potentially countervailable event took place after the POI, it is not subject to analysis in this investigation.

#### DOC Position

Based on an analysis of the primary features of the 1991 and 1992 provisional capital contributions, we find that the potential obligation to repay IRI (in the event that the EC did not approve the capital contribution) effectively makes these contributions contingent liabilities. To reflect their contingent nature, we have modelled the provisional capital contributions as short-term zero-interest loans which are rolled over every six months until such time as they are repaid or the EC approves their conversion to equity.

We disagree with respondents that Certain Steel from France is applicable in this instance. In the French case, we were looking at the year the debt-to-equity conversion occurred and decided that the equity infusion was the potentially countervailable event rather than the loan. In this case, the provisional capital increase is being treated as a loan throughout the POI. Therefore, there is no other potentially countervailable event in the POI.

We disagree with petitioners that there must be a loan repayment schedule or payment of interest in order for the Department to consider these payments to represent liabilities. The possibility of repayment was real. Therefore, the provisional capital increase is properly treated as a loan.

#### Comment 4

Petitioners argue that the scope of operations of the various entities that produce(d) electrical steel (*i.e.*, Terni, TAS, and the Specialty Steels Division of ILVA) has changed significantly over the years as a result of a series of restructurings. Petitioners argue that since TAS was created during the 1987 restructuring out of the assets of Terni, I.A.I. and Terminoss, Terni between 1978 and 1986 was not the same as the Specialty Steels Division of ILVA after 1989, which includes the assets of I.A.I. and Terminoss. According to petitioners, the Department must use a denominator which represents the ability to generate sales at the time a subsidy was given.

According to petitioners, the significant difference between 1986 sales of Terni and 1992 sales of ILVA's Specialty Steels Division indicates that these two entities are similar in name

only. Petitioners note that, in cases involving a merger, it is the Department's practice to perform a "tying analysis" in order to measure the benefits to the entity originally receiving the subsidy. Petitioners argue that since the 1987 restructuring of Terni cannot be separated from the overall Finsider restructuring, the Department, as it did in the preliminary determination of Certain Steel from Italy, should adjust ILVA's sales denominator in order to "reflect steel activities prior to restructuring." According to petitioners, the Department should use the sales of ILVA's Specialty Steels Divisions Terni plant (plus its share of intercompany sales) as the denominator for Terni-specific loans and grants, thereby excluding the stainless steel activities of ILVA's Specialty Steels Division.

Respondents argue that, since Terni's stainless steel producing subsidiaries (I.A.I. and Terninox), and other Terni assets were merely merged into a new entity, TAS, which subsequently became the Specialty Steels Division of ILVA, the restructurings did not dramatically alter the entity producing the subject merchandise. As such, according to respondents, the Department should reject suggestions that stainless steel sales be subtracted from the denominator.

Respondents further argue that the difference between Terni sales in 1986 and ILVA's Specialty Steels Division sales in 1992 can be explained by increased activity in areas whose production capability was enhanced pursuant to restructuring. Moreover, respondents argue that a company's sales cannot be expected to remain "static" as petitioners suggest. Finally, respondents also argue that, according to the Department's "pass-through" methodology, the Department should find that the price paid by TAS for I.A.I. and Terninox represented the exchange of one "subsidized" asset for another asset.

#### *DOC Position*

We disagree with petitioners that the 1987 restructuring was so fundamental that a comparison cannot be made between Terni and the Specialty Steels Division of ILVA. We believe that it is incorrect to characterize the merger of I.A.I. and Terninox into TAS as the introduction of unrelated assets to the producer of the subject merchandise. Since I.A.I. and Terninox were both subsidiaries of Terni prior to the 1987 restructuring, we find no reason to eliminate stainless steel sales from the Terni-specific denominator.

We do not disagree with petitioners that ILVA's sales have to be adjusted to

properly measure subsidies given to Terni/TAS. As noted by petitioners, in Certain Steel from Italy the Department adjusted ILVA sales to calculate subsidy margins for benefits accruing to Italsider and/or Nuova Italsider. To accomplish the same results in this investigation, we have used the sales of the Specialty Steels Division of ILVA to calculate the subsidy margin for Terni-specific benefits, rather than the sales of ILVA.

Finally, we agree with respondents that a company's sales cannot be expected to remain the same over time; *i.e.*, a comparison of nominal sales values separated by six years does not take into consideration inflation or the internal economies of scale resulting from restructuring.

#### *Comment 5*

Petitioners state that the Department did not use the highest interest rate on the record of the investigation for calculating the benchmark in its preliminary determination. Petitioners note that the IMF interest rates that it submitted in the petition are higher in some instances than the interest rate used by the Department.

The GOI, on the other hand, argues that petitioners' suggestion that the Department use the Italian "lending rate," as provided by the IMF, should be rejected since this is a short-term interest rate. Therefore, according to the GOI, this interest rate should not be considered representative of the highest long-term interest rate in Italy. Respondents state that the Department, as it did in the final determination of Certain Steel, correctly used the reference rate provided by the Bank of Italy to calculate benchmark rates.

#### *DOC Comment*

We note that the Bank of Italy's reference rate is the highest average long-term fixed interest rate on the record of this investigation. Because section 355.44(b)(6)(iv)(A) of the Proposed Regulations lists short-term interest rates as the least preferred choice for an uncreditworthy long-term interest rate benchmark, we cannot use the IMF "lending rate" as suggested by petitioners. Accordingly, the Department has continued to use the reference rate plus 12 percent of the ABI prime rate for purposes of constructing benchmark and discount rates.

#### *Comment 6*

Respondents argue that in cases involving companies experiencing a major restructuring or expansion, the Department recognizes that a reasonable private investor's analysis may depend on the company's prospects, rather than

its past financial experience.

Respondents cite to Certain Carbon Steel Products from Sweden, 58 FR 37385 (July 9, 1993) in support of their argument.

According to respondents, the ECSC Treaty permits government investment in a state-owned steel company only in cases where the EC determines that such investment is provided "under circumstances acceptable to a private investor operating under normal market economy conditions." Because of this requirement, a team of independent experts examined the GOI's proposed restructuring plan and concluded that the implementation of the plan afforded ILVA reasonable chances of achieving financial viability under normal market conditions.

Respondents further argue that the Department has considered the EC's approval of government equity investments as evidence that the transaction confers no countervailable benefits. Respondents cite to the administrative review of Industrial Nitrocellulose from France, 52 FR 833 (January 9, 1987), which involved the French nitrocellulose industry.

Petitioners argue that ILVA's claim of equityworthiness in 1988 is without merit. ILVA's predecessor companies, including Terni, incurred losses in every year examined by the Department. In addition, petitioners argue that nothing on the record suggests that ILVA's prospects after 1988 were so optimistic as to overcome years of poor financial performance and justify commercial investment by a private investment company.

#### *DOC Position*

We agree with respondents that where a major restructuring or expansion occurs, it may be appropriate to place greater reliance on the future prospects of the company than would be the case where an equity investment is made in an established enterprise (see *GIA* at 37244). For example, in the Swedish Steel case cited by respondents, we considered such factors as: (1) The anticipated rate of return on equity; (2) the extended length of time before the company was projected to be profitable; (3) the prospects of the world steel industry; (4) the cost structure of the company.

In this instance, the 1988 equity investment was made in ILVA, a company which would differ from the operating companies that went into it principally because of the substantial debt forgiveness that occurred as part of the 1988-90 restructuring. Relieved of this debt, ILVA's balance sheet, when it began operations in 1989, would be



much improved over that of its predecessor, Finsider.

