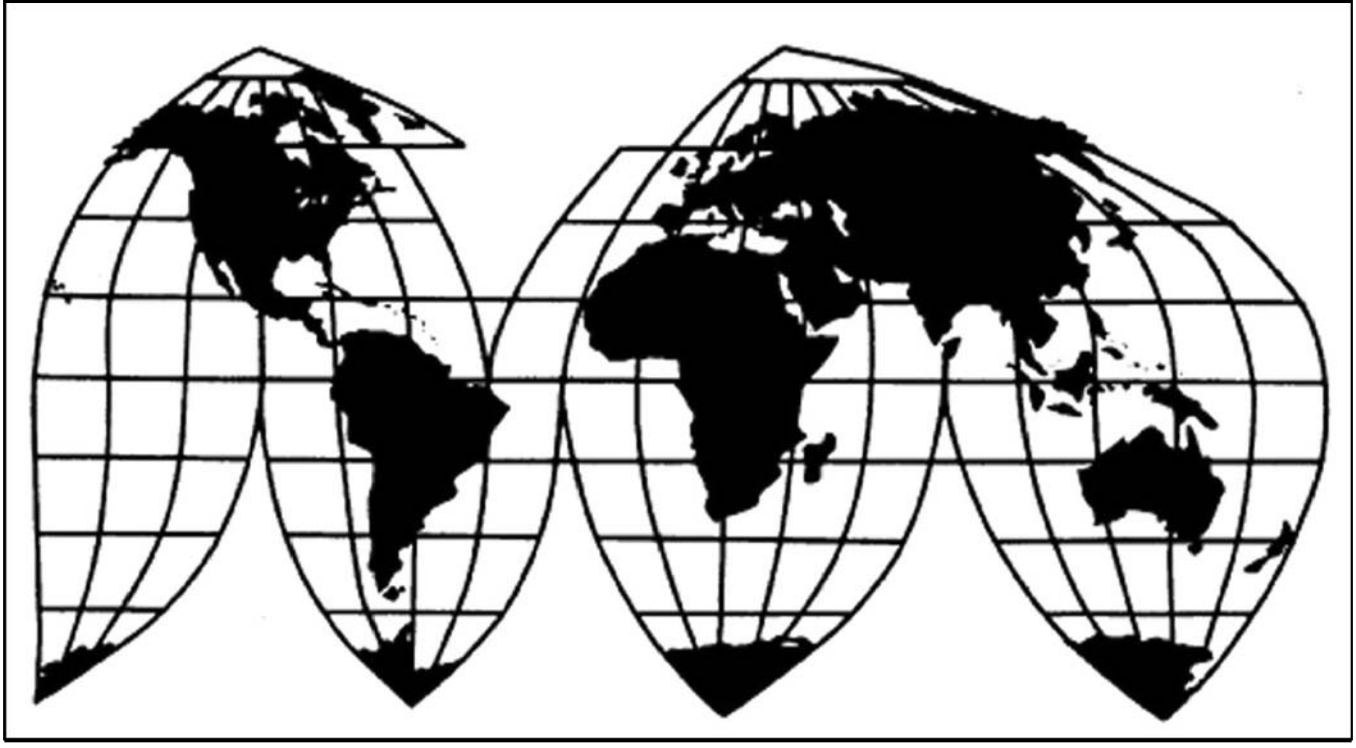
Grain-Oriented Electrical Steel from China, Czech Republic, Germany, Japan, Korea, Poland, and Russia

Investigation Nos. 701-TA-505 and 731-TA-1231-1237 (Preliminary)

Publication 4439 **November 2013**

U.S. International Trade Commission



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UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation Nos. 701-TA-505 and 731-TA-1231-1237 (Preliminary)

GRAIN-ORIENTED ELECTRICAL STEEL FROM
CHINA, CZECH REPUBLIC, GERMANY, JAPAN, KOREA, POLAND, AND RUSSIA

DETERMINATIONS

On the basis of the record[1] developed in the subject investigations, the United States International Trade Commission (Commission) determines, pursuant to sections 703(a) and 733(a) of the Tariff Act of 1930 (19 U.S.C. §§ 1671b(a) and 1673b(a)) (the Act), that there is a reasonable indication that an industry in the United States is materially injured by reason of imports from China, Czech Republic, Germany, Japan, Korea, Poland, and Russia of grain-oriented electrical steel, provided for in subheadings 7225.11.00, 7226.11.10, and 7226.11.90 of the Harmonized Tariff Schedule of the United States, that are alleged to be sold in the United States at less than fair value (LTFV), and by reason of imports of grain-oriented electrical steel that are allegedly subsidized by the Government of China.

COMMENCEMENT OF FINAL PHASE INVESTIGATIONS

Pursuant to section 207.18 of the Commission's rules, the Commission also gives notice of the commencement of the final phase of its investigations. The Commission will issue a final phase notice of scheduling, which will be published in the *Federal Register* as provided in section 207.21 of the Commission's rules, upon notice from the Department of Commerce (Commerce) of affirmative preliminary determinations in the investigations under sections 703(b) or 733(b) of the Act, or, if the preliminary determinations are negative, upon notice of affirmative final determinations in those investigations under sections 705(a) or 735(a) of the Act. Parties that filed entries of appearance in the preliminary phase of the investigations need not enter a separate appearance for the final phase of the investigations. Industrial users, and, if the merchandise under investigation is sold at the retail level, representative consumer organizations have the right to appear as parties in Commission antidumping and countervailing duty investigations. The Secretary will prepare a public service list containing the names and addresses of all persons, or their representatives, who are parties to the investigations.

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

BACKGROUND

On September 18, 2013, a petition was filed with the Commission and Commerce by of AK Steel Corp., West Chester, Ohio; Allegheny Ludlum, LLC, Pittsburgh, Pennsylvania; and the United Steelworkers, Pittsburgh, Pennsylvania, alleging that an industry in the United States is materially injured or threatened with material injury by reason of LTFV and subsidized imports of grain-oriented electrical steel from China and LTFV imports of grain-oriented electrical steel from Czech Republic, Germany, Japan, Korea, Poland, and Russia. Accordingly, effective September 18, 2013, the Commission instituted countervailing duty investigation No. 701-TA-505 and antidumping duty investigation Nos. 731-TA-1231-1237 (Preliminary).

Notice of the institution of the Commission's investigations and of a public conference 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* on September 25, 2013 ((78 FR 59059), as revised on October 21, 2013 (78 FR 64011, October 25, 2013)). The conference was held in Washington, DC, on October 25, 2013, and all persons who requested the opportunity were permitted to appear in person or by counsel.

Views of the Commission

Based on the record in the preliminary phase of these investigations, we find that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of grain-oriented electrical steel ("GOES") from China, the Czech Republic, Germany, Japan, Korea, Poland, and Russia that are allegedly sold in the United States at less than fair value and imports of GOES from China that are allegedly subsidized by the Government of China.

I. The Legal Standard for Preliminary Determinations

The legal standard for preliminary antidumping and countervailing duty determinations requires the Commission to determine, based upon the information available at the time of the preliminary determinations, whether there is a reasonable indication that a domestic industry is materially injured or threatened with material injury, or that the establishment of an industry is materially retarded, by reason of the allegedly unfairly traded imports.[1] In applying this standard, the Commission weighs the evidence before it and determines whether "(1) the record as a whole contains clear and convincing evidence that there is no material injury or threat of such injury; and (2) no likelihood exists that contrary evidence will arise in a final investigation."[2]

II. Background

The petitions in these investigations were filed on September 18, 2013, by AK Steel Corporation ("AK Steel") and Allegheny Ludlum, LLC ("Allegheny"), domestic producers of GOES, and The United Steel Workers, a trade union whose workers produce GOES).[3] Petitioners AK Steel and Allegheny ("Petitioners") are domestic producers of GOES and accounted for all reported domestic GOES production. Petitioners appeared at the staff conference and submitted postconference briefs.

The following respondents and groups of respondents appeared at the staff conference and submitted postconference briefs:

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[1] 19 U.S.C. §§ 1671b(a), 1673b(a) (2000); *see also American Lamb Co. v. United States*, 785 F.2d 994, 1001-04 (Fed. Cir. 1986); *Aristech Chem. Corp. v. United States, 2*0 CIT 353, 354-55 (1996).

[2] *American Lamb Co.*, 785 F.2d at 1001; *see also Texas Crushed Stone Co. v. United States*, 35 F.3d 1535, 1543 (Fed. Cir. 1994).

[3] Due to a lapse of appropriations and the related shutdown of the Commission's investigative activities between October 1 and October 16, 2013, the Commission tolled the deadlines in these investigations. *See* 78 Fed. Reg. 64011 (Oct. 25, 2013).

(1) Baoshan Iron & Steel Co., Ltd. and Baosteel America, Inc. ("Baosteel"), a producer of the subject merchandise in China and a U.S. importer of subject merchandise from China.

(2) ThyssenKrupp Electrical Steel GmbH ("ThyssenKrupp"), a producer of the subject merchandise in Germany.

(3) JFE Steel Corporation and Nippon Steel ("JFE") & Sumitomo Metal Corporation ("Sumitomo"), producers of the subject merchandise in Japan (collectively, "Japanese Producers").

(4) Novolipetsk Steel ("NLMK"), a producer of the subject merchandise in Russia.

The Government of the People's Republic of China and the Ministry of Economic Development of the Russian Federation each filed a postconference brief.

U.S. industry data are based on the questionnaire responses of two producers, AK Steel and Allegheny, which accounted for all U.S. production of GOES in 2012. Data for subject imports are based on official import data, as adjusted.[4]

The Commission received responses to its questionnaires from eight foreign producers/exporters of subject merchandise, as follows:

- one producer/exporter in China, Baosteel, which accounted for *** percent of GOES production in China, but *** U.S. imports of GOES from China during the period of investigation ("POI"), which encompasses January 2010 to June 2013;[5]
- one producer/exporter in the Czech Republic, ArcelorMittal Frydek-Mistek A.S., which states that it accounts for all GOES production in the Czech Republic, *** its reported exports to the United States accounted for *** percent of U.S. imports of GOES from the Czech Republic in 2012 as reported in official U.S. import statistics;[6]
- the sole producer/exporter in Germany, ThyssenKrupp, accounting for *** percent of U.S. imports of GOES from Germany in 2012 as reported in official U.S. import statistics;[7]
- the two producers/exporters in Japan, JFE and Sumitomo, accounting for *** percent of U.S. imports of GOES from Japan in 2012 as reported in official U.S. import statistics;[8]
- the sole producer/exporter in Korea, POSCO, accounting for *** percent of U.S. imports of GOES from Korea in 2012 as reported in official U.S. import statistics;[9] and

[4] Confidential Report ("CR") at IV-3, Public Report ("PR") at IV-2. The nature of the adjustment is discussed further below.

[5] CR at VII-4, PR at VII-3.

[6] CR at VII-8, PR at VII-4.

[7] CR at VII-12, PR at VII-6.

[8] CR at VII-17, PR at VII-7.

[9] CR at VII-23, PR at VII-9.

• the two producers/exporters in Russia, NLMK and Public Joint Stock Company Ashinskiy Metallurgical Works, accounting for *** percent of U.S. imports of GOES from Russia in 2012 as reported in official U.S. import statistics.[10]

The Commission did not receive a response to the questionnaire issued to the only known producer of GOES in Poland, Stalprodukt S.A.[11]

Prior Investigations. The Commission instituted investigations concerning GOES from Italy and Japan in 1993. In 1994, following the Commission's final affirmative determinations, Commerce published a countervailing duty order on GOES from Italy and antidumping duty orders on GOES from Italy and Japan.[12] The orders were revoked effective March 14, 2006, after the domestic industry expressed its intention to not participate in the second five-year reviews of the orders.[13]

III. Domestic Like Product

A. Legal Standard

In determining whether there is a reasonable indication that an industry in the United States is materially injured or threatened with material injury by reason of imports of the subject merchandise, the Commission first defines the "domestic like product" and the "industry."[14] Section 771(4)(A) of the Tariff Act of 1930, as amended ("the Tariff Act"), defines the relevant domestic industry as the "producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product."[15] In turn, the Tariff Act defines "domestic 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."[16]

The decision regarding the appropriate domestic like product(s) in an investigation is a factual determination, and the Commission has applied the statutory standard of "like" or

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[10] CR at VII-27, PR at VII-11.

[11] CR at VII-30, PR at VII-13.

[12] 59 Fed. Reg. 29414 (Jun. 7, 1994) (countervailing duty order on GOES from Italy), 59 Fed. Reg. 29984 (Jun. 10, 1994) (antidumping duty order on GOES from Japan), and 59 Fed. Reg. 41431 (Aug. 12, 1994) (antidumping duty order on GOES from Italy).