Beyond this, however, we have little indication of ILVA's future prospects. There is no information on expected rates of return, the time frame for achieving profitability, or developments in the steel market that would allow us to reach a conclusion that ILVA would yield a reasonable rate of return in a reasonable period of time.

Respondents have discussed two indicators of the future prospects of ILVA, the independent study undertaken by the EC and the EC's decision allowing the investment. With respect to the study, it was not placed on the record and we have had no opportunity to analyze it. Without such analysis, we cannot simply accept respondents' characterization of the study's conclusion.

We also disagree with respondents that the EC's finding on this investment is dispositive. Our determinations of equityworthiness are made in accordance with the Department's standards, not the EC's. In Final Affirmative Countervailing Duty Determination: Certain Hot Rolled Lead and Bismuth Carbon Steel Products from France, 58 FR 6221, 6232 (January 27, 1993), we explicitly rejected the EC approval of the investment as not relevant. In Industrial Nitrocellulose from France, cited by respondents, the Department performed its own analysis and, contrary to respondents' assertion, did not rely on an EC finding. Respondents' reliance on "principles of comity" (citing the Restatement (Third) of Foreign Relations Law of the United States (ALI) section 481, is also inapposite, because comity involves respecting foreign judgments regarding the disposition of property and the status of persons.

Finally, while indicators of past performance may be less important, we do not believe that a private investor would ignore them entirely. As explained in our discussion of Terni's equityworthiness above, that company had performed poorly. Similarly, Italsider, another company that was restructured into ILVA, had performed poorly (see Certain Steel from Italy). Therefore, the past performance of companies that became ILVA offered no basis to believe that the 1988 investment in ILVA was consistent with commercial considerations.

#### Comment 7

Respondents argue that the Department only countervails worker assistance when a company is relieved of an obligation it would otherwise incur. According to respondents,

because it confirmed at verification that Italian companies have no obligation to retrain their workers, the Department should conclude that ECSC Article 56 worker training is not countervailable.

#### DOC Position

First, it should be noted that we did not countervail the portion of Article 56 retraining grants funded by the ECSC. With respect to the portion funded by the GOI under Law 181/89, we disagree that the workers assistance provision of the Proposed Regulations is applicable in this situation. There is a distinction between funds which cover the cost of upgrading the skills of workers remaining at ILVA (which is a cost normally born by the company to improve the efficiency of its work force), and funds provided to train workers leaving ILVA, which we consider a benefit solely to the worker. Only the former is properly categorized as countervailable "worker assistance" under section 355.44(j) of the Proposed Regulations, to the extent that it relieves the company of the cost of improving its workers' skills.

Since the GOI's contributions to match the ECSC Article 56 payments were only available to steel companies and these funds were used to cover part of ILVA's costs of training workers who remained at ILVA, we find that a countervailable benefit is being provided.

#### Comment 8

The GOI states that, based on the clearer understanding gained by the Department at verification regarding the types of loans eligible for Law 796/76 exchange rate guarantees, this program should be found not countervailable.

#### DOC Position

We note that the Department failed to send the GOI a deficiency questionnaire indicating that more information was needed to demonstrate the *de facto* use of Law 796/76. When it became evident at verification that such information was needed, we attempted to gather it. However, the information could not be provided in the form necessary in the limited time available during verification.

Accordingly, we have not made the adverse inference that this program is *de facto* specific to the steel industry. However, we note that this finding of non-countervailability only relates to this investigation and is subject to revision at the first administrative review if a countervailing duty order is issued.

#### Comment 9

The GOI notes that exports of the subject merchandise to the U.S. were not financed using Law 227/77. According to the GOI, this financing should not be considered countervailable because it is not limited to a particular industry and is also consistent with the Organization for Economic Cooperation and Development Understanding on official export credits. The GOI argues that since this financing is permitted by a multilateral agreement binding both the U.S. and Italy, it should not be considered countervailable.

#### DOC Position

We found no countervailable benefits under this program because ILVA did not use this financing for exports to the United States. With respect to the other arguments raised by the GOI, since this program provided export financing, its availability to a large number of industries is not relevant. For export subsidies, we need only find, pursuant to 355.43(a)(1) of the Proposed Regulations, that the financing for exports is provided at preferential rates. Second, although the U.S. and Italy participate in the OECD arrangement which establishes the interest rates that can be charged on export loans, nothing in that arrangement would preclude the application of countervailing duties on merchandise entering the U.S. which received subsidized financing.

#### Comment 10

Respondents note that at verification, the Department determined that Law 181/89 actually had three components: (1) the creation of alternative employment opportunities; (2) the development of new industrial initiatives ("reindustrialization"); and (3) worker retraining. Respondents state that the Department further determined that ILVA only received funds under the reindustrialization provision of Law 181/89.

Of the three reindustrialization projects, respondents claim that two were tied to non-subject merchandise. Therefore, they are not countervailable pursuant to section 355.47 of the Proposed Regulations. The third reindustrialization project was a "retraining center." Respondents argue that the Proposed Regulations state that "worker assistance" is only countervailable to the extent that it relieves a company of an obligation that it would otherwise incur (see section 355.44(j) of the Proposed Regulations). Since there is no obligation in Italy to

retrain workers, this project does not provide a countervailable benefit.

#### *DOC Position*

As a matter of clarification, we found that Law 181/89 has four components, the fourth being early retirement. However, the early retirement component expired prior to the POI. Since early retirement is typically considered a recurring benefit and, therefore, allocable to the year in which received, we did not establish the extent to which it had or had not been used by ILVA.

Regarding the reindustrialization component, we agree that two of the projects involved the further processing of non-subject merchandise. Therefore, we have found them not countervailable.

However, with respect to the training center, we disagree that this amounted to worker assistance within the meaning of the Proposed Regulations. As discussed in Comment 7 above, there is a distinction between worker assistance and funds that are being used to cover the costs that ILVA would incur to train its work force. Although not exclusively, the training center in question is used to upgrade the technical skills of ILVA workers. Therefore, we have determined that the GOI payments to cover part of the cost of building a training center provide a countervailable benefit to ILVA.

#### *Comment 11*

The GOI argues that the early retirement program would only be countervailable if companies had no choice but to keep surplus workers on the payroll. However, companies can carry out large-scale lay-offs under Italian law. Thus, the GOI contends that early retirement is an alternative to lay-offs and not an alternative to maintaining excess workers. The GOI contends that because companies are required to contribute to the costs for early retirement, the program is a burden, not a benefit, to them. The only beneficiaries under the early retirement program are the workers.

Moreover, according to respondents, early retirement is available to workers in a broad range of industries. The Department should, therefore, find that there is no selective treatment under the program.

According to petitioners, verification confirmed that early retirement is only available to a limited group of industries. Moreover, because use of early retirement under Article 27 is contingent upon approval from a government committee, the GOI exercises discretion in determining

which industries can use the program. Petitioners also argue that Italian companies have an obligation to provide early retirement benefits once the workers have opted for the program. The benefit should, therefore, be calculated as the GOI's contribution to the program because if government funds had not been provided, ILVA would have been legally responsible for the entire cost, according to petitioners.

#### *DOC Position*

We agree with the GOI that, by law, companies in Italy can carry out large-scale lay-offs. Moreover, we have no evidence that Italian companies have a legal obligation to keep workers on the payroll until they reach normal retirement age. However, based on verification, we have found that some companies, including ILVA, belong to a category of firms that must go through certain "steps and procedures," in the form of the provisions under Law 223/91 before they actually can reduce the workforce. In practice, therefore, large companies are obligated to use Law 223/91 to deal with surplus workers.