[13] 59 Fed. Reg. 15376 (Mar. 28, 2006).

[14] 19 U.S.C. § 1677(4)(A).

[15] 19 U.S.C. § 1677(4)(A).

[16] 19 U.S.C. § 1677(10).

"most similar in characteristics and uses" on a case-by-case basis.[17] No single factor is dispositive, and the Commission may consider other factors it deems relevant based on the facts of a particular investigation.[18] The Commission looks for clear dividing lines among possible like products and disregards minor variations.[19] Although the Commission must accept Commerce's determination as to the scope of the imported merchandise that is subsidized and/or sold at less than fair value,[20] the Commission determines what domestic product is like the imported articles Commerce has identified.[21]

B. Product Description

In its notices of institution, Commerce defined the imported merchandise within the scope of these investigations as:

> {G}rain-oriented silicon electrical steel (GOES). GOES is a flat-rolled alloy steel product containing by weight at least 0.6 percent but not more than 6 percent of

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[17] *See, e.g.*, *Cleo Inc. v. United States*, 501 F.3d 1291, 1299 (Fed. Cir. 2007); *NEC Corp. v. Department of Commerce*, 36 F. Supp. 2d 380, 383 (Ct. Int'l Trade 1998); *Nippon Steel Corp. v. United States*, 19 CIT 450, 455 (1995); *Torrington Co. v. United States*, 747 F. Supp. 744, 749 n.3 (Ct. Int'l Trade 1990), aff'd, 938 F.2d 1278 (Fed. Cir. 1991) ("every like product determination 'must be made on the particular record at issue' and the 'unique facts of each case'"). The Commission generally considers a number of factors including the following: (1) physical characteristics and uses; (2) interchangeability; (3) channels of distribution; (4) customer and producer perceptions of the products; (5) common manufacturing facilities, production processes, and production employees; and, where appropriate, (6) price. *See Nippon*, 19 CIT at 455 n.4; *Timken Co. v. United States*, 913 F. Supp. 580, 584 (Ct. Int'l Trade 1996).

[18] *See*, *e.g.*, S. Rep. No. 96-249 at 90-91 (1979).

[19] *See*, *e.g.*, *Nippon*, 19 CIT at 455; *Torrington*, 747 F. Supp. at 748-49*; see also* S. Rep. No. 96-249 at 90-91 (Congress has indicated that the like product standard should not be interpreted in "such a narrow fashion as to permit minor differences in physical characteristics or uses to lead to the conclusion that the product and article are not 'like' each other, nor should the definition of 'like product' be interpreted in such a fashion as to prevent consideration of an industry adversely affected by the imports under consideration.").

[20] *See*, *e.g.*, *USEC, Inc. v. United States*, 34 Fed. Appx. 725, 730 (Fed. Cir. 2002) ("The ITC may not modify the class or kind of imported merchandise examined by Commerce."); *Algoma Steel Corp. v. United States,* 688 F. Supp. 639, 644 (Ct. Int'l Trade 1988), *aff'd*, 865 F.3d 240 (Fed. Cir.), *cert. denied*, 492 U.S. 919 (1989).

[21] *Hosiden Corp. v. Advanced Display Mfrs.,* 85 F.3d 1561, 1568 (Fed. Cir. 1996) (the Commission may find a single like product corresponding to several different classes or kinds defined by Commerce); *Cleo*, 501 F.3d at 1298 n.1 ("Commerce's {scope} finding does not control the Commission's {like product} determination."); *Torrington*, 747 F. Supp. at 748-52 (affirming the Commission's determination defining six like products in investigations where Commerce found five classes or kinds).

> 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, in coils or in straight lengths. GOES that is subject to these investigations is currently classifiable under subheadings 7225.11.0000, 7226.11.1000, 7226.11.9030, and 7226.11.9060 of the Harmonized Tariff Schedule of the United States ("HTSUS"). Although the HTSUS subheadings are provided for convenience and customs purposes, the written description of the merchandise is dispositive.[22]

GOES is sold in sheet or strip form, in coils or in straight lengths. GOES, which typically contains approximately 3.2 percent by weight of silicon, is subject to specialized rolling and annealing (heat treatment) processes, which produce grain structures uniformly oriented in the rolling (or lengthwise) direction of the steel sheet. This uniformly oriented grain structure permits the steel sheet to conduct a magnetic field with a high degree of efficiency in the direction of rolling compared with other steels such as non-oriented silicon electrical steel ("NOES"). As a result, GOES has superior magnetic properties compared with NOES, both in terms of higher permeability and lower core loss.[23] Both domestic and imported GOES are produced in compliance with specifications issued by the ASTM International ("ASTM") or users' proprietary specifications. The conventional products in the standard thicknesses are often identified as American Iron and Steel Institute ("AISI") types M-2 through M-6, with thickness and energy loss increasing with each higher number.[24]

GOES is used primarily in the production of laminated cores for large- and medium-sized electrical power transformers and distribution transformers. Power transformers are used to raise the voltage of electric power from the level at which it is generated by a power plant to a higher level for more efficient transmission, and to lower voltage to levels suitable for local distribution. Distribution transformers further reduce electrical voltage to levels suitable for commercial and residential consumers.[25]

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[22] *Grain-Oriented Electrical Steel from the People's Republic of China, the Czech Republic, Germany, Japan, the Republic of Korea, Poland, and the Russian Federation: Initiation of Antidumping Duty Investigations*, 78 Fed. Reg. 65283, 65289 (Dep't of Commerce, Oct. 31, 2013). *See also Grain-Oriented Electrical Steel from the People's Republic of China: Initiation of Countervailing Duty Investigation*, 78 Fed. Reg. 65265, 65268 (Dep't of Commerce, Oct. 31, 2013).

[23] "Permeability" refers to the ease with which magnetic lines of force distribute themselves throughout a material, or more generally, the ease of magnetization of the GOES product in response to a magnetic field. "Core loss" refers to the measure of the amount of electrical energy that is lost as heat when magnetic flux flows through the steel. CR at I-16 n.31, PR at I-11 n.31.

[24] CR at I-16, PR at I-11.

[25] CR at I-17, PR at I-12.

GOES is produced in nominal thicknesses ranging from 0.007 inch (0.018 mm) to 0.0138 inch (0.35 mm). Thinner laminations yield lower core loss in transformers and, because of this, are often used despite the added cost for both the steel and the manufacturing of the transformer core. Laminations for transformer cores are oriented within the transformers to take advantage of the directional magnetic properties of the steel to allow transformation of electrical currents from one voltage to another.[26]

GOES is produced in different levels of magnetic permeability: "conventional" and "high-permeability." High-permeability product allows a transformer to operate at a higher level of flux density[27] than does conventional GOES, thus permitting a transformer to be smaller and have lower operating losses.[28] High-permeability product GOES can be domain refined to reduce even further the core loss at high flux density. Domain refinement occurs by scribing thin lines onto the surface of the steel, using laser scribing, mechanical scribing, or electrolytic etching. Whereas domain-refined GOES produced by mechanical scribing or electrolytic etching retains its enhanced magnetic properties when heat treated, domain-refined GOES produced by laser scribing does not. Hence, laser-scribed GOES cannot be used in production of wound-core transformers, which require heat treatment to relieve internal stresses following their manufacture.[29] A distinct ASTM specification addresses conventional GOES, high-permeability GOES, and laser-scribed high-permeability GOES.[30]

Electrical transformers are produced with either stacked or wound cores. In stacked cores, laminations are stacked together to form the core. In wound cores, a continuous length of GOES is wound around a mandrel multiple times. Wound cores undergo heat-treatment to relieve internal stresses. Copper windings (electricity conductors) are wrapped around both stacked and wound cores.[31]

C. Analysis

Petitioners argue that the Commission should define a single domestic like product coextensive with the definition of the scope of the subject merchandise, as it did in the 1994 investigations of GOES from Italy and Japan and the five-year reviews of orders on that

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[26] CR at I-16-17, PR at I-12.

[27] "Flux density" generally refers to total number of magnetic lines of force per unit area; *i.e.*, the density of magnetic lines of force, or magnetic flux lines, passing through a specific area. CR at I-18, PR at I-13.

[28] CR at I-18, PR at at I-13.

[29] CR at I-18, PR at I-13.

[30] *See* CR at I-16 n.32, PR at I-11 n.32.

[31] CR at I-19, PR at I-13.

merchandise.[32] Russian respondent NLMK argues that the Commission should define conventional GOES and high-permeability GOES as separate domestic like products.[33] For the reasons stated below, we have defined a single domestic like product in these preliminary phase investigations encompassing all types of GOES within the scope definition.

Physical Characteristics and Uses. All types of GOES, whether conventional or high-permeability, are flat-rolled alloy steel products having a grain-oriented structure that permits the product to conduct a magnetic field in a specific direction with a high degree of efficiency. All types of GOES share common chemistry, containing by weight at least 0.6 percent but not more than 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 a proportion that would give the steel the characteristics of another alloy steel. GOES is used primarily in the production of laminated cores for large and medium-sized electrical power transformers and distribution transformers.[34]

Manufacturing Facilities, Production Processes and Employees. AK Steel, ***, manufactures both conventional and high-permeability GOES on the same production equipment using the same manufacturing processes. Allegheny's production of GOES is concentrated in conventional grades but Allegheny indicates that it is in the process of expanding its product mix to include high-permeability GOES, which it has produced and shipped in trial orders to select customers.[35]

Channels of Distribution. AK Steel reported selling both conventional and high-permeability GOES *** to end users and Allegheny reported that *** of its conventional GOES is sold to end users; *** percent of U.S. producers' shipments of GOES in 2012 were to end users.[36]

Interchangeability. The record suggests that there is some degree of interchangeability among different grades of GOES. U.S. producers assert that conventional grades of GOES

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[32] Petitioners' Postconference Brief at 4-6. In the 1994 investigations concerning GOES from Italy and Japan, the Commission defined a single domestic like product encompassing both conventional and high-permeability GOES, coextensive with the scope. The Commission concluded that the different grades constituted a continuum of products and further found that the different grades of GOES were chemically alike, possessed essentially the same physical characteristics, were marketed through the same channels of distribution, had similar uses, were interchangeable to a certain degree, and shared common production facilities. *Grain-Oriented Silicon Electrical Steel From Italy and Japan*, Inv. Nos. 701-TA-355 and 731-TA-660 (Final), USITC Pub. 2778 (May 1994) at I-6-8; *Grain-Oriented Silicon Electrical Steel From Italy*, Inv. Nos. 701-TA-355 and 731-TA-659 (Final), USITC Pub. 2800 (Aug. 1994) at I-6-8. In the five-year reviews of the orders on GOES from Italy and Japan, the Commission again defined the domestic like product as all GOES. *Grain-Oriented Silicon Electrical Steel From Italy and Japan*, Inv. Nos. 701-TA-355 and 731-TA-659-660 (Review), USITC Pub. 3396 (Feb. 2001) at 5.

[33] NLMK Postconference Brief at 2-8.

[34] CR at I-15-19, PR at I-11-13.

[35] CR at I-26, PR at I-17.

[36] CR at I-27, PR at I-18.

compete with high-permeability grades of GOES to a certain degree (*i.e.*, within one or two grade steps) with purchasers evaluating different grades of GOES along with other factors to achieve certain performance characteristics at the lowest cost.[37] NLMK acknowledges that transformers meeting users' requirements can be made from any of a wide range of GOES. NLMK asserts, however, that energy conservation standards promulgated by the U.S. Department of Energy ("DOE") in 2007 limit the extent to which lower permeability grades of conventional GOES, which have the highest degree of energy loss, *e.g.*, AISI grades M-6 and M-4, can be used in producing certain transformer types.[38]

We find that GOES consists of a continuum of types and grades and that an ultimate purchaser's specifications can often be met with GOES within one or two permeability grade steps. Consequently, any reduction in applications to which the lower permeability grades are suited simply results in the potential shortening of the continuum at its lower end.

Producer and Customer Perceptions. Notwithstanding differences among the various grades of GOES and the acknowledged distinction between conventional and high-permeability GOES, customers and producers generally perceive both conventional and high-permeability GOES to be suitable in the construction of transformer cores used in the generation and distribution of electricity.[39]

Price. The record in these preliminary phase investigations indicates that prices per short ton for high-permeability GOES overlap with prices for conventional GOES.[40]

Conclusion. The record in these preliminary phase investigations indicates that conventional and high-permeability GOES share important physical characteristics, most notably a grain-oriented structure and use in the production of cores for transformers. All grades of GOES share common manufacturing facilities and channels of distribution, and the record indicates no clear distinctions in the pricing of the grades. Although some limits on interchangeability between conventional and high-permeability GOES exist, the record in these preliminary phase investigations does not suggest that these limits present a clear dividing line

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[37] Conference Transcript at 22-23, 55-56, 60-61, 91 (Peterson), 27-28, 53-54, 59, 61-62 (Polinski), 38 (Hermann), and 54-55, 57 (Schoen).