Regarding the general availability of early retirement, the structure of Law 223/91 is such that the early retirement option is available to a smaller group of companies than the lay-off option, CIG-S. Because the GOI was not able to provide evidence showing that the steel producers did not receive a disproportionate share of the quota granted under the early retirement option, we have used CIG-S as our "benchmark." Since the financial obligations imposed on the company under early retirement are more onerous than the obligations under CIG-S, we have determined that ILVA did not receive a benefit under the early retirement program.

#### *Comment 12*

Petitioners argue that the shares in ILVA owned by Italsider (in liquidation) were transferred to TAS free-of-charge in 1990. Respondents argue that ILVA did provide an invoice from Italsider requesting payment from TAS but that ILVA was unable to locate the payment record during verification. Moreover, respondents argue that the Department never posed the question of payment to TAS (in liquidation), nor did the Department verify the records of TAS (in liquidation). Therefore, respondents argue, ILVA should not be penalized for any missing information over which it has no control.

#### *DOC Position*

As discussed above in connection with the 1988-90 restructuring;

petitioners alleged several subsidies to TAS after the second asset transfer and receipt of Italsider's shares by TAS was among them. As we explained, we believe that we have captured the full benefit to the subject merchandise from the restructuring without analyzing these individual transactions. Therefore, TAS' payment or non-payment to Italsider is irrelevant to our analysis.

However, although we did not verify that TAS (in liquidation) paid Italsider for the shares, we do not believe that TAS kept the proceeds from the sale. This is because the proceeds were so large (1,563 billion lire) that they would have been more than enough to pay off all of TAS' outstanding liabilities and to return the company to a positive equity position. However, as TAS' books indicate, this did not happen.

#### *Comment 13*

Petitioners maintain that although evidence presented at verification may demonstrate that Terni received Law 750/81 funds based on its identity as a producer of forgings and castings, the Department nevertheless found that Terni's accounting records did not reflect that these grants were designated only for the production of forgings and castings. Therefore, petitioners argue that Terni treated and accounted for these grants as general funds, and did not specifically allocate them to its forgings and castings operations.

#### *DOC Position*

We find these grants to be not countervailable since they applied to merchandise not subject to this investigation. We disagree with petitioners' argument that Terni's treatment of these funds as "general funds" demonstrates that they were not specifically allocated to the production of forgings and castings. We stated in the GIA that when a company receives a general subsidy, the Department does not attempt to "trace" or establish how the subsidy was used. Conversely, if the subsidy is tied to the production of merchandise other than the merchandise under investigation, the Department also does not attempt to trace or establish how the subsidy was ultimately used. Furthermore, we believe that respondents provided sufficient documentation, which is fully discussed in the ILVA verification report, that grants under this program specifically applied to the production of forgings and castings. As stated in the GIA at 37267, if the benefit is tied to a product other than the merchandise under investigation, the Department will not find a countervailable subsidy on the subject merchandise.

**Verification**

In accordance with section 776(b) of the Act, we verified the information used in making our final determination. We followed standard verification procedures, including meeting with government and company officials, examination of relevant accounting records and examination of original source documents. Our verification results are outlined in detail in the public versions of the verification reports, which are on file in the Central Records Unit (room B-099 of the Main Commerce Building).

**Suspension of Liquidation**

In accordance with our affirmative preliminary determination, we instructed the U.S. Customs Service to suspend liquidation of all entries of electrical steel from Italy, which were entered or withdrawn from warehouse for consumption, on or after February 1, 1994, the date our preliminary determination was published in the Federal Register. If the ITC issues a final affirmative injury determination, we will instruct Customs to require a cash deposit for entries of the merchandise after that date in the amounts indicated below.

	Percent
Electrical Steel Country-Wide Ad Valorem Rate .....	24.42

**ITC Notification**

In accordance with section 705(d) of the Act, we will notify the ITC of our determination. In addition, we are making available to the ITC all nonprivileged and nonproprietary information relating to this investigation. We will allow the ITC access to all privileged and business proprietary information in our files, provided the ITC confirms that it will not disclose such information, either publicly or under an administrative protective order, without the written consent of the Deputy Assistant Secretary for Investigations, Import Administration.

If the ITC determines that material injury, or threat of material injury, does not exist, these proceedings will be terminated and all estimated duties deposited or securities posted as a result of the suspension of liquidation will be refunded or cancelled. If, however, the ITC determines that such injury does exist, we will issue a countervailing duty order directing Customs officers to assess countervailing duties on electrical steel from Italy.

**Return of Destruction of Proprietary Information**

This notice serves as the only reminder to parties subject to Administrative Protective Order (APO) of their responsibility concerning the return or destruction of proprietary information disclosed under APO in accordance with 19 CFR 355.34(d). Failure to comply is a violation of the APO.

This determination is published pursuant to section 705(d) of the Act and 19 CFR 355.20(a)(4).

Dated: April 11, 1994.

Susan G. Esserman,  
Assistant Secretary for Import Administration.

[FR Doc. 94-9313 Filed 04-15-94; 8:45 am]

BILLING CODE 3510-08-P

[A-588-831]

**Notice of Final Determination of Sales at Less Than Fair Value: Grain-Oriented Electrical Steel From Japan**

**AGENCY:** Import Administration, International Trade Administration, Department of Commerce

**EFFECTIVE DATE:** March 25, 1994.

**FOR FURTHER INFORMATION CONTACT:** Michael Ready or Jennifer Katt, Office of Antidumping Investigations, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW., Washington, DC 20230; telephone: (202) 482-2613 or (202) 482-0498, respectively.

**FINAL DETERMINATION:** We determine that imports of grain-oriented electrical steel from Japan are being, or are likely to be, sold in the United States at less than fair value, as provided in section 735 of the Tariff Act of 1930, as amended (the "Act"). The estimated margins are shown in the "Continuation of Suspension of Liquidation" section of this notice.

**Case History**

Since the preliminary determination in this investigation on February 2, 1994 (59 FR 5990, February 9, 1994), no interested party has submitted comments.

**Scope of the Investigation**

The product covered by this investigation is grain-oriented silicon electrical steel, which is a flat-rolled alloy steel product containing by weight at least 0.6 percent of silicon, not more than 0.08 percent of carbon, not more than 1.0 percent of aluminum, and no other element in an amount that would give the steel the characteristics of another alloy steel, of a thickness of no more than 0.56 millimeters, in coils of any width, or in straight lengths which are of a width measuring at least 10 times the thickness, as currently classifiable in the Harmonized Tariff Schedule of the United States ("HTS") under item subheadings 7225.10.0030, 7226.10.1030, 7226.10.5015 and 7226.10.5065. Although the HTS subheadings are provided for convenience and customs purposes, our

written description of the scope of this proceeding is dispositive. The HTS subheadings listed above reflect a revision as specified in the preliminary determination.

**Fair Value Comparisons**

Because both respondents, Kawasaki Steel Corporation ("Kawasaki") and Nippon Steel Corporation ("Nippon"), refused to respond to our antidumping questionnaire, we based our determination on best information available ("BIA"), pursuant to section 776(c) of the Act. See the preliminary determination notice for the methodology used to select the BIA margin.