[38] NLMK Postconference Brief at 2-8. The 2007 standards, however, do not cover all transformer products and thus are limited in the extent to which they indirectly impact potential applications for particular grades or types of GOES. NLMK's separate claim that demand for the M-6 and M-4 grades may be eliminated when new DOE energy efficiency standards are implemented in 2016 also suggests that those grades continue to find applications in current transformer production. NLMK Postconference Brief at 7-8 & Exhibit 2. Moreover, the record indicates that, in 2013, DOE removed a type of transformer, liquid-immersed distribution transformers, from the 2007 regulations' coverage. NLMK Postconference Brief at Exhibit 3 (*Energy Conservation Standards for Distribution Transformers*, 78 Fed. Reg. 23336, 23337 (Apr. 18, 2013)). As noted, below, we intend in any final phase investigations to gather more information as to the characteristics of the various types and grades of GOES.

[39] *E.g.*, Conference Transcript at 27-28 (Polinski), 56 (Peterson).

[40] *See*, *e.g.*, CR/PR at Tables I-2, V-3, V-6.

between the products in light of their other common characteristics. We accordingly define a single domestic like product, consisting of all GOES, that is coextensive with Commerce's scope definition.[41]

IV. Domestic Industry

The domestic industry is defined as the domestic "producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product."[42] In defining the domestic industry, the Commission's general practice has been to include in the industry producers of all domestic production of the like product, whether toll-produced, captively consumed, or sold in the domestic merchant market.

No domestic producer of GOES is a related party.[43] Consequently, and in light of the definition of the domestic like product, we define the domestic industry to include the two U.S. producers of GOES.

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[41] In any final phase of these investigations we will examine in greater detail the characteristics of the various types and grades of GOES and the interchangeability between these different types and grades. In comments on the draft questionnaires, the parties should identify and define with specificity any particular GOES products for which the Commission should collect data.

[42] 19 U.S.C. § 1677(4)(A).

[43] A subsidiary of domestic producer AK Steel and Nippon Steel, a producer of subject merchandise from Japan, *** interest in Vicksmetal Armco Associates ("Vicksmetal") which provides slitting services for GOES. CR at III-2, PR at III-1-2. The statute provides that "a producer and an exporter or importer shall be considered to be related parties if . . . the producer and the exporter or importer directly or indirectly control a third party and there is reason to believe that the relationship causes the producer to act differently than a nonrelated producer." 19 U.S.C. § 1677(4)(B)(ii)(IV). Although Vicksmetal is a third party that is controlled by both a domestic producer (AK Steel) and an exporter of subject merchandise (Nippon), there is no evidence in the record that this relationship causes AK Steel to act differently than a nonrelated producer. Indeed, AK Steel is a petitioner in these proceedings and ***. CR/PR at Table III-1. Accordingly, we find that AK Steel is not a related party.

V. Cumulation[44]

A. In General

For purposes of evaluating the volume and price effects for a determination of reasonable indication of material injury by reason of subject imports, section 771(7)(G)(i) of the Tariff Act requires the Commission to cumulate subject imports from all countries as to which petitions were filed and/or investigations self-initiated by Commerce on the same day, if such imports compete with each other and with the domestic like product in the U.S. market. In assessing whether subject imports compete with each other and with the domestic like product, the Commission generally has considered four factors:

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

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[44] Pursuant to Section 771(24) of the Tariff Act, imports from a subject country of merchandise corresponding to a domestic like product that account for less than 3 percent of all such merchandise imported into the United States during the most recent 12 months for which data are available preceding the filing of the petition shall be deemed negligible. 19 U.S.C. §§ 1671b(a), 1673b(a), 1677(24)(A)(i), 1677(24)(B); *see also* 15 C.F.R. § 2013.1 (developing countries for purposes of 19 U.S.C. § 1677(36)).

The subject import data in these investigations are official Commerce statistics that have been adjusted with respect to reported subject imports from Canada. Although there is no GOES production capacity in Canada, the official Commerce statistics show GOES imports from Canada of 1.96 million short tons in 2010, 1.71 million short tons in 2011, 2.25 million short tons in 2012, 1.26 million short tons in interim 2012, and 1.49 million short tons in interim 2013. CR at IV-3, PR at IV-2; official Commerce statistics for HTS 7225.11.0000, 7226.11.1000, 7226.11.9030, and 7226.11.9060. We were able to determine the origin of those imports based on importer information and made adjustments accordingly.

Adjusted official import data show that imports from each subject country exceeded the 3 percent statutory negligibility threshold for July 2012 to June 2013, the most recent 12-month period prior to the filing of the petition for which the Commission has data that permitted adjustment. China accounted for *** percent of total U.S. imports by quantity, Czech Republic for *** percent, Germany for *** percent, Japan for *** percent, Korea for *** percent, Poland for *** percent, and Russia for *** percent. CR/PR at Table IV-3.

The unadjusted official import data for each country also exceed the requisite 3 percent threshold for September 2012 to August 2013, the most recent 12-month period prior to the filing of the petition for which the Commission has data. On that basis, China accounted for 5.1 percent of total U.S. imports by quantity, Czech Republic for 8.8 percent, Germany for 6.8 percent, Japan for 43.8 percent, Korea for 9.8 percent, Poland for 5.9 percent, and Russia for 6.9 percent. *Id.*

(2) the presence of sales or offers to sell in the same geographic markets of subject imports from different countries and the domestic like product;
(3) the existence of common or similar channels of distribution for subject imports from different countries and the domestic like product; and
(4) whether the subject imports are simultaneously present in the market.[45]

While no single factor is necessarily determinative, and the list of factors is not exclusive, these factors are intended to provide the Commission with a framework for determining whether the subject imports compete with each other and with the domestic like product.[46] Only a "reasonable overlap" of competition is required.[47]

B. Analysis

Petitioners argue that, because the relevant criteria for cumulation are satisfied, the Commission should cumulate subject imports from China, Czech Republic, Germany, Japan, Korea, Poland, and Russia.[48] ThyssenKrupp argues that the Commission should not cumulate subject imports from Germany with imports from the other subject countries because of differences in the form of the product from Germany and the channels of distribution into which it is sold.[49] No other respondent party addressed the issue.

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[45] *See Certain Cast-Iron Pipe Fittings from Brazil, the Republic of Korea, and Taiwan*, Inv. Nos. 731-TA-278-80 (Final), USITC Pub. 1845 (May 1986), *aff'd*, *Fundicao Tupy, S.A. v. United States*, 678 F. Supp. 898 (Ct. Int'l Trade), *aff'd*, 859 F.2d 915 (Fed. Cir. 1988).

[46] *See*, *e.g.*, *Wieland Werke, AG v. United States*, 718 F. Supp. 50 (Ct. Int'l Trade 1989).

[47] The Statement of Administrative Action ("SAA") to the Uruguay Round Agreements Act ("URAA"), expressly states that "the new section will not affect current Commission practice under which the statutory requirement is satisfied if there is a reasonable overlap of competition." H.R. Rep. No. 103-316, Vol. I at 848 (1994) (*citing Fundicao Tupy*, 678 F. Supp. at 902); *see Goss Graphic Sys., Inc. v. United States*, 33 F. Supp. 2d 1082, 1087 (Ct. Int'l Trade 1998) ("cumulation does not require two products to be highly fungible"); *Wieland Werke, AG*, 718 F. Supp. at 52 ("Completely overlapping markets are not required.").

[48] *See, e.g.*, Petitioners' Postconference Brief at 11-14. Petitioners argue that the statutory prerequisites to cumulation are satisfied because the petitions on GOES from all subject countries were filed simultaneously, no statutory exceptions to cumulation apply, and there is a reasonable overlap of competition based on the factors that the Commission typically considers. *Id*. at 17-18.

[49] *See* ThyssenKrupp Postconference Brief at 10-15. In particular, it argues that a large proportion of subject imports from Germany enter the U.S. market in the form of master coils and therefore do not compete with other subject imports, which enter the U.S. market in finished, *i.e.*, slit and processed, form. *Id*. at 12. It also asserts that subject imports from Germany compete in a channel of distribution different from those in which the domestic like product and imports from other subject sources compete because most subject imports from Germany were sold to slitters/laminators while the domestic like product and imports from the other subject countries were sold largely to end users. *Id*.

In these investigations, the threshold criterion for cumulation is satisfied because Petitioners filed the antidumping duty petitions with respect to subject imports from all subject countries and the countervailing duty petition with respect to subject imports from China on the same day, September 18, 2013.[50] We thus examine whether there is a reasonable overlap of competition between subject imports from China, Czech Republic, Germany, Japan, Korea, Poland, and Russia and between subject imports from each source and the domestic like product.

Fungibility. The record indicates that GOES meeting a particular ASTM or end user specification is generally fungible regardless of source and is used in the same general applications in the production of transformer cores.[51] U.S. producers reported that subject imports from the subject countries are always interchangeable with each other and with the domestic like product.[52] All responding importers reported that imports from subject countries are *** interchangeable with the domestic like product and with each other.[53] We acknowledge that there are differences in the product mix for imports from individual subject sources and for the domestic like product in terms of the shares accounted for by conventional GOES; high-permeability, non-domain-refined GOES; high-permeability, domain-refined GOES, as well as differences among types of domain-refined GOES.[54] Nevertheless, as discussed in section III.C. above, there appears to be at least some degree of interchangeability between conventional and high-permeability GOES.

Channels of Distribution. U.S. producers sold mainly to ***, as did importers of subject product from China, Japan, Korea, Poland, and Russia.[55] Importers of subject product from Germany also sold to *** to some extent during the POI, notwithstanding that they sold ***.[56] The *** of U.S. shipments of subject imports from the Czech Republic were to distributors, but

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[50] None of the statutory exceptions to cumulation applies in these investigations.

[51] *E.g.*, CR at I-16, PR at I-11; CR/PR at Table II-4.

[52] CR/PR at Table II-4.

[53] CR/PR at Table II-4. Market participants' perceptions of interchangeability of subject imports from Germany with the domestic like product and imports from other subject sources were not appreciably different from their perceptions of imports from other subject countries. *Id.*

[54] CR/PR at Table IV-4. We intend in any final phase investigations to examine further to what extent these product mix differences limit fungibility between and among subject imports from each source and the domestic like product.

[55] CR/PR at Table II-1.

[56] Contrary to ThyssenKrupp's claim that its product was sold *** into the slitter/laminator channels, *** percent of U.S. shipments of subject imports from Germany in 2010 were to end users, as were *** percent of those shipments in 2011, and *** percent in interim 2013. CR/PR at Table II-1. The record further indicates that there were common importers of subject merchandise from Germany, on the one hand, and imports from each other subject country except China, on the other. CR/PR at Table IV-1.

*** also went to slitters/laminators.[57] U.S. producers sold into both those channels, and importers of subject product from Germany, Japan, and Russia sold to slitters/laminators.[58] [59]

Geographic Overlap. The record indicates an overlap in sales of the domestic like product and sales of the subject imports from all sources in the same geographic markets. U.S. producers reported selling GOES to all regions in the contiguous United States, and importers of GOES from each of the subject countries except China reported selling GOES to all regions in the contiguous United States. Importers of subject GOES from China reported selling to four of the six specified regions.[60]

Simultaneous Presence in Market. Official import statistics indicate that imports from each of the subject countries were present in at least parts of the period from 2010 to 2012 and imports from six of the subject countries were present in each of the six months from January 2013 to June 2013 ("interim 2013").[61]

Conclusion. The record in these preliminary phase investigations indicates geographical overlap and simultaneous presence between and among imports from each of the subject countries and the domestic like product. Contrary to the arguments of ThyssenKrupp, the record does not show a lack of fungibility between subject imports from Germany, on the one hand, and imports from other subject countries and the domestic like product, on the other. Market participants' perceptions of subject imports from Germany paralleled those for the other subject sources. Similarly, although the record indicates some distinctions in the distribution pattern of subject imports from Germany compared to imports from most of the other subject countries, in our view the record supports a finding of reasonable overlap of channels in distribution for purposes of these preliminary phase investigations. As previously

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[57] Between *** percent and *** percent of subject imports from the Czech Republic were sold to distributors on an annual basis from 2010 to 2012 and between *** percent and *** percent was sold to slitters/laminators. CR/PR at Table II-1.