**Continuation of Suspension of Liquidation**

We are directing the Customs Service to continue to suspend liquidation of all entries of grain-oriented electrical steel from Japan that are entered, or withdrawn from warehouse, for consumption on or after February 9, 1994, the date of publication of our preliminary determination in the Federal Register. The Customs Service shall require a cash deposit or posting of a bond equal to the amount by which the foreign market value of the merchandise subject to this investigation exceeds United States price. This suspension of liquidation will remain in effect until further notice. The weighted-average dumping margins are as follows:

Producer/manufacturer/exporter	Margin percent
Kawasaki Steel Corporation .....	31.08
Nippon Steel Corporation .....	31.08
All Others .....	31.08

**ITC Notification**

In accordance with section 735(d) of the Act, we have notified the International Trade Commission ("ITC") of our determination. The ITC will determine whether these imports are materially injuring, or threaten material injury to, the U.S. industry no later than 45 days from the date of this determination.

**Notification to Interested Parties**

This notice also serves as the only reminder to parties subject to administrative protective order ("APO") of their responsibility concerning the return or destruction of proprietary information disclosed under APO in accordance with 19 CFR 353.34(d). Failure to comply is a violation of the APO.

This determination is published pursuant to section 735(d) of the Act and 19 CFR 353.20(a)(4).

Dated: April 18, 1994.

Paul L. Joffa,

Deputy Assistant Secretary for Import Administration.

[FR Doc. 94-9948 Filed 4-22-94; 8:45 am]

BILLING CODE 3510-06-P

**Case History**

Since the initiation of this investigation on September 15, 1993, (58 FR 49017, September 21, 1993), the following events have occurred:

On October 20, 1993, the United States International Trade Commission ("ITC") issued an affirmative preliminary injury determination (see Investigation No. 701-TA-355, 58 FR 54168).

On November 4, 1993, the Department of Commerce ("Department") published a revision to the scope of this investigation (see 58 FR 58838, November 4, 1993). That scope revision is reflected below in the "Scope of the Investigation" section of this notice.

In November 1993, the Department issued its antidumping duty questionnaire to ILVA S.p.A. and Acciai Speciali Terni ("Terni"), the sole Italian producer of subject merchandise during the period of investigation. After formal transmittal of the questionnaire, officials from the Department traveled to Terni's production facilities in Italy in order to outline the Department's antidumping procedures, answer questions Terni might have concerning the proceeding and discuss any difficulties Terni may encounter in meeting the Department's reporting requirements.

In November and December, respectively, Terni submitted its responses to Sections A and B through D of our questionnaire.

In December 1993, the Department issued a supplemental questionnaire, and in January 1994, Terni submitted its response to that supplement.

On January 26, 1994, Terni requested a postponement of the final determination in this investigation.

**Postponement of Final Determination**

Pursuant to section 735(a)(2)(A) of the Act, on January 26, 1994, Terni requested that, in the event of an affirmative preliminary determination in this investigation, the Department postpone its final determination until not more than 135 days after the date of publication of the affirmative preliminary determinations. Pursuant to 19 CFR 353.20(b), if our preliminary determination is affirmative, and the Department receives a request from producers or resellers who account for a significant portion of the exports under investigation, we will, absent compelling reasons to the contrary, grant the request.

Because no such compelling reasons exist, we are postponing the final determination until the 135th day after the date of publication of this notice in the Federal Register.

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[A-475-811]

**Preliminary Determination of Sales at Less Than Fair Value and Postponement of Final Determination: Grain-Oriented Electrical Steel From Italy**

**AGENCY:** Import Administration, International Trade Administration, Department of Commerce.

**EFFECTIVE DATE:** February 9, 1994.

**FOR FURTHER INFORMATION CONTACT:** Jeffery B. Denning or Jennifer L. Katt, Office of Antidumping Investigations, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230; telephone (202) 482-4194 and 482-0498, respectively.

**PRELIMINARY DETERMINATION:** We preliminarily determine that grain-oriented electrical steel ("GOES") from Italy is being, or is likely to be, sold in the United States at less than fair value, as provided in section 733 of the Tariff Act of 1930, as amended (the "Act"). The estimated margins are shown in the "Suspension of Liquidation" section of this notice.

### Scope of the Investigation

The product covered by this investigation is grain-oriented silicon electrical steel, which is a flat-rolled alloy steel product containing by weight at least 0.6 percent of silicon, not more than 0.08 percent of carbon, not more than 1.0 percent of aluminum, and no other element in an amount that would give the steel the characteristics of another alloy steel, of a thickness of no more than 0.56 millimeters, in coils of any width, or in straight lengths which are of a width measuring at least 10 times the thickness, as currently classifiable in the Harmonized Tariff Schedule of the United States ("HTS") under item numbers 7225.10.0030, 7226.10.1030, 7226.10.5015 and 7226.10.5065. Although the HTS subheadings are provided for convenience and customs purposes, our written description of the scope of this proceeding is dispositive.

The HTS subheadings listed here reflect a revision from those identified in our Notice of Initiation, and in our published Revision of Scope of Investigations (58 FR 58838, November 4, 1993). This revision is due to the fact that the Harmonized Tariff Schedule has been amended so that there are now specific HTS subheadings for grain-oriented silicon electrical steel. This revision of identified HTS numbers pertains to this investigation, as well as the concurrent antidumping investigation from Japan (A-588-831) and countervailing duty investigation from Italy (C-475-812).

### Period of Investigation

The period of investigation ("POI") is March 1, 1993, through August 31, 1993.

### Such or Similar Comparisons

We have determined that the class or kind of merchandise subject to this investigation constitutes a single such or similar category. In making our fair value comparisons, in accordance with the Department's standard methodology, we first compared identical merchandise, as determined by the model-matching criteria contained in Appendix V of the questionnaire ("Appendix V"), on file in Room B-099 of the main building of the Department of Commerce ("Public File"). Since there were sales of identical merchandise in the home market to compare to U.S. sales, all of our price-to-price comparisons involved identical merchandise.

Because Terni reported a single level of trade for both the home and United States markets, in accordance with 19

CFR 353.58, all comparisons were made at the same level of trade.

### Fair Value Comparisons

To determine whether Terni's sales of GOES from Italy to the United States were made at less than fair value, we compared the United States price ("USP") to the foreign market value ("FMV"), as specified in the "United States Price" and "Foreign Market Value" sections of this notice.

### United States Price

All of Terni's U.S. sales to the first unrelated purchaser took place prior to importation into the United States. Therefore, in accordance with section 772(b) of the Act, our calculation of USP was based on the purchase price ("PP") methodology.

We calculated Terni's PP sales based on packed and delivered prices to unrelated customers in the United States. We made deductions, where appropriate, for U.S. brokerage and handling, U.S. duty and customs fees and freight expenses. We have also made adjustments for the value-added tax paid on comparison sales in Italy. These adjustments are made pursuant to *Federal-Mogul Corp. and The Torrington Co. v. United States*, 834 F. Supp. 1391 (CIT, 1993). For discussion of this adjustment see, Final Results of Administrative Review: Certain Industrial Forklifts from Japan, (59 FR 1374, January 10, 1994) and Final Determination of Sales at Less Than Fair Value: Certain Stainless Steel Wire Rods from France, (58 FR 6865, December 29, 1993).

### Foreign Market Value

In order to determine whether there was a sufficient volume of sales in the home market to serve as a viable basis for calculating FMV, we compared the volume of home market sales of subject merchandise to the volume of third country sales of subject merchandise, in accordance with section 773(a)(1)(B) of the Act. As a result we determined that the home market was viable, and therefore, we have based FMV on home market sales.

We used the Department's related party test to determine whether sales to related customers were made on an arm's length basis. See Appendix II to Final Determination of Sales at Less Than Fair Value: Certain Cold-Rolled Carbon Steel Flat Products from Argentina, (58 FR 37077, July 9, 1993), for a discussion of this test. We excluded from our price-to-price comparisons any sales to related customers we determined were not at arm's length. Additionally, after

issuance of the questionnaire, Terni stated in a submission that it sold only one type of GOES in the United States (conventional permeability GOES), but sold this as well as other types of GOES in its home market (high permeability GOES and "downgraded" GOES). Terni claimed that during the POI it had home market sales of identical merchandise, as determined by the Department's model-matching criteria, for all "models" of GOES sold in the United States, and requested that it be allowed to limit its reporting of home market sales on that basis. We agreed to Terni's request. Consequently, Terni was required to provide full reporting of all home market sales of conventional permeability GOES, as well as the following information for all remaining home market sales of subject merchandise:

- (1) All the Appendix V product characteristics for each unique product, as determined by that criteria, for all home market POI sales of subject merchandise;
- (2) The total POI volume and value of sales, broken down for each month of the POI, for each unique home market product, as determined by Appendix V and;
- (3) Sample sales invoices and order confirmations for POI sales of each unique product, as determined by Appendix V.

(See Memorandum from Team to Richard W. Moreland, dated December 10, 1993, in the Public File)

### Cost of Production

Based on allegations contained in the petition, and in accordance with section 773(b) of the Act, we initiated an investigation to determine whether Terni's home market POI sales were made at prices below its cost of production ("COP"), and over an extended period of time.

#### A. Calculation of COP

We calculated COP based on the sum of Terni's cost of materials, fabrication, general expenses and home market packing reported on its sales database, in accordance with section 773(b) of the Act. We relied on the submitted COP, except in the following instances where the costs were not appropriately quantified or valued:

1. We disallowed G&A expenses reported on a divisional basis for the POI. We were unable to determine ILVA S.p.A.'s annual G&A costs based on the information submitted. As BIA, pursuant to section 776(c) of the Act, we used the average 1992 SG&A percentage for the domestic industry as reported in petitioner's cost allegation dated August 26, 1993. Since we could not breakout the selling expenses from this percentage, we disregarded all

submitted selling and G&A expenses, and used the domestic average SG&A rate.

2. Terni's submitted financial expense was calculated based exclusively on interest expense incurred on a divisional basis during the period March 1 to August 31, 1993. The Department's policy is to compute a company's interest expense percentage using its audited consolidated annual financial statements for the year that most closely represents the POI. As EIA, we recalculated interest expense based on 1992 ILVA Group consolidated financial statements.

(See Concurrence Memorandum, dated January 28, 1994, for discussion of these adjustments)

**B. Test of Home Market Sale Prices**

After calculating COP, we tested whether, as required by section 773(b) of the Act, Terni's home market sales of subject merchandise were made at prices below COP, in substantial quantities, and over an extended period of time, according to the following methodology:

On a model-specific basis, (as determined by Appendix V) we compared COP to reported prices, minus movement charges and rebates. If over 90 percent of the sales of a model were at prices equal to or greater than the COP, we did not disregard any below-cost sales of that model because we determined that the below-cost sales were not made in "substantial quantities". If between ten and 90 percent of the sales of a given model were at prices equal to or greater than the COP, we discarded only the below-cost sales, provided sales of that model were also found to be made over an extended period of time. Where we found that more than 90 percent of the sales of a model were at prices below the COP and sold over an extended period of time, in accordance with section 773(b) of the Act, we disregarded all sales of that model, and calculated FMV based on constructed value ("CV").

In order to determine whether sales were made over an extended period of time, we performed the following analysis on a model-specific basis: (1) if a respondent sold a product in only one month of the POI and there were sales in that month below the COP, or (2) if a respondent sold a product during two months or more of the POI and there were sales below the COP during two or more of those months, then below-cost sales were considered to have been made over an extended period of time. Otherwise the below-cost sales were not

considered as having been made over an extended period of time.

**C. Results of COP Test**

We found that for certain models of GOES more than 90 percent of home market sales were at below-COP prices and were made over an extended period of time. Since Terni provided no indication that these sales were at prices that would permit recovery of all costs within a reasonable period of time and in the normal course of trade, we based FMV on CV for all U.S. sales left without an identical match to home market sales as a result of our application of the COP test.

**D. Calculation of CV**

We calculated CV based on the sum of Terni's cost of materials, fabrication, general expenses and U.S. packing costs as reported in the U.S. sales database. We made the adjustments described above for COP. In accordance with section 773(e)(1)(B)(i) and (ii) of the Act we included: (1) the greater of Terni's reported general expenses, adjusted as detailed above, or the statutory minimum of ten percent of the cost of manufacture ("COM") and; (2) for profit, we used the statutory minimum, eight percent of COM and general expenses (because actual profit on home market sales was less than eight percent).

**Price-to-Price Comparisons**

For those products for which there were an adequate number of sales at prices above the COP, we based FMV on home market prices. We calculated FMV based on delivered prices, inclusive of packing and VAT to customers in the home market. Based upon application of our related party test, we made comparisons only to home market sales to unrelated parties. Since all comparisons of U.S. and home market sales involved identical merchandise, we made no adjustments, pursuant to 19 CFR 353.57, for physical differences in merchandise. We deducted credit and warranty expenses. In addition we made deductions, where appropriate, for rebates and inland freight. We subtracted home market packing and added U.S. packing costs. Pursuant to section 773(a)(4)(B) of the Act and 19 CFR 353.58(a)(2), we made circumstance-of-sale adjustments for imputed credit and, where appropriate, certain U.S. warehousing expenses. We recalculated credit for those sales that had missing payment and or shipment dates. For sales with unreported shipment and payment dates, we used a weighted-average credit days for our imputed credit calculations. For sales with only unreported payment dates, we

used the date of the preliminary determination as the payday (see Concurrence Memorandum).

We included in FMV the amount of the VAT collected in the home market (19 percent). We also calculated the amount of tax that was due solely to the inclusion of price deductions in the original tax base (i.e., 19 percent of the sum of any adjustments, expenses and charges that were deducted from the tax base). We deducted this amount from the FMV after all other additions and deductions had been made. By making this additional tax adjustment, we avoid a distortion that would cause the creation of a dumping margin even when pre-tax dumping is zero (see Concurrence Memorandum).

**Price to CV Comparisons**

Where we compared Terni's U.S. prices to CV, we deducted from FMV the weighted-average home market direct selling expenses and added the U.S. model specific direct selling expenses.

**Currency Conversion**

We made currency conversions based on the official exchange rates in effect on the dates of the U.S. sales as certified by the Federal Reserve Bank of New York.

**Verification**

As provided in section 776(b) of the Act, we will verify information that we determine is acceptable for use in making our final determination.

**Suspension of Liquidation**

In accordance with section 733(d)(1) of the Act, we are directing the Customs Service to suspend liquidation of all entries of GOES from Italy that are entered, or withdrawn from warehouse, for consumption on or after the date of publication of this notice in the Federal Register. The Customs Service shall require a cash deposit or posting of a bond equal to the estimated preliminary dumping margins, as shown below. This suspension of liquidation will remain in effect until further notice. The estimated preliminary less than fair value dumping margins are as follows:

Producer/manufacturer/exporter	Weighted-average margin percentage
ILVA S.p.A. and Acciaierie Special Terni	5.62
All others	5.62

**ITC Notification**

In accordance with section 733(f) of the Act, we have notified the ITC of our determination. If our final determination is affirmative, the ITC will determine whether these imports are materially injuring, or threaten material injury to, the U.S. industry before the later of 120 days after the date of this preliminary determination or 45 days after our final determination.