[58] Between *** percent and *** percent of U.S. producers' U.S. shipments on an annual basis from 2010 to 2012 were to distributors. Between *** and *** percent of U.S. producers' U.S. shipments were to slitters/laminators, as were between *** and *** percent of importers' U.S. shipments of subject imports from Germany, between *** and *** percent of U.S. importers' U.S. shipments of subject imports from Japan, and between *** and *** percent of importers' U.S. shipments of subject imports from Russia. CR/PR at Table II-1.

[59] In any final phase investigations, we will examine further any distinctions in distribution channels among imports from different subject countries and between imports from particular subject countries and the domestic like product.

[60] CR/PR at Table II-2. ThyssenKrupp also made an argument that the geographical areas within which GOES from Germany was sold were *** (ThyssenKrupp Postconference Brief at 9); ***, as noted, record data shows distribution of GOES from Germany in all regions. CR/PR at Table II-2.

[61] CR/PR at Table IV-5. Subject imports from Korea were present in four of six months in interim 2013. *Id.*

discussed, we intend in any final phase investigations to collect additional information pertinent to our consideration of fungibility and channels of distribution.

Consequently, the record indicates a reasonable overlap of competition among subject imports from China, Czech Republic, Germany, Japan, Korea, Poland, and Russia and between subject imports from each source and the domestic like product. Because the antidumping and countervailing duty petitions were filed on the same day and we find that there is a reasonable overlap of competition between and among the subject imports and the domestic like product, we cumulate subject imports from China, Czech Republic, Germany, Japan, Korea, Poland, and Russia for our analysis of whether there is a reasonable indication of material injury by reason of subject imports.

VI. Reasonable Indication of Material Injury by Reason of Subject Imports

A. Legal Standard

In the preliminary phase of antidumping and countervailing duty investigations, the Commission determines whether there is a reasonable indication that an industry in the United States is materially injured or threatened with material injury by reason of the imports under investigation.[62] In making this determination, the Commission must consider the volume of subject imports, their effect on prices for the domestic like product, and their impact on domestic producers of the domestic like product, but only in the context of U.S. production operations.[63] The statute defines "material injury" as "harm which is not inconsequential, immaterial, or unimportant."[64] In assessing whether there is a reasonable indication that the domestic industry is materially injured by reason of subject imports, we consider all relevant economic factors that bear on the state of the industry in the United States.[65] No single factor is dispositive, and all relevant factors are considered "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[66]

Although the statute requires the Commission to determine whether there is a reasonable indication that the domestic industry is "materially injured by reason of" unfairly traded imports,[67] it does not define the phrase "by reason of," indicating that this aspect of the

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[62] 19 U.S.C. §§ 1671b(a), 1673b(a).

[63] 19 U.S.C. § 1677(7)(B). The Commission "may consider such other economic factors as are relevant to the determination" but shall "identify each {such} factor ... {a}nd explain in full its relevance to the determination." 19 U.S.C. § 1677(7)(B).

[64] 19 U.S.C. § 1677(7)(A).

[65] 19 U.S.C. § 1677(7)(C)(iii).

[66] 19 U.S.C. § 1677(7)(C)(iii).

[67] 19 U.S.C. §§ 1671b(a), 1673b(a).

injury analysis is left to the Commission's reasonable exercise of its discretion.[68] In identifying a causal link, if any, between subject imports and material injury to the domestic industry, the Commission examines the facts of record that relate to the significance of the volume and price effects of the subject imports and any impact of those imports on the condition of the domestic industry. This evaluation under the "by reason of" standard must ensure that subject imports are more than a minimal or tangential cause of injury and that there is a sufficient causal, not merely a temporal, nexus between subject imports and material injury.[69]

In many investigations, there are other economic factors at work, some or all of which may also be having adverse effects on the domestic industry. Such economic factors might include nonsubject imports; changes in technology, demand, or consumer tastes; competition among domestic producers; or management decisions by domestic producers. The legislative history explains that the Commission must examine factors other than subject imports to ensure that it is not attributing injury from other factors to the subject imports, thereby inflating an otherwise tangential cause of injury into one that satisfies the statutory material injury threshold.[70] In performing its examination, however, the Commission need not isolate

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[68] *Angus Chemical Co. v. United States*, 140 F.3d 1478, 1484-85 (Fed. Cir. 1998) ("{T}he statute does not 'compel the commissioners' to employ {a particular methodology}."), *aff'g* 944 F. Supp. 943, 951 (Ct. Int'l Trade 1996).

[69] The Federal Circuit, in addressing the causation standard of the statute, has observed that "{a}s long as its effects are not merely incidental, tangential, or trivial, the foreign product sold at less than fair value meets the causation requirement." *Nippon Steel Corp. v. USITC*, 345 F.3d 1379, 1384 (Fed. Cir. 2003). This was re-affirmed in *Mittal Steel Point Lisas Ltd. v. United States*, 542 F.3d 867, 873 (Fed. Cir. 2008), in which the Federal Circuit, quoting *Gerald Metals, Inc. v. United States*, 132 F.3d 716, 722 (Fed. Cir. 1997), stated that "this court requires evidence in the record 'to show that the harm occurred "by reason of" the LTFV imports, not by reason of a minimal or tangential contribution to material harm caused by LTFV goods.'" *See also Nippon Steel Corp. v. United States*, 458 F.3d 1345, 1357 (Fed. Cir. 2006); *Taiwan Semiconductor Industry Ass'n v. USITC*, 266 F.3d 1339, 1345 (Fed. Cir. 2001).

[70] SAA, H.R. Rep. 103-316, Vol. I at 851-52 (1994) ("{T}he Commission must examine other factors to ensure that it is not attributing injury from other sources to the subject imports."); S. Rep. 96-249 at 75 (1979) (the Commission "will consider information which indicates that harm is caused by factors other than less-than-fair-value imports."); H.R. Rep. 96-317 at 47 (1979) ("in examining the overall injury being experienced by a domestic industry, the ITC will take into account evidence presented to it which demonstrates that the harm attributed by the petitioner to the subsidized or dumped imports is attributable to such other factors;" those factors include "the volume and prices of nonsubsidized imports or imports sold at fair value, contraction in demand or changes in patterns of consumption, trade restrictive practices of and competition between the foreign and domestic producers, developments in technology and the export performance and productivity of the domestic industry"); *accord Mittal Steel*, 542 F.3d at 877.

the injury caused by other factors from injury caused by unfairly traded imports.[71] Nor does the "by reason of" standard require that unfairly traded imports be the "principal" cause of injury or contemplate that injury from unfairly traded imports be weighed against other factors, such as nonsubject imports, which may be contributing to overall injury to an industry.[72] It is clear that the existence of injury caused by other factors does not compel a negative determination.[73]

Assessment of whether material injury to the domestic industry is "by reason of" subject imports "does not require the Commission to address the causation issue in any particular way" as long as "the injury to the domestic industry can reasonably be attributed to the subject imports" and the Commission "ensure{s} that it is not attributing injury from other sources to the subject imports."[74] [75] Indeed, the Federal Circuit has examined and affirmed various Commission methodologies and has disavowed "rigid adherence to a specific formula."[76]

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[71] SAA at 851-52 ("{T}he Commission need not isolate the injury caused by other factors from injury caused by unfair imports."); *Taiwan Semiconductor Industry Ass'n*, 266 F.3d at 1345. ("{T}he Commission need not isolate the injury caused by other factors from injury caused by unfair imports ... . Rather, the Commission must examine other factors to ensure that it is not attributing injury from other sources to the subject imports." (emphasis in original)); *Asociacion de Productores de Salmon y Trucha de Chile AG v. United States*, 180 F. Supp. 2d 1360, 1375 (Ct. Int'l Trade 2002) ("{t}he Commission is not required to isolate the effects of subject imports from other factors contributing to injury" or make "bright-line distinctions" between the effects of subject imports and other causes.); *see also Softwood Lumber from Canada*, Inv. Nos. 701-TA-414 and 731-TA-928 (Remand), USITC Pub. 3658 at 100-01 (Dec. 2003) (Commission recognized that "{i}f an alleged other factor is found not to have or threaten to have injurious effects to the domestic industry, *i.e*., it is not an 'other causal factor,' then there is nothing to further examine regarding attribution to injury"), *citing Gerald Metals,* 132 F.3d at 722 (the statute "does not suggest that an importer of LTFV goods can escape countervailing duties by finding some tangential or minor cause unrelated to the LTFV goods that contributed to the harmful effects on domestic market prices.").

[72] S. Rep. 96-249 at 74-75; H.R. Rep. 96-317 at 47.

[73] *See Nippon*, 345 F.3d at 1381 ("an affirmative material-injury determination under the statute requires no more than a substantial-factor showing. That is, the 'dumping' need not be the sole or principal cause of injury.").

[74] *Mittal Steel*, 542 F.3d at 877-78; *see also id.* at 873 ("While the Commission may not enter an affirmative determination unless it finds that a domestic industry is materially injured 'by reason of' subject imports, the Commission is not required to follow a single methodology for making that determination ... {and has} broad discretion with respect to its choice of methodology.") *citing United States Steel Group v. United States*, 96 F.3d 1352, 1362 (Fed. Cir. 1996) and S. Rep. 96-249 at 75.

[75] Commissioner Pinkert does not join this paragraph or the following three paragraphs. He points out that the Federal Circuit, in *Bratsk*, 444 F.3d 1369, and *Mittal Steel*, held that the Commission is *required*, in certain circumstances when considering present material injury, to undertake a particular kind of analysis of nonsubject imports, albeit without reliance upon presumptions or rigid formulas. *Mittal Steel* explains as follows:

(Continued…)

The Federal Circuit's decisions in *Gerald Metals*, *Bratsk,* and *Mittal Steel* all involved cases in which the relevant "other factor" was the presence in the market of significant volumes of price-competitive nonsubject imports. The Commission interpreted the Federal Circuit's guidance in *Bratsk* as requiring it to apply a particular additional methodology following its finding of material injury in cases involving commodity products and a significant market presence of price-competitive nonsubject imports.[77] The additional "replacement/benefit" test looked at whether nonsubject imports might have replaced subject imports without any benefit to the U.S. industry. The Commission applied that specific additional test in subsequent cases, including the *Carbon and Certain Alloy Steel Wire Rod from Trinidad and Tobago* determination that underlies the *Mittal Steel* litigation.

Mittal Steel clarifies that the Commission's interpretation of *Bratsk* was too rigid and makes clear that the Federal Circuit does not require the Commission to apply an additional test nor any one specific methodology; instead, the Court requires the Commission to have "evidence in the record 'to show that the harm occurred 'by reason of' the LTFV imports,'" and requires that the Commission not attribute injury from nonsubject imports or other factors to subject imports.[78] Accordingly, we do not consider ourselves required to apply the replacement/benefit test that was included in Commission opinions subsequent to *Bratsk*.

The progression of *Gerald Metals*, *Bratsk*, and *Mittal Steel* clarifies that, in cases involving commodity products where price-competitive nonsubject imports are a significant

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(…Continued)

> What *Bratsk* held is that "where commodity products are at issue and fairly traded, price-competitive, non-subject imports are in the market," the Commission would not fulfill its obligation to consider an important aspect of the problem if it failed to consider whether non-subject or non-LTFV imports would have replaced LTFV subject imports during the period of investigation without a continuing benefit to the domestic industry. 444 F.3d at 1369. Under those circumstances, *Bratsk* requires the Commission to consider whether replacement of the LTFV subject imports might have occurred during the period of investigation, and it requires the Commission to provide an explanation of its conclusion with respect to that factor.

542 F.3d at 878.

[76] *Nucor Corp. v. United States*, 414 F.3d 1331, 1336, 1341 (Fed. Cir. 2005); *see also Mittal Steel*, 542 F.3d at 879 ("*Bratsk* did not read into the antidumping statute a Procrustean formula for determining whether a domestic injury was 'by reason' of subject imports.").

[77] *Mittal Steel*, 542 F.3d at 875-79.

[78] *Mittal Steel*, 542 F.3d at 873 (quoting from *Gerald Metals*, 132 F.3d at 722), 875-79 & n.2 (recognizing the Commission's alternative interpretation of *Bratsk* as a reminder to conduct a non-attribution analysis).

factor in the U.S. market, the Court will require the Commission to give full consideration, with adequate explanation, to non-attribution issues when it performs its causation analysis.[79]

The question of whether the material injury threshold for subject imports is satisfied notwithstanding any injury from other factors is factual, subject to review under the substantial evidence standard.[80] Congress has delegated this factual finding to the Commission because of the agency's institutional expertise in resolving injury issues.[81]

B. Conditions of Competition and the Business Cycle

The following conditions of competition inform our analysis of whether there is a reasonable indication of material injury by reason of subject imports.