**Public Comment**

Interested parties who wish to request a hearing must submit a written request to the Assistant Secretary for Import Administration, U.S. Department of Commerce, room B-099, within ten days of the publication of this notice. Requests should contain: (1) the party's name, address, and telephone number; (2) the number of participants; and (3) a list of the issues to be discussed.

In accordance with 19 CFR 353.38, case briefs or other written comments in at least ten copies must be submitted to the Assistant Secretary no later than May 6, 1994, and rebuttal briefs no later than May 12, 1994. A hearing, if requested, will be held on May 17, 1994, at 1 pm at the U.S. Department of Commerce in room 1815. Parties should confirm by telephone the time, date, and place of the hearing 48 hours prior to the scheduled time. In accordance with 19 CFR 353.38(b), oral presentations will be limited to issues raised in the briefs.

We will make our final determination not later than 135 days after publication of this determination in the Federal Register.

This determination is published pursuant to section 733(f) of the Act and 19 CFR 353.15(a)(4).

Dated: February 2, 1994.

Joseph A. Spetrini,  
Acting Assistant Secretary for Import  
Administration.

[FR Doc. 94-2998 Filed 2-8-94; 8:45 am]

BILLING CODE 3510-08-P



**APPENDIX B**  
**LIST OF PARTICIPANTS IN THE HEARING**



## CALENDAR OF PUBLIC HEARING

Those listed below appeared as witnesses at the United States International Trade Commission's hearing:

Subject:               **GRAIN ORIENTED SILICON  
ELECTRICAL STEEL FROM  
ITALY AND JAPAN**

Inv. Nos.:             **701-TA-355 and  
731-TA-659-660 (Final)**

Date and Time:       **April 12, 1994 - 9:30 a.m.**

Sessions were held in connection with the investigation in the Main Hearing Room 101 of the United States International Trade Commission, 500 E St., S.W., Washington, D.C.

In Support of Imposition of  
Antidumping Duties:

Collier, Shannon, Rill and Scott  
Washington, D.C.  
on behalf of

Allegheny Ludlum Corporation  
Armco Incorporated  
United Steelworkers of Amercia  
Butler Armco Independent Union  
Zanesville Armco Independent Union

F. Joseph Miller, Marketing Director, Silicon Steel,  
Allegheny Ludlum Corporation

James J. Goglio, Marketing Manager, Silicon Steel,  
Allegheny Ludlum Corporation

Charles A. Stitt, Vice President and General Manager,  
Electrical Products, Armco Advanced Materials Company

Robert I. ("Rip") Psyck, Manager, Sales and Marketing,  
Electrical Steel, Armco Advanced Materials Company

In Support of Imposition of  
Antidumping Duties cont'd:

Anthony L. Von Holle, Principal Research Engineer,  
Electrical Steel Research, Research and Technology,  
Armco, Incorporated

Ronald C. Steed, Vice President, Assistant General Manager,  
Hevi Duty Electric

David A. Hartquist)  
Michael J. Coursey)  
Kathleen Weaver Cannon)--OF COUNSEL  
David C. Smith, Jr.)

Clarisse A. Morgan, Georgetown Economic Services

In Opposition of Imposition of  
Antidumping Duties:

Morrison and Foerster  
Washington, D.C.  
on behalf of

General Electric Company (GE)

Ralph J. Kelsey, General Manager of  
Sourcing, General Electric Industrial  
and Power Systems

Gregory D. Coulter, Manager of Transformer  
Engineering and Technology, General Electric  
Industrial and Power Systems -- Power Delivery  
Systems, Distribution Transformer Department

Selig S. Merber, Counsel for International  
Trade Regulation and Sourcing, General Electric  
Company

Alan K. Palmer)  
Donald B. Cameron)--OF COUNSEL  
Neal J. Reynolds)

In Opposition of Imposition of  
Antidumping Duties cont'd:

Steptoe and Johnson  
Washington, D.C.  
on behalf of

Nippon Steel Corporation

Dr. Bruce Malashevich, President of  
Economic Consulting Services

John Gauthier, National Electrical  
Manufacturers Association

Daniel J. Plaine)  
Ed Krauland)--OF COUNSEL  
Mark Barnett)

Howrey and Simon  
Washington, D.C.  
on behalf of

Kawasaki Steel Corporation ("Kawasaki")

Lyman R. Guidry, President and CEO of Ermco,  
Dyersberg, Tennessee

Alan L. Wilks, Ermco

Robert H. Huey)  
Michael A. Hertzberg)  
Callie Georgeann Pappas)--OF COUNSEL  
Maria Tan Pedersen)

In Opposition of Imposition of  
Antidumping Duties cont'd:

Rogers and Wells  
Washington, D.C.  
on behalf of

Acciai Speciali Terni, S.r.l. ("ASI")

ILVA USA, Incorporated ("ILVA USA")

Fabio Balboni, Sales Manager, Specialty  
Steel Products, ILVA USA

William Silverman)-OF COUNSEL  
Ryan Trainer)

**APPENDIX C**  
**SUMMARY DATA**





Table C-1

Grain-oriented silicon electrical steel: Summary data concerning the U.S. market, 1990-93

\* \* \* \* \*

Figure C-1

Salient data for grain-oriented silicon electrical steel, 1990-93

\* \* \* \* \*

Table C-2

Conventional-permeability grain-oriented silicon electrical steel: Summary data concerning the U.S. market, 1990-93

\* \* \* \* \*

Table C-3

High-permeability grain-oriented silicon electrical steel: Summary data concerning the U.S. market, 1990-93

\* \* \* \* \*



**APPENDIX D**

**U.S. IMPORTS BASED ON OFFICAL STATISTICS OF  
THE U.S. DEPARTMENT OF COMMERCE**



Table D-1  
Silicon electrical steel: U.S. imports, by sources, 1990-93

Item	1990	1991	1992	1993
	<u>Quantity (short tons)</u>			
Italy . . . . .	10,900	13,535	15,062	24,942
Japan . . . . .	37,460	40,042	39,808	50,545
Subtotal . . . . .	48,360	53,578	54,870	75,487
Austria . . . . .	0	1	0	64
Belgium . . . . .	0	46	685	0
Brazil . . . . .	1,107	468	433	1,878
Canada . . . . .	5,086	5,552	4,174	1,544
Czech Republic . . . . .	0	0	0	21
France . . . . .	1,664	1,815	2,183	2,412
Germany . . . . .	7,045	6,967	7,484	10,620
Hong Kong . . . . .	1	0	0	0
South Korea . . . . .	213	0	14	0
Mexico . . . . .	0	0	0	4
Netherlands . . . . .	22	0	0	0
Russia . . . . .	0	0	39	1,277
Slovenia . . . . .	0	0	18	2,489
Sweden . . . . .	9,844	12,440	10,418	9,312
Switzerland . . . . .	0	0	0	157
United Kingdom . . . . .	2,048	857	1,525	9,592
Yugoslavia (former) . . . . .	774	253	0	0
Total . . . . .	76,163	81,976	81,842	114,857
	<u>Value (1,000 dollars)</u>			
Italy . . . . .	12,699	14,713	16,637	27,088
Japan . . . . .	61,131	62,304	64,575	72,770
Subtotal . . . . .	73,829	77,017	81,212	99,858
Austria . . . . .	0	5	0	42
Belgium . . . . .	0	66	771	0
Brazil . . . . .	659	287	254	2,086
Canada . . . . .	4,591	5,628	4,415	1,446
Czech Republic . . . . .	0	0	0	26
France . . . . .	2,547	2,757	3,239	3,493
Germany . . . . .	6,472	6,462	7,245	10,337
Hong Kong . . . . .	4	0	0	0
South Korea . . . . .	256	0	12	0
Mexico . . . . .	0	0	0	5
Netherlands . . . . .	28	0	0	0
Russia . . . . .	0	0	47	1,272
Slovenia . . . . .	0	0	160	1,408
Sweden . . . . .	11,024	13,976	11,846	9,303
Switzerland . . . . .	0	0	0	171
United Kingdom . . . . .	2,537	997	1,606	10,861
Yugoslavia (former) . . . . .	505	161	0	0
Total . . . . .	102,451	107,356	110,807	140,307

Continued on next page.