1. Demand Conditions

GOES is used primarily in the production of laminated cores for large and medium-sized electrical power transformers and distribution transformers. U.S. demand for GOES, therefore, depends on the demand for U.S.-produced power and distribution transformers.[82] The extent to which utilities replace transformers is an important driver of demand for GOES, with transformer replacement currently accounting for 65 to 70 percent of demand.[83] Housing starts also drive demand for GOES in the new transformer market. Seasonally adjusted housing

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[79] To that end, after the Federal Circuit issued its decision in *Bratsk*, the Commission began to present published information or send out information requests in final phases of investigations to producers in nonsubject countries that accounted for substantial shares of U.S. imports of subject merchandise (if, in fact, there were large nonsubject import suppliers). In order to provide a more complete record for the Commission's causation analysis, these requests typically seek information on capacity, production, and shipments of the product under investigation in the major source countries that export to the United States. The Commission plans to continue utilizing published or requested information in final phases of investigations in which there are substantial levels of nonsubject imports.

[80] We provide in our respective discussions of volume, price effects, and impact a full analysis of other factors alleged to have caused any material injury experienced by the domestic industry.

[81] *Mittal Steel*, 542 F.3d at 873; *Nippon Steel Corp*., 458 F.3d at 1350, *citing U.S. Steel Group*, 96 F.3d at 1357; S. Rep. 96-249 at 75 ("The determination of the ITC with respect to causation is ... complex and difficult, and is a matter for the judgment of the ITC.").

[82] CR at II-14, PR at II-8. Medium voltage distribution transformers, which account for about 70 percent of transformer demand in the United States, can be manufactured using either conventional or high-permeability GOES, whereas large voltage power transformers used by utility companies, which account for about 25 percent of demand, are typically manufactured using high-permeability GOES. CR at II-20, PR at II-12.

[83] CR at II-15, PR at II-9. Transformer replacement accounted for 75 to 80 percent of demand in 2011. *Id.*

starts increased by 46 percent between January 2010 and August 2013, with most of the increase occurring since the latter part of 2011. Housing starts, however, remain well below historic averages.[84]

The record indicates that apparent U.S. consumption increased overall from 2010 to 2012 and was higher in the first half of 2013 than the first half of 2012. Apparent U.S. consumption of GOES increased from *** short tons in 2010 to *** short tons in 2011, then declined to *** short tons in 2012, for an overall 2010-12 increase of *** percent.[85] During the first half of 2013, apparent U.S. consumption was higher at *** short tons than during the first half of 2012 at *** short tons.[86]

2. Supply Conditions

Sources of supply to the U.S. market during the POI included the domestic industry, subject imports, and imports from nonsubject sources.[87]

AK Steel and Allegheny are the U.S. manufacturers of GOES.[88] AK Steel accounted for *** percent and Allegheny for *** of total domestic production of GOES in 2012.[89] AK Steel manufactures both conventional and high-permeability grades of GOES and Allegheny manufactures only conventional grades.[90] Conventional grades account for most domestic production.[91]

The domestic industry supplied the large majority of apparent U.S. consumption during the POI. Its share of apparent U.S. consumption was *** percent in 2010, *** percent in 2011, *** percent in 2012; it was *** percent in interim 2012 and *** percent in interim 2013.[92] The domestic industry's export shipments accounted for a substantial but declining share of its total shipments during the POI.[93] Export shipments declined by *** percent between 2010 and 2012

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[84] CR at II-15, PR at II-9; CR/PR at Figure II-2.

[85] CR/PR at Table IV-7.

[86] CR/PR at Table IV-7. U.S. producers reported an increase in U.S. demand for GOES since 2010, while most importers reported a decrease in demand. CR/PR at Table II-3.

[87] CR/PR at Table IV-7.

[88] CR/PR at III-1.

[89] CR/PR at Table III-1.

[90] CR at I-25-26, PR at I-17. As noted above, Allegheny plans to manufacture high-permeability GOES in the future and has done so in test quantities. CR at I-26, PR at I-17.

[91] CR/PR at Tables III-4, III-6, IV-4.

[92] CR/PR at Table IV-8.

[93] The domestic industry's export shipments accounted for *** percent of total shipments in 2010, *** percent in 2011, *** percent in 2012, *** percent in interim 2012, and *** percent in interim 2013. CR/PR at Table III-5.

and were *** percent lower in interim 2013 than in interim 2012.[94] *** attributes the decline in export shipments to ***.[95]

Cumulated subject imports held the second largest share of the U.S. market during the POI. The market share of cumulated subject imports was *** percent in 2010, *** percent in 2011, and *** percent in 2012; it was *** percent in interim 2012 and *** percent in interim 2013.[96] High-permeability GOES accounted for *** percent of U.S. shipments of subject imports in 2012, compared to *** percent of U.S. producers' domestic shipments.[97]

Nonsubject imports had a very small presence in the U.S. market throughout the POI. Nonsubject imports' market share was *** percent in 2010, *** percent in 2011, *** percent in 2012, *** percent in interim 2012, and *** percent in interim 2013.[98]

3. Substitutability

Based on the record in the preliminary phase of these investigations, we find that there is at least a moderate degree of substitutability among domestically produced GOES and GOES from all subject sources. As explained above, U.S. producers reported that subject imports from each subject country are always interchangeable with each other and with the domestic like product and responding importers reported that imports from subject countries are always, frequently, or sometimes interchangeable with the domestic like product and with each other.[99] Although GOES may be substitutable within a grade or two,[100] the record in the preliminary phase of these investigations is not clear regarding the extent to which a purchaser can substitute between coiled and straight GOES, between conventional and high-permeability forms of the product, and between high-permeability GOES that is and that is not domain refined. In any final phase investigations, we will examine substitutability more closely, including through information gathered from purchasers.

4. Other Conditions

As previously stated, GOES of a specific type, whether imported or domestically produced, complies with ASTM or proprietary specifications.[101] In light of this and our finding

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[94] CR/PR at Tables III-5, C-1.
[95] CR/PR as revised by Memorandum INV-LL-096 (Nov. 14, 2013) at III-8 n.4.
[96] CR/PR at Table IV-8.
[97] CR/PR at Table IV-4.
[98] CR/PR at Table IV-8.
[99] CR/PR at Table II-4.
[100] *E.g.*, Conference Transcript at 27-28 (Polinski), 56 (Peterson).
[101] CR at I-16, PR at I-11.

that subject imports and the domestic like product are at least moderately substitutable, we find that price is an important factor in purchasing decisions.

***.[102] Importers' practices are mixed; five reporting importers produced at least *** percent of their sales to order, two made *** shipments from foreign inventories, and two made *** shipments from U.S. inventories.[103]

U.S. producers and importers reported selling *** GOES through contracts with fixed quantities. U.S. producers reported making about *** percent of their sales with short term contracts and about *** with long term contracts, with the remaining amount being spot sales. Most importers reported making the bulk of their sales with short term contracts, although three reported making at least 80 percent of their sales on a spot basis.[104]

Raw material inputs in the production of GOES include steel scrap, ferrosilicon, natural gas, and electricity.[105] Raw material costs made up between *** and *** percent of U.S. producers' cost of goods sold during 2010 to 2012.[106] U.S. producers' average cost of raw materials per short ton increased overall between 2010 and 2012 and was lower in interim 2013 than in interim 2012.[107] U.S. producers include raw material surcharges in contract prices. The *** primary surcharge elements are ***.[108]

C. Volume of Subject Imports

Section 771(7)(C)(i) of the Tariff Act provides that the "Commission shall consider whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States, is significant."[109]

The volume of U.S. cumulated subject imports was 31,380 short tons in 2010, 28,424 short tons in 2011, and 32,318 short tons in 2012. It was 14,805 short tons in interim 2012 and 16,297 short tons in interim 2013.[110]

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[102] CR at II-19, PR at II-12.

[103] CR at II-19-20, PR at II-12.

[104] CR at V-3-4, PR at V-2.

[105] CR/PR at Figure V-1.

[106] CR/PR at V-1.

[107] CR/PR at Table VI-3. Average raw material costs per short ton were $*** in 2010, $*** in 2011, $*** in 2012, $*** in interim 2012 and $*** in interim 2013. *Id.*

[108] CR at V-2-3, PR at V-1. Allegheny Ludlum calculates its raw material surcharge ***. AK Steel ***. *Id.*

[109] 19 U.S.C. § 1677(7)(C)(i).

[110] CR/PR at Table IV-2. As noted above, import data in these investigations are official Commerce statistics adjusted to reflect the actual country of origin for imports incorrectly entered as the product of Canada. *See* CR at IV-3, PR at IV-2. For purposes of these preliminary phase investigations, we have not included in import data the small volume of temporary in bond ("TIB") imports shipped to NAFTA markets, although they are included for reference in CR/PR at Table C-2.

Subject imports had a largely stable presence in the U.S. market during the POI. As explained above, demand as measured by apparent U.S. consumption increased by *** percent from 2010 to 2012 and was *** percent higher in interim 2013 than in interim 2012.[111] The quantity of subject imports rose more slowly by 3.0 percent from 2010 to 2012. It was 10.1 percent higher in interim 2013 than in interim 2012.[112] The share of apparent U.S. consumption held by cumulated subject imports was *** percent in 2010, *** percent in 2011, and *** percent in 2012; it was *** percent in interim 2012, and *** percent in interim 2013.[113]

We find, for purposes of the preliminary phase of these investigations, that the volume of cumulated subject imports is significant both in absolute terms and relative to apparent consumption in the United States. We do not find, however, that the change in the volume of cumulated subject imports over the POI was significant.

D. Price Effects of the Subject Imports

Section 771(7)(C)(ii) of the Tariff Act provides that, in evaluating the price effects of subject imports, the Commission shall consider whether –

> (I) there has been significant price underselling by the imported merchandise as compared with the price of domestic like products of the United States, and
>
> (II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.[114]

As explained above, based on the record in the preliminary phase of these investigations, we find that there is at least a moderate degree of substitutability between subject imports from all sources and the domestic like product, and that price is an important consideration in purchasing decisions.

The Commission collected quarterly pricing data for five pricing products.[115] The Commission received usable pricing data from questionnaire responses provided by two U.S. producers of GOES and eleven importers.[116] [117]

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[111] CR/PR at Tables IV-7, C-1.

[112] CR/PR at Table C-1.

[113] CR/PR at Table IV-8.

[114] 19 U.S.C. § 1677(7)(C)(ii).

[115] CR/PR at Tables V-3 to V-7. The pricing products are the following:

Product 1: Conventional GOES, 9 mil (0.23 mm) thickness, maximum core loss 1.20W/kg, (50 hz, 1.7T), U.S. grade M-3;

(Continued…)

There was a mixed pattern of overselling and underselling by subject imports during the POI. Cumulated subject imports undersold the domestic like product in 104 out of 165 quarterly comparisons and oversold it in the remaining 61 comparisons.[118]

Additionally, the record includes *** lost sale in the amount of $***.[119] It is difficult to discern from some purchaser responses to Petitioners' other lost sales allegations whether or not a domestic producer lost the sale to subject imports. It appears, however, that in some instances in which lost sales allegations were not specifically confirmed, purchasers indicated that prices for subject imports in the U.S. market were used as leverage to obtain price reductions from domestic producers.[120]

The domestic industry experienced significant adverse price effects during the POI, and it is not clear from this preliminary record that subject imports did not cause them to a

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(…Continued)

Product 2: Conventional GOES, 11 mil (0.27 mm) thickness, maximum core loss 1.25 W/kg, (50 hz, 1.7T), U.S. grade M-4;

Product 3: Conventional GOES, 14 mil (0.35 mm) thickness, maximum core loss 1.58W/kg, (50 hz, 1.7T), U.S. grade M-6;

Product 4: Domain-refined high-permeability GOES, 9 mil (0.23mm) thickness, maximum core loss 0.80 W/kg, (50 hz, 1.7T), U.S. grade H-O DR;

Product 5: Domain-refined high-permeability GOES, 11 mil (0.27mm) thickness, maximum core loss 0.90 W/kg, (50 hz, 1.7T), U.S. grade H-1 DR. CR at V-5, PR at V-3-4.

[116] CR at V-5, PR at 3-4. The pricing data we have used exclude certain data to avoid double counting and exclude data for products that did not correspond to the pricing product description. CR at V-6 n.8, PR at V-4 n.8.

[117] Pricing data reported by these firms accounted for *** percent of the domestic industry's U.S. shipments, *** percent of subject imports from China, *** percent of subject imports from the Czech Republic, *** percent of subject imports from Germany, *** percent of subject imports from Japan, *** percent of subject imports from Korea, *** percent of subject imports from Poland, and *** percent of subject imports from Russia, and 26 percent of all subject imports during the POI. CR at V-5-6, PR at V-4.

[118] CR/PR at Tables V-3-V-9. ThyssenKrupp contends that the pricing comparisons between subject imports from Germany and the domestic like product are not meaningful because *** the pricing data for the domestic like product are based on sales to end users, while subject imports from Germany are not sold in this channel. ThyssenKrupp Postconference Brief at 10. We invite parties in their comments on the draft questionnaires in any final phase investigations to propose definitions for pricing products that will minimize any distortions in comparisons related to differences in channels of distribution and assure comparability between the subject imports and the domestic like product.

[119] CR/PR at Table V-10.

[120] For instance, ***. Importer questionnaire response of ***. CR/PR at Table V-10. In any final phase investigations, we intend to investigate in more detail the lost sales and revenue allegations and to obtain further information from purchasers concerning pricing dynamics in the GOES market.

significant degree. With respect to price depression, we note that U.S. prices declined for all five of the domestically produced pricing products, and prices also declined for the great majority of subject imports.[121] With respect to price suppression, we note that between 2010 and 2012, when demand increased overall, the domestic industry's average unit value ("AUV") for net sales declined by *** percent, while the industry's unit cost of goods sold ("COGS") increased by *** percent.[122] As the domestic industry was unable to maintain prices to cover its costs, its COGS to net sales ratio increased steadily from *** percent in 2010 to *** percent in 2011 and *** percent in 2012; it was *** percent in interim 2012 and *** percent in interim 2013.[123]

In light of the significant volume of cumulated subject imports, our finding with respect to the substitutability of subject imports and the domestic like product, the importance of price in purchasing decisions, the presence of underselling, and indications of lost sales and lower import prices being used as leverage in sales negotiations, we cannot conclude on this preliminary record that cumulated subject imports have not depressed or suppressed domestic prices to a significant degree. We will examine these issues further in any final phase investigations, in particular, the extent to which other factors may have caused adverse price effects.

[121] CR/PR at Tables V-3 to V-7. Prices increased for Product 2 from *** (for which there were only two observations) and Japan. Prices also increased for Product 4 from ***. CR/PR at Tables V-4, V-6.

[122] The domestic industry's AUVs for net sales were $*** in 2010, $*** in 2011, $*** in 2012, $*** in interim 2012, and $*** in interim 2013. The domestic industry's unit COGS were $*** in 2010, $*** in 2011, $*** in 2012, $*** in interim 2012, and $*** in interim 2013. CR/PR at Table C-1.

[123] CR/PR at Table C-1.

E. Impact of the Subject Imports[124]

Section 771(7)(C)(iii) of the Tariff Act provides that the Commission, in examining the impact of the subject imports on the domestic industry, "shall evaluate all relevant economic factors which have a bearing on the state of the industry." These factors include output, sales, inventories, capacity utilization, market share, employment, wages, productivity, profits, cash flow, return on investment, ability to raise capital, research and development, and factors affecting domestic prices. No single factor is dispositive and all relevant factors are considered "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."

As apparent U.S. consumption increased over the POI, the domestic industry maintained its market share, which was *** percent in 2010, *** percent in 2011, and *** percent in 2012; it was *** percent in interim 2012 and *** percent in interim 2013.[125] U.S. shipments also increased by quantity, rising overall by *** percent between 2010 and 2012, while declining overall by value by *** percent. U.S. shipments by quantity were *** percent higher, and by value were *** percent lower in interim 2013 than in interim 2012.[126] By contrast, the domestic industry's production, after increasing from *** short tons in 2010 to *** short tons in 2011, fell to *** short tons in 2012; production was *** short tons in interim 2012 and *** short tons

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[124] In its notice initiating antidumping investigations on GOES from the seven subject countries, Commerce reported estimated dumping margins of 159.21 percent for GOES from China, 68.46 percent to 235.50 percent for GOES from Czech Republic, 38.54 percent to 241.91 percent for GOES from Germany, 44.95 percent to 172.30 percent for GOES from Japan, 49.51 percent to 257.61 percent for GOES from Korea, 56.69 percent to 99.51 percent for GOES from Poland, and 43.52 percent to 119.88 percent for GOES from Russia. 78 Fed. Reg. 65283, 65287 (Dep't of Commerce, Oct. 31, 2013). In its notice initiating a countervailing duty investigation on GOES from China, Commerce stated it would investigate 14 alleged subsidy programs. Commerce identifies these programs in a separate initiation checklist as including three loan programs, three tax programs, three programs for Government provision of goods and services for less than adequate remuneration, one program for Government purchases of goods for more than adequate remuneration, and five grant programs. CR at I-13, PR at I-9. It appears that provision of benefits under at least one of these programs, preferential export financing by the Export-Import Bank of China, is contingent upon export activity. *Id.* Commerce declined to initiate an investigation on four other programs alleged in the petition. *Id*.

[125] CR/PR at Table IV-8.

[126] CR/PR at Tables III-5, C-1. U.S. producers' U.S. shipments by quantity were *** short tons in 2010, *** short tons in 2011, *** short tons in 2012, *** short tons in interim 2012, and *** short tons in interim 2013. CR/PR at Table III-5. U.S. producers' U.S. shipments by value were $*** in 2010, $*** in 2011, $*** in 2012, $*** in interim 2012, and $*** in interim 2013. *Id.*

U.S. producers' end-of-period inventories declined during the POI, from *** short tons in 2010 to *** short tons in 2011, and then to *** short tons in 2012. Inventories were *** short tons in interim 2012 and *** short tons in interim 2013. CR/PR at Table III-7.

in interim 2013.[127] The industry's production capacity was unchanged: it was *** short tons from 2010 to 2012 and *** short tons in interim 2012 and interim 2013.[128] Its capacity utilization was *** percent in 2010, *** percent in 2011, *** percent in 2012, *** percent in interim 2012, and *** percent in interim 2013.[129]

While the quantity of U.S. shipments increased from 2010 to 2012, production declined, largely because of a concurrent substantial reduction in export shipments. U.S. producers' export shipments declined overall by quantity by *** percent between 2010 and 2012 while declining overall by value by *** percent. Export shipments by quantity were *** percent lower, and by value were *** percent lower, in interim 2013 than in interim 2012.[130]

The number of production workers, hours worked, and wages paid declined between 2010 and 2012; these indicators were lower in interim 2013 than in interim 2012.[131]

Several key financial indicators declined as the domestic industry experienced price declines and was unable to increase prices to cover rising costs. Sales revenue increased from $*** in 2010 to $*** in 2011, but declined to $*** in 2012, and was lower in interim 2013 than in interim 2012.[132] As previously discussed, unit sales value declined from 2010 to 2012, and was lower in interim 2013 than in interim 2012, notwithstanding concurrent increases in unit COGS.[133] Declines in overall and per-unit revenues while costs were increasing led to sharp declines in the domestic industry's operating income. Operating income fell from $*** in 2010 to $*** in 2011, and then to $*** in 2012.[134] Operating performance also was much worse in interim 2013, when the industry ***, than in interim 2012 when its ***.[135] The ratio of operating income to net sales fell by *** percentage points from 2010 to 2012, with operating margins declining from *** percent in 2010 to *** percent in 2011 and then to *** percent in

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[127] CR/PR at Table III-3.

[128] CR/PR at Table III-3.

[129] CR/PR at Table III-3.

[130] CR/PR at Tables III-5, C-1. U.S. producers' export shipments by quantity rose from *** short tons in 2010 to *** short tons in 2011, and then declined to *** short tons in 2012. They were *** short tons in interim 2012 and *** short tons in interim 2013. CR/PR at Table III-5. U.S. producers' export shipments (by value) were $*** in 2010, $*** in 2011, $*** in 2012, $*** in interim 2012, and $*** in interim 2013. *Id.*

[131] CR/PR at Table III-8. The number of production workers was *** in 2010, *** in 2011 *** in 2012, *** in interim 2012, and *** in interim 2013. The total hours worked were *** in 2010, *** in 2011, *** in 2012, *** in interim 2012, and *** in interim 2013. Wages paid were $*** in 2010, $*** in 2011, $*** in 2012, $*** in interim 2012, and $*** in interim 2013. Worker productivity was *** short tons (per 1,000 hours) in 2010, *** short tons in 2011, *** short tons 2012, *** short tons in interim 2012, and *** short tons in interim 2013. CR/PR at Table III-8.

[132] CR/PR at Table VI-1.

[133] CR/PR at Table VI-1.

[134] CR/PR at Table VI-1.

[135] CR/PR at Table VI-1.

2012.[136] Operating margins also were lower in interim 2013, at *** percent, than in interim 2012, at *** percent.[137]

In light of the domestic industry's deteriorating financial condition during the POI, the significant volume of cumulated subject imports, our finding with respect to the substitutability of the domestic like product and subject imports, the importance of price in purchasing decisions, the presence of underselling, and the fact that the domestic industry experienced price declines and a cost-price squeeze, we cannot conclude on this record that subject imports did not cause the industry's declines in revenues and operating performance.

We have also considered the role of other factors in our assessment of the impact of the subject imports. As discussed above, nonsubject imports were not a significant presence in the U.S. market during the POI.[138] Accordingly, we do not find the small volume of nonsubject imports to be a cause of the difficulties experienced by the domestic industry.[139]

Respondent parties argue that the domestic industry's condition is caused by factors other than subject imports, including declines in domestic producers' export shipments, competition between the domestic producers, and U.S. prices declining to world price levels.[140] There is limited information in the record of these preliminary phase investigations to permit us to assess the impact of these alleged other factors. Consequently, based on the record in these preliminary phase investigations, we cannot conclude that these factors individually or together amount to clear and convincing evidence of no material injury to the domestic industry by reason of cumulated subject imports. We intend in any final phase investigations to examine those factors and their effect on the domestic industry.

In sum, the record as a whole in the preliminary phase of these investigations does not contain clear and convincing evidence that there is no reasonable indication of material injury to the domestic industry by reason of cumulated subject imports. We have therefore reached affirmative preliminary determinations.

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[136] CR/PR at Table VI-1. The domestic industry's aggregate capital expenditures declined during the POI from $*** in 2010 to $*** in 2011, and $*** in 2012; capital expenditures were $*** in interim 2012 and $*** in interim 2013. CR/PR at Table VI-5. Research and development expenditures rose from 2010 to 2012, and were lower in interim 2013 than in interim 2012. *Id.*

[137] CR/PR at Table IV-1.

[138] As discussed earlier, nonsubject imports' market share was *** percent in 2010, *** percent in 2011, *** percent in 2012, *** percent in interim 2012, and *** percent in interim 2013. CR/PR at Table IV-8.

[139] Commissioner Pinkert finds that, regardless of whether GOES is a commodity product for purposes of the Bratsk/Mittal Steel analysis, he need not perform that analysis in these investigations because nonsubject imports were not a significant factor in the U.S. market during the POI. Nonsubject imports had a U.S. market share that ranged between *** and *** percent throughout the POI. CR/PR at Table IV-8.

[140] *E.g.,* Baosteel Postconference Brief at 6-8, Japanese Producers Postconference Brief at 14-27, ThyssenKrupp Postconference Brief at 10-12, NLMK Postconference Brief at 9-10.

VII. Conclusion

For the reasons stated above, we determine that there is a reasonable indication that an industry in the United States is materially injured by reason of subject imports of GOES from China, the Czech Republic, Germany, Japan, Korea, Poland, and Russia that are allegedly sold in the United States at less than fair value and subject imports of GOES from China that are allegedly subsidized by the government of China.

PART I: INTRODUCTION

BACKGROUND

These investigations result from a petition filed with the U.S. Department of Commerce ("Commerce") and the U.S. International Trade Commission ("USITC" or "Commission") by counsel on behalf of AK Steel Corp. ("AK Steel"), West Chester, Ohio; Allegheny Ludlum, LLC, ("Allegheny Ludlum"), Pittsburgh, Pennsylvania; and the United Steelworkers ("USW"),[1] Pittsburgh, Pennsylvania, on September 18, 2013, alleging that an industry in the United States is materially injured and threatened with material injury by reason of subsidized imports of grain-oriented electrical steel ("GOES")[2] from China and by reason of less-than-fair-value ("LTFV") imports of GOES from China, the Czech Republic, Germany, Japan, Korea, Poland, and Russia. The following tabulation provides information relating to the background of these investigations.[3] [4]

Effective date	Action
September 18, 2013	Petition filed with Commerce and the Commission; institution of Commission investigation (78 FR 59059, September 25, 2013)
October 21, 2013	Tolling of activity in antidumping and countervailing duty proceedings (78 FR 64011, October 25, 2013)
October 25, 2013	Commission's conference
October 31, 2013	Commerce's notices of initiation (78 FR 65265 and 78 FR 65283)
November 19, 2013	Commission's vote
November 20, 2013	Commission's determinations
November 27, 2013	Commission's views

[1] The USW represents employees of Allegheny Ludlum that are engaged in the production of GOES in the United States.