Table D-1--Continued  
 Silicon electrical steel: U.S. imports, by sources, 1990-93

Item	1990	1991	1992	1993
	<u>Unit value (per short ton)</u>			
Italy . . . . .	\$1,165	\$1,087	\$1,105	\$1,086
Japan . . . . .	1,632	1,556	1,622	1,440
Average . . . . .	1,527	1,437	1,480	1,323
Austria . . . . .	( <sup>1</sup> )	6,325	( <sup>1</sup> )	660
Belgium . . . . .	( <sup>1</sup> )	1,427	1,126	( <sup>1</sup> )
Brazil . . . . .	595	614	586	1,111
Canada . . . . .	903	1,014	1,058	937
Czech Republic . . . . .	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	1,228
France . . . . .	1,531	1,519	1,484	1,448
Germany . . . . .	919	928	968	973
Hong Kong . . . . .	4,541	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
South Korea . . . . .	1,203	( <sup>1</sup> )	825	( <sup>1</sup> )
Mexico . . . . .	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	1,340
Netherlands . . . . .	1,248	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Russia . . . . .	( <sup>1</sup> )	( <sup>1</sup> )	1,210	996
Slovenia . . . . .	( <sup>1</sup> )	( <sup>1</sup> )	9,138	566
Sweden . . . . .	1,120	1,123	1,137	999
Switzerland . . . . .	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	1,093
United Kingdom . . . . .	1,239	1,163	1,053	1,132
Yugoslavia (former) . . . . .	653	637	( <sup>1</sup> )	( <sup>1</sup> )
Average . . . . .	1,345	1,310	1,354	1,222
	<u>Share of total quantity (percent)</u>			
Italy . . . . .	14.3	16.5	18.4	21.7
Japan . . . . .	49.2	48.8	48.6	44.0
Subtotal . . . . .	63.5	65.4	67.0	65.7
Austria . . . . .	0.0	( <sup>2</sup> )	0.0	0.1
Belgium . . . . .	0.0	0.1	0.8	0.0
Brazil . . . . .	1.5	0.6	0.5	1.6
Canada . . . . .	6.7	6.8	5.1	1.3
Czech Republic . . . . .	0.0	0.0	0.0	( <sup>2</sup> )
France . . . . .	2.2	2.2	2.7	2.1
Germany . . . . .	9.2	8.5	9.1	9.2
Hong Kong . . . . .	( <sup>2</sup> )	0.0	0.0	0.0
South Korea . . . . .	0.3	0.0	( <sup>2</sup> )	0.0
Mexico . . . . .	0.0	0.0	0.0	( <sup>2</sup> )
Netherlands . . . . .	( <sup>2</sup> )	0.0	0.0	0.0
Russia . . . . .	0.0	0.0	( <sup>2</sup> )	1.1
Slovenia . . . . .	0.0	0.0	( <sup>2</sup> )	2.2
Sweden . . . . .	12.9	15.2	12.7	8.1
Switzerland . . . . .	0.0	0.0	0.0	0.1
United Kingdom . . . . .	2.7	1.0	1.9	8.4
Yugoslavia (former) . . . . .	1.0	0.3	0.0	0.0
Total . . . . .	100.0	100.0	100.0	100.0

See footnotes at end of table.

Table D-1--Continued  
 Silicon electrical steel: U.S. imports, by sources, 1990-93

Item	1990	1991	1992	1993
	Share of total value ( <i>percent</i> )			
Italy . . . . .	12.4	13.7	15.0	19.3
Japan . . . . .	59.7	58.0	58.3	51.9
Sutotal . . . . .	72.1	71.7	73.3	71.2
Austria . . . . .	0.0	( <sup>2</sup> )	0.0	( <sup>2</sup> )
Belgium . . . . .	0.0	0.1	0.7	0.0
Brazil . . . . .	0.6	0.3	0.2	1.5
Canada . . . . .	4.5	5.2	4.0	1.0
Czech Republic . . . . .	0.0	0.0	0.0	( <sup>2</sup> )
France . . . . .	2.5	2.6	2.9	2.5
Germany . . . . .	6.3	6.0	6.5	7.4
Hong Kong . . . . .	( <sup>2</sup> )	0.0	0.0	0.0
South Korea . . . . .	0.2	0.0	( <sup>2</sup> )	0.0
Mexico . . . . .	0.0	0.0	0.0	( <sup>2</sup> )
Netherlands . . . . .	( <sup>2</sup> )	0.0	0.0	0.0
Russia . . . . .	0.0	0.0	( <sup>2</sup> )	0.9
Slovenia . . . . .	0.0	0.0	0.1	1.0
Sweden . . . . .	10.8	13.0	10.7	6.6
Switzerland . . . . .	0.0	0.0	0.0	0.1
United Kingdom . . . . .	2.5	0.9	1.4	7.7
Yugoslavia (former) . . . . .	0.5	0.1	0.0	0.0
Total . . . . .	100.0	100.0	100.0	100.0

<sup>1</sup> Not applicable.

<sup>2</sup> Positive figure, but less than significant digits displayed.

Note.--Because of rounding, figures may not add to the totals shown; unit values are calculated from unrounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.





**APPENDIX E**  
**SUMMARY DATA, BY U.S. PRODUCER,**  
**AND**  
**DATA CONCERNING ARMCO'S**  
**CONVENTIONAL- AND HIGH-PERMEABILITY GRAIN-ORIENTED SILICON**  
**ELECTRICAL STEEL**



Table E-1

Grain-oriented silicon electrical steel: Summary data concerning Allegheny, 1990-93

\* \* \* \* \*

Table E-2

Grain-oriented silicon electrical steel: Summary data concerning Armco, 1990-93

\* \* \* \* \*

Table E-3

Grain-oriented silicon electrical steel: Armco's operational and profit and loss data for conventional- and high-permeability steels, 1993

\* \* \* \* \*



**APPENDIX F**  
**SUMMARY SHIPMENT DATA, BY GRADE, 1990-93**



Table F-1  
Grain-oriented silicon electrical steel: Summary shipment data by source and grade, 1990-93

\* \* \* \* \*





**APPENDIX G**

**ALLEGHENY'S PRODUCTION COSTS FOR CONVENTIONAL-PERMEABILITY  
GRAIN-ORIENTED SILICON ELECTRICAL STEEL,  
FISCAL YEARS 1990-93**



Table G-1  
Allegheny's production costs for its conventional-permeability grain-oriented silicon electrical steel,  
fiscal years 1990-93

\* \* \* \* \*



**APPENDIX H**

**COMMENTS RECEIVED FROM U.S. PRODUCERS ON THE IMPACT OF  
IMPORTS OF GRAIN-ORIENTED SILICON ELECTRICAL STEEL  
FROM ITALY AND JAPAN ON THEIR GROWTH, INVESTMENT,  
ABILITY TO RAISE CAPITAL, OR EXISTING DEVELOPMENT  
AND PRODUCTION EFFORTS, INCLUDING EFFORTS TO DEVELOP  
A DERIVATIVE OR MORE ADVANCED VERSION OF THE PRODUCT**



The Commission requested U.S. producers to describe any actual or anticipated negative effects of grain-oriented silicon electrical steel from Italy or Japan on their growth, investment, ability to raise capital, or existing development and production efforts, including efforts to develop a derivative or more advanced version of the product. Their comments are as follows:

1. Since January 1, 1990, has your firm experienced any actual negative effects on its growth, investment, ability to raise capital, or existing development and production efforts, including efforts to develop a derivative or more advanced version of the product, as a result of imports of grain-oriented silicon electrical steel from Italy or Japan?