[2] See the section entitled "The Subject Merchandise" in *Part I* of this report for a complete description of the merchandise subject to these investigations.

[3] Pertinent *Federal Register* notices are referenced in app. A, and may be found at the Commission's website (www.usitc.gov).

[4] A list of witnesses appearing at the conference is presented in app. B of this report.

STATUTORY CRITERIA AND ORGANIZATION OF THE REPORT

Statutory criteria

Section 771(7)(B) of the Tariff Act of 1930 (the "Act") (19 U.S.C. § 1677(7)(B)) provides that in making its determinations of injury to an industry in the United States, the Commission--

> *shall consider (I) the volume of imports of the subject merchandise, (II) the effect of imports of that merchandise on prices in the United States for domestic like products, and (III) the impact of imports of such merchandise on domestic producers of domestic like products, but only in the context of production operations within the United States; and. . . may consider such other economic factors as are relevant to the determination regarding whether there is material injury by reason of imports.*

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

> *In evaluating the volume of imports of merchandise, the Commission shall consider whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States is significant.*
> *. . .*
> *In evaluating the effect of imports of such merchandise on prices, the Commission shall consider whether. . .(I) there has been significant price underselling by the imported merchandise as compared with the price of domestic like products of the United States, and (II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.*
> *. . .*
> *In examining the impact required to be considered under subparagraph (B)(i)(III), the Commission shall evaluate (within the context of the business cycle and conditions of competition that are distinctive to the affected industry) all relevant economic factors which have a bearing on the state of the industry in the United States, including, but not limited to . . . (I) actual and potential decline in output, sales, market share, profits, productivity, return on investments, and utilization of capacity, (II) factors affecting domestic prices, (III) actual and potential negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment, (IV) 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*

domestic like product, and (V) in {an antidumping investigation}, the magnitude of the margin of dumping.

Organization of report

Part I of this report presents information on the subject merchandise, alleged subsidy/dumping margins, and domestic like product. *Part II* of this report presents information on conditions of competition and other relevant economic factors. *Part III* presents information on the condition of the U.S. industry, including data on capacity, production, shipments, inventories, and employment. *Parts IV* and *V* present the volume of subject imports and pricing of domestic and imported products, respectively. *Part VI* presents information on the financial experience of U.S. producers. *Part VII* presents the statutory requirements and information obtained for use in the Commission's consideration of the question of threat of material injury as well as information regarding nonsubject countries.

MARKET SUMMARY

GOES is primarily used in the production of laminated cores for large and medium-sized electrical power transformers and distribution transformers. There are two U.S. producers of GOES: AK Steel and Allegheny Ludlum. Leading producers of GOES outside the United States and leading U.S. importers of GOES are listed in table I-1. There are a relatively small number of large purchasers of GOES in the United States, which are generally producers of power and distribution transformers.[5]

Apparent U.S. consumption of GOES totaled *** short tons ($***) in 2012. U.S. producers' U.S. shipments of GOES totaled *** short tons ($***) in 2012, and accounted for *** percent of apparent U.S. consumption by quantity and *** percent by value. U.S. imports from subject sources totaled *** short tons ($***) in 2012 and accounted for *** percent of apparent U.S. consumption by quantity and *** percent by value. U.S. imports from nonsubject sources totaled *** short tons ($***) in 2012 and accounted for *** percent of apparent U.S. consumption by quantity and *** percent by value.

[5] Petitioners' postconference brief, p. 2.

Table I-1

GOES: Leading producers outside the United States and leading U.S. importers

Country	Producers/exporters	U.S. importers
Subject countries		
China	Anshan Iron & Steel Group Corp. Baoshan Iron & Steel Co., Ltd. Hebei Shougang Qian'an Iron & Steel Co., Ltd. Wuhan Iron & Steel Co. Ltd.	***
Czech Republic	ArcelorMittal Frýdek-Místek a.s.	***
Germany	ThyssenKrupp Electrical Steel GmbH	***
Japan	JFE Steel Corp. Nippon Steel & Sumitomo Metal Corp.	***
Korea	POSCO	***
Poland	Stalprodukt S.A.	***
Russia	Novolipetsk Steel ("NLMK") PJSC Ashinskiy Metallurgical Works (exporter)	***
Nonsubject countries		
France	ThyssenKrupp Electrical Steel UGO S.A.S.	***
Italy	Legnano	***
United Kingdom	Cogent	***

Source: Compiled from data submitted in response to Commission questionnaires.

SUMMARY DATA AND DATA SOURCES

A summary of data collected in these investigations is presented in appendix C, table C-1.[6] Except as noted, U.S. industry data are based on questionnaire responses of two firms that accounted for 100 percent of U.S. production of GOES during 2012. U.S. imports are based on official U.S. import statistics, as adjusted.

PREVIOUS AND RELATED INVESTIGATIONS

GOES has been the subject of several prior petitions and proceedings before the Commission. These petitions and proceedings are explained below.

Safeguard investigations

The domestic GOES industry previously sought relief pursuant to section 201 of the Trade Act of 1974. In 1984, following a request from the United States Trade Representative

[6] A summary of data that includes Temporary Importation under Bond ("TIB") imports reported by U.S. importer *** is presented in appendix C, table C-2. *** imported *** short tons ($***) of GOES from *** during 2012 under the TIB program. These TIB imports were re-exported to ***.

("USTR"), the Commission initiated a section 201 investigation on U.S. imports of carbon and certain alloy steel products, including U.S. imports of GOES. In that investigation, the Commission determined that certain steel products, including GOES, were being imported into the United States in such increased quantities as to be a substantial cause of serious injury to the domestic industry and recommended a five-year program of tariffs and quotas. President Reagan, however, determined that import relief was not in the national economic interest, and instead established a national policy for the steel industry that led to the creation of several voluntary restraint agreements. GOES was among the products subject to a voluntary restraint agreement until the program expired in 1992.

Following receipt of a request from USTR on June 22, 2001, the Commission instituted investigation No. TA-201-73, *Steel*, under section 202 of the Trade Act of 1974[7] to determine whether certain steel products, including GOES, were being imported into the United States in such increased quantities as to be a substantial cause of serious injury, or the threat thereof, to the domestic industries producing articles like or directly competitive with the imported article.[8] On July 26, 2001, the Commission received a resolution adopted by the Committee on Finance of the U.S. Senate ("Senate Finance Committee" or "Committee") requesting that the Commission investigate certain steel imports under section 201 of the Trade Act of 1974.[9] Consistent with the Senate Finance Committee's resolution, the Commission consolidated the investigation requested by the Committee with the Commission's previously instituted investigation No. TA-201-73.[10] On December 20, 2001, the Commission issued its determinations and remedy recommendations. The Commission made a negative determination with respect to GOES.[11]

Patent infringement proceeding

Domestic producer Allegheny Ludlum filed a petition under section 337 of the Act in 1988, alleging that GOES produced by Nippon Steel Corp. and imported into the United States was produced in violation of a patent held by Allegheny Ludlum. The Commission did not initiate a section 337 investigation because Allegheny Ludlum did not produce a product pursuant to its own patent and, therefore, did not satisfy the statute's definition of an "industry."[12]

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[7] 19 U.S.C. § 2252.

[8] *Institution and Scheduling of an Investigation under Section 202 of the Trade Act of 1974 (19 U.S.C. 2252) (the Act)*, 66 FR 35267, July 3, 2001.

[9] 19 U.S.C. § 2251.

[10] *Consolidation of Senate Finance Committee Resolution Requesting a Section 201 Investigation with the Investigation Requested by the United States Trade Representative on June 22, 2001*, 66 FR 44158, August 22, 2001.

[11] *Steel; Import Investigations*, 66 FR 67304, December 28, 2001.

[12] *Grain-Oriented Silicon Electrical Steel From Italy and Japan, Inv. Nos. 701-TA-355 and 731-TA-659-660 (Review)*, USITC Publication 3396, February 2001, p. I-2.

Antidumping and countervailing duty proceedings

Original investigations

In 1993, GOES was the subject of antidumping and countervailing duty investigations with respect to imports from Italy and Japan. Following affirmative determinations by Commerce and the Commission, a countervailing duty order covering U.S. imports of GOES from Italy was published on June 7, 1994, an antidumping duty order was published on U.S. imports of GOES from Japan on June 10, 1994, and an antidumping duty order was published on imports of GOES from Italy on August 12, 1994.[13]

First five-year reviews

On December 1, 1999, both Commerce and the Commission initiated the first five-year reviews of the antidumping and countervailing duty orders on GOES from Italy and Japan. The Commission determined that revocation of the countervailing duty order on imports of GOES from Italy and revocation of the antidumping duty orders on imports of GOES from Italy and Japan would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.[14] On March 14, 2001, the Department published a notice of the continuation of the antidumping and countervailing duty orders.[15]

First remand

Italian and Japanese producers, exporters, and importers of the subject merchandise appealed the Commission's determinations to the U.S. Court of International Trade ("CIT"). On December 24, 2002, the CIT remanded the Commission's determinations on the grounds that the Commission did not apply the correct "likely" standard; that the Commission failed to specifically discuss each of the four factors outlined in 19 U.S.C. §1675a(a)(2)(A)-(D); and that the Commission failed to discuss whether the likely volume of imports of subject merchandise would be significant in absolute terms or relative to U.S. production and consumption, pursuant to 19 U.S.C. 5 1675a(a)(2).[16]

On remand, the Commission again found that revocation of the countervailing duty order on GOES from Italy, and the antidumping duty orders on GOES from Italy and Japan

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[13] *Grain-Oriented Silicon Electrical Steel From Italy and Japan, Inv. Nos. 701-TA-355 and 731-TA-659-660 (Review)*, USITC Publication 3396, February 2001, p. I-2.

[14] *Grain-Oriented Silicon Electrical Steel From Italy and Japan, Inv. Nos. 701-TA-355 and 731-TA-659-660 (Review)*, USITC Publication 3396, February 2001, p. 1. Chairman Koplan, Commissioner Miller, and Commissioner Devaney made affirmative determinations, while Vice Chairman Okun, Commissioner Bragg, and Commissioner Hillman dissented.

[15] *Continuation of Antidumping Duty Orders and Countervailing Duty Order: Grain-Oriented Silicon Electrical Steel From Italy and Japan*, 50 FR 14889, March 14, 2001.

[16] *Nippon Steel Corp., et al. v. United States*, Slip Op. 02-153, December 24, 2002, p. 15.

would be likely to lead to a continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.[17]

Second remand

On December 17, 2003, the CIT issued an opinion remanding the Commission's remand determination. Although the CIT found that the Commission had complied with its instructions regarding "likely" and the four enumerated statutory factors, the CIT found that several of the Commission's findings either required further explanation or were not supported by substantial evidence. Accordingly, the CIT remanded the Commission's no discernible adverse impact, cumulation, likely volume, likely price and likely impact findings for reconsideration. The CIT instructed the Commission to "revisit the evidence cited for its findings with respect to cumulation and likelihood of continuation or recurrence of material injury and satisfy its obligations with specific reference to the evidence it claims supports its conclusions and adequate explanations of its findings based on this evidence." The CIT further ordered that the Commission address certain evidence it believed "fairly detracts" from the weight of the evidence supporting the Commission's determinations.[18]

On second remand, the Commission found that revocation of the countervailing duty order on GOES from Italy, and the antidumping duty orders on GOES from Italy and Japan, would be likely to lead to a continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.[19]

Third remand

On June 15, 2005, the Court issued an opinion affirming in part and remanding in part the Commission's affirmative determination on second remand. The Commission's determination was affirmed with respect to discernible adverse impact, cumulation, and likely price effects. However, the CIT found that the Commission's likely volume and likely impact findings were not supported by substantial evidence.[20] Upon consideration of the third remand order, the Commission determined that revocation of the countervailing duty order on GOES from Italy and the antidumping duty orders on GOES from Italy and Japan would not likely lead

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[17] *Grain-Oriented Silicon Electrical Steel from Italy and Japan, Inv. Nos. 701-TA-355 and 731-TA-659-660 (Review) (Remand)*, USITC Publication 3585, March 2003, p. 1. Commissioners Miller and Koplan made affirmative determinations, while Chairman Okun and Vice Chairman Hillman made negative determinations.