Allegheny

\* \* \* \* \*

Armco

\* \* \* \* \*

2. Does your firm anticipate any negative impact of imports of grain-oriented silicon electrical steel from Italy or Japan?

Allegheny

\* \* \* \* \*

Armco

\* \* \* \* \*

3. Has the scale of capital investments undertaken been influenced by the presence of imports of grain-oriented silicon electrical steel from Italy or Japan?

Allegheny

\* \* \* \* \*

Armco

\* \* \* \* \*





**APPENDIX I**  
**PURCHASER PRICE DATA**



Table I-1

Product 1: Weighted-average net delivered purchase prices reported by U.S. stampers/service centers, and margins of underselling, by quarters, Jan. 1990-Dec. 1993

\* \* \* \* \*

Table I-2

Product 2: Weighted-average net delivered purchase prices reported by U.S. stampers/service centers, and margins of underselling, by quarters, Jan. 1990-Dec. 1993

\* \* \* \* \*

Table I-3

Product 3: Weighted-average net delivered purchase prices reported by U.S. transformer manufacturers, and margins of (overselling), by quarters, Jan. 1990-Dec. 1993

Period	United States		Japan		
	Price	Quantity	Price	Quantity	Margin
	<i>Per pound</i>	<i>1,000 pounds</i>	<i>Per pound</i>	<i>1,000 pounds</i>	<i>Per-cent</i>
<b>1990:</b>					
Jan.-Mar. . . . .	\$0.79	25,643	\$0.85	1,678	(7.5)
Apr.-June . . . . .	0.79	27,943	0.85	1,706	(7.6)
July-Sept. . . . .	0.81	25,950	0.85	1,674	(5.5)
Oct.-Dec. . . . .	0.81	24,674	0.85	1,869	(5.5)
<b>1991:</b>					
Jan.-Mar. . . . .	0.81	24,012	0.85	2,744	(4.5)
Apr.-June . . . . .	0.81	24,972	0.85	2,595	(3.9)
July-Sept. . . . .	0.81	23,974	0.85	2,809	(4.7)
Oct.-Dec. . . . .	0.81	21,858	0.85	2,434	(4.0)
<b>1992:</b>					
Jan.-Mar. . . . .	0.80	24,455	0.82	1,618	(2.9)
Apr.-June . . . . .	0.80	23,687	0.82	1,618	(3.1)
July-Sept. . . . .	0.79	23,189	0.82	2,768	(4.0)
Oct.-Dec. . . . .	0.80	22,394	0.82	2,637	(3.4)
<b>1993:</b>					
Jan.-Mar. . . . .	0.79	23,957	0.81	2,710	(1.8)
Apr.-June . . . . .	0.80	24,542	0.81	3,255	(1.5)
July-Sept. . . . .	0.80	25,832	0.80	2,219	(0.8)
Oct.-Dec. . . . .	0.79	28,836	0.80	1,685	(0.6)

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Table I-4

Product 4: Weighted-average net delivered purchase prices reported by U.S. transformer manufacturers, and margins of underselling, by quarters, Jan. 1990-Dec. 1993

Period	United States		Japan		
	Price <i>Per pound</i>	Quan- tity <i>1,000 pounds</i>	Price <i>Per pound</i>	Quan- tity <i>1,000 pounds</i>	Margin <i>Per- cent</i>
<b>1990:</b>					
Jan.-Mar. . . . .	\$1.02	330	\$0.97	5,590	5.4
Apr.-June . . . . .	1.04	408	0.98	7,714	5.5
July-Sept. . . . .	0.99	531	0.97	6,107	1.6
Oct.-Dec. . . . .	1.02	413	0.98	7,230	3.9
<b>1991:</b>					
Jan.-Mar. . . . .	1.01	1,191	0.99	7,867	1.9
Apr.-June . . . . .	1.01	1,240	0.99	6,932	2.1
July-Sept. . . . .	1.01	1,007	0.98	5,697	3.0
Oct.-Dec. . . . .	1.01	786	0.98	6,391	2.9
<b>1992:</b>					
Jan.-Mar. . . . .	1.01	1,842	1.00	8,999	1.3
Apr.-June . . . . .	1.02	1,865	0.99	7,428	2.4
July-Sept. . . . .	1.02	1,690	1.00	7,944	2.1
Oct.-Dec. . . . .	1.04	1,322	1.00	7,952	4.0
<b>1993:</b>					
Jan.-Mar. . . . .	1.04	893	1.00	6,731	3.7
Apr.-June . . . . .	1.03	782	1.00	7,604	2.9
July-Sept. . . . .	1.04	1,320	1.00	7,431	4.2
Oct.-Dec. . . . .	1.04	1,102	1.00	5,927	3.9

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Table I-5

Products 5 and 6: Weighted-average net delivered purchase prices reported by U.S. transformer manufacturers, by quarters, Jan. 1990-Dec. 1993<sup>1</sup>

Period	Japan Product 5		Japan Product 6	
	Price <i>Per</i> <i>pound</i>	Quan- tity <i>1,000</i> <i>pounds</i>	Price <i>Per</i> <i>pound</i>	Quan- tity <i>1,000</i> <i>pounds</i>
<b>1990:</b>				
Jan.-Mar. . . . .	\$0.95	4,292	\$1.03	1,028
Apr.-June . . . . .	0.95	4,622	1.03	1,300
July-Sept. . . . .	0.95	3,524	1.03	1,342
Oct.-Dec. . . . .	0.95	4,747	1.03	815
<b>1991:</b>				
Jan.-Mar. . . . .	0.94	2,491	1.05	1,257
Apr.-June . . . . .	0.96	3,770	1.05	1,821
July-Sept. . . . .	0.97	2,752	1.05	1,256
Oct.-Dec. . . . .	0.96	2,849	1.05	1,986
<b>1992:</b>				
Jan.-Mar. . . . .	0.98	3,801	1.05	2,629
Apr.-June . . . . .	0.99	2,740	1.05	3,229
July-Sept. . . . .	0.98	3,466	1.05	2,478
Oct.-Dec. . . . .	0.98	2,730	1.04	2,519
<b>1993:</b>				
Jan.-Mar. . . . .	0.99	1,350	1.04	3,332
Apr.-June . . . . .	1.00	1,208	1.02	3,493
July-Sept. . . . .	0.99	2,133	1.04	4,189
Oct.-Dec. . . . .	1.00	1,460	1.03	5,046

<sup>1</sup> Products meeting the descriptions of products 5 and 6 are not produced in the United States. Thus, only prices for the products imported from Japan are shown.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.