[18] *Nippon Steel Corp., et al. v. United States*, 301 F. Supp 1355 (CIT 2003).

[19] *Grain-Oriented Silicon Electrical Steel from Italy and Japan, Inv. Nos. 701-TA-355 and 731-TA-659-660 (Review) (Second Remand)*, USITC Publication 3680, March 2004, p. 1. Commissioner Koplan, Commissioner Miller, and Commissioner Lane made affirmative determinations, while Chairman Okun, Vice Chairman Hillman, and Commissioner Pearson made negative determinations.

[20] *Nippon Steel Corp., et al. v. United States*, Slip Op. 05-72, June 15, 2005.

to the continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.[21]

On May 30, 2006, the CIT affirmed the Commission's third remand determination. Following an appeal by the domestic industry to the U.S. Court of Appeals for the Federal Circuit, the CIT's decision was reversed and vacated. On October 10, 2007, and pursuant to the Federal Circuit's mandate, the CIT sustained the Commission's second remand determination and reinstated the affirmative injury determination.[22]

Second five-year reviews

On February 1, 2006, Commerce and the Commission initiated the second five-year reviews of the antidumping and countervailing duty orders.[23] At that time, the domestic industry chose not to participate in the reviews because it believed subject imports from Italy and Japan were unlikely to cause a recurrence of material injury to the domestic industry.[24] As a result, the antidumping and countervailing duty orders on GOES from Italy and Japan were revoked effective March 14, 2006.[25]

NATURE AND EXTENT OF ALLEGED SUBSIDIES AND SALES AT LTFV

Alleged subsidies

On October 31, 2013, Commerce published a notice in the *Federal Register* of the initiation of its countervailing duty investigation on GOES from China.[26] Commerce identified the following government programs in China:[27]

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[21] *Grain-Oriented Silicon Electrical Steel From Italy and Japan, Inv. Nos. 701-TA-355 (Review) (Third Remand) and 731-TA-659-660 (Review) (Third Remand)*, USITC Publication 3798, September 2005, p. 1. Vice Chairman Okun and Commissioners Hillman and Pearson made negative determinations, while Chairman Koplan and Commissioner Lane made affirmative determinations. Commissioner Aranoff did not participate in the third remand proceeding.

[22] *Nippon Steel Corp. v. United States*, 31 C.I.T. 1588 (2007).

[23] *Initiation of Five-Year ("Sunset") Reviews*, 70 FR 5243, February 1, 2006; and *Grain-Oriented Silicon Electrical Steel from Italy and Japan*, 70 FR 5376, February 1, 2006.

[24] Petition, p. 8.

[25] *Grain-Oriented Electrical Steel From Italy and Japan: Final Results of Sunset Reviews and Revocation of Orders*, 59 FR 15376, March 28, 2006.

[26] *Grain-Oriented Electrical Steel from the People's Republic of China: Initiation of Countervailing Duty Investigation*, 78 FR 65265, October 31, 2013.

[27] *Enforcement and Compliance Office of AD/CVD Enforcement CVD Investigations Initiation Checklist*, October 24, 2013.

I. Programs on which the Department is Initiating an Investigation
    A. Loan Programs
        1. Policy Loans to the GOES Industry
        2. Preferential Export Financing by the Export-Import Bank of China
        3. Preferential Loans for state-owned enterprises
    B. Tax Programs
        1. Income Tax Reductions for high- or new-technology enterprises
        2. Income Tax Credits for Domestically-Owned Companies Purchasing Domestically-Produced Equipment
        3. Import Tariff and Value-Added Tax Exemptions for Foreign Invested Enterprises and Certain Domestic Enterprises Using Imported Equipment in Encouraged Industries
    C. Government Provision of Goods and Services for Less Than Adequate Remuneration
        1. Government Provision of Land-Use Rights for Less Than Adequate Remuneration
        2. Provision of Electricity for Less Than Adequate Remuneration
    D. Government Purchases of Goods for More Than Adequate Remuneration
        1. Government of China Purchases of GOES for More Than Adequate Remuneration
    E. Grant Programs
        1. State Key Technology Project Fund
        2. Special Fund for Energy Savings Technology Reform
        3. Grants to Angang
        4. Grants to Baosteel
        5. Grants to WISCO
II. Alleged Programs on which the Department is not Initiating an Investigation
        1. Grants to Cover Legal Fees in Trade Remedy Cases
        2. The State Science and Technology Support Scheme
        3. Export Rebates for Mechanic, Electronic and High-Tech Products
        4. Grants for Listing Shares

Alleged sales at LTFV

On October 31, 2013, Commerce published a notice in the *Federal Register* of the initiation of its antidumping duty investigations on GOES from China, the Czech Republic, Germany, Japan, Korea, Poland, and Russia.[28] Commerce has initiated antidumping duty investigations based on the estimated dumping margins of 159.21 percent for GOES from

[28] *Grain-Oriented Electrical Steel From the People's Republic of China, the Czech Republic, Germany, Japan, the Republic of Korea, Poland, and the Russian Federation: Initiation of Antidumping Duty Investigations*, 78 FR 65283, October 31, 2013.

China, 68.46 percent to 235.50 percent for GOES from Czech Republic, 38.54 percent to 241.91 percent for GOES from Germany, 44.95 percent to 172.30 percent for GOES from Japan, 49.51 percent to 257.61 percent for GOES from Korea, 56.69 percent to 99.51 percent for GOES from Poland, and 43.52 percent to 119.88 percent for GOES from Russia.

THE SUBJECT MERCHANDISE

Commerce's scope

Commerce has defined the scope of these investigations as follows:

> The scope of these investigations covers grain-oriented silicon electrical steel (GOES). GOES is a flat-rolled alloy steel product containing by weight at least 0.6 percent but not more than 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, in coils or in straight lengths. The GOES that is subject to these investigations is currently classifiable under subheadings 7225.11.0000, 7226.11.1000, 7226.11.9030, and 7226.11.9060 of the Harmonized Tariff Schedule of the United States (HTSUS). Although the HTSUS subheadings are provided for convenience and customs purposes, the written description of the scope of these investigations is dispositive.[29]

Tariff Treatment

The imported GOES subject to these investigations is classified in subheadings 7225.11.00, 7226.11.10, and 7226.11.90 of the Harmonized Tariff Schedule of the United States ("HTS") and imported under statistical reporting numbers 7225.11.0000, 7226.11.1000, 7226.11.9030, and 7226.11.9060. The HTS subheading numbers are provided for convenience and customs purposes only; the written description of the scope of these investigations is dispositive. The column-1 general (normal trade relations) rate of duty for these subheadings, applicable to the products subject to these investigations, is free.

[29] *Grain-Oriented Electrical Steel from the People's Republic of China: Initiation of Countervailing Duty Investigation*, 78 FR 65265, October 31, 2013; and *Grain-Oriented Electrical Steel From the People's Republic of China, the Czech Republic, Germany, Japan, the Republic of Korea, Poland, and the Russian Federation: Initiation of Antidumping Duty Investigations*, 78 FR 65283, October 31, 2013.

THE PRODUCT[30]

Description and applications

The product covered by these investigations, as defined by Commerce, is grain-oriented electrical steel ("GOES"), which is a flat-rolled alloy steel product containing by weight at least 0.6 percent but not more than 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 a proportion that would give the steel the characteristics of another alloy steel.

GOES is sold in either sheet or strip form, either in coils or in straight lengths. GOES, which typically contains approximately 3.2 percent by weight of silicon, is subject to specialized rolling and annealing (heat treatment) processes, which produce grain structures uniformly oriented in the rolling (or lengthwise) direction of the steel sheet. This uniformly oriented grain structure permits the steel sheet to conduct a magnetic field with a high degree of efficiency in the direction of rolling compared with other steels such as non-oriented silicon electrical steel ("NOES"). As a result, GOES has superior magnetic properties compared with NOES, both in terms of higher permeability and lower core loss.[31] Both domestic and imported GOES are produced in compliance with specifications issued by the ASTM International ("ASTM"),[32] or proprietary specifications.

GOES is used primarily in the production of laminated cores for large and medium-sized electrical power transformers and distribution transformers.[33] GOES is produced in nominal thicknesses ranging from 0.0138 inch (0.35 mm) down to 0.007 inch (0.18 mm). Thinner

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[30] Except as noted, information presented in the "Description and Applications" and "Manufacturing Processes" is drawn from *Grain-Oriented Silicon Electrical Steel from Italy and Japan, Inv. Nos. 701-TA-355 and 731-TA-659-660 (Review)*, USITC Publication 3396, February 2001.

[31] "Permeability" refers to the ease with which magnetic lines of force distribute themselves throughout a material, or more generally, the ease of magnetization of the GOES product in response to a magnetic field. "Core loss" refers to the measure of the amount of electrical energy that is lost as heat when magnetic flux flows through the steel.

[32] ASTM International was previously known as American Society for Testing and Materials. Specification ASTM A876/A876M covers conventional GOES, high-permeability GOES, and laser-scribed high-permeability GOES. The domestic industry produces a wide range of GOES, including conventional GOES in standard thicknesses from 0.007 inch (0.18 mm) through 0.0138 inch (0.35 mm), and both high-permeability GOES and laser-scribed high-permeability GOES in two standard thicknesses. The conventional products in the standard thicknesses are often called American Iron and Steel Institute ("AISI") type numbers M-2 through M-6, although the use of these numbers is not recommended by ASTM. Within each type of GOES, magnetic characteristics may differ in that the same product made by two producers may have difference average core losses.

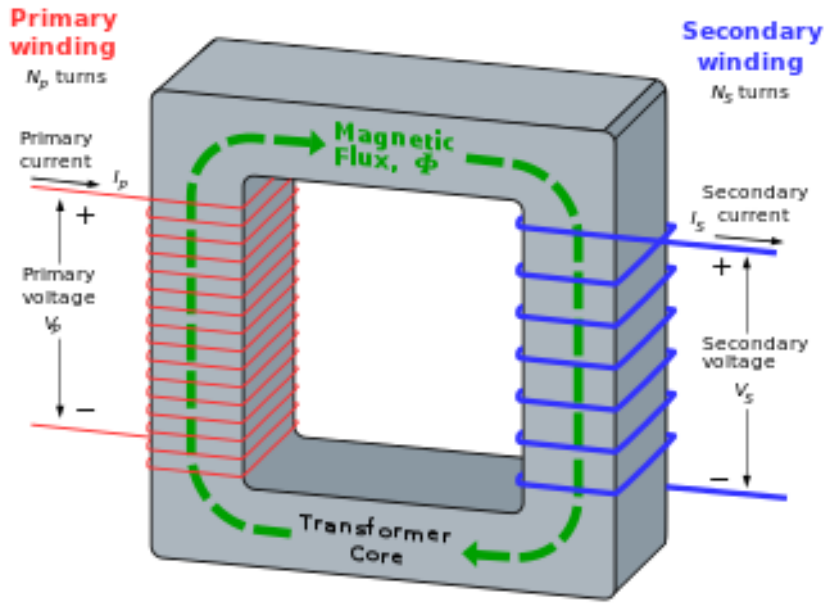
[33] Transformers are electrical apparatus that transfer electrical energy from one electrical circuit to another without any direct electrical connection by the electromagnetic induction of an alternating electrical current between two or more magnetically coupled coils or windings. Transformers are used to either increase (step-up) or decrease (step-down) the voltage of an alternating electrical current in various circuits in electrical equipment.

laminations yield lower core loss in transformers and because of this, are often used despite the added cost for both the steel and the manufacturing of the transformer core. Laminations for transformer cores are oriented within the transformers to take advantage of the directional magnetic properties of the steel.

The directional magnetic properties of the grain-oriented electrical steel allow for the transformation of electrical power from one voltage to another of an alternating electrical current (figure I-1). Power transformers are used to raise the voltage of electric power from the level at which it is generated by a power plant to a higher level for more efficient transmission, and to lower voltage to levels suitable for local distribution. Distribution transformers, in turn, further reduce electrical voltage to levels suitable for commercial and residential consumers.

Figure I-1

GOES: An alternating current in the primary winding induces a varying magnetic flux in the transformer core and secondary winding, which induces a secondary voltage of alternating current in the secondary winding



Source: Galco Industrial Electronics website, found at http://www.galco.com/comp/prod/trnsfmrs.htm, retrieved October 18, 2013.

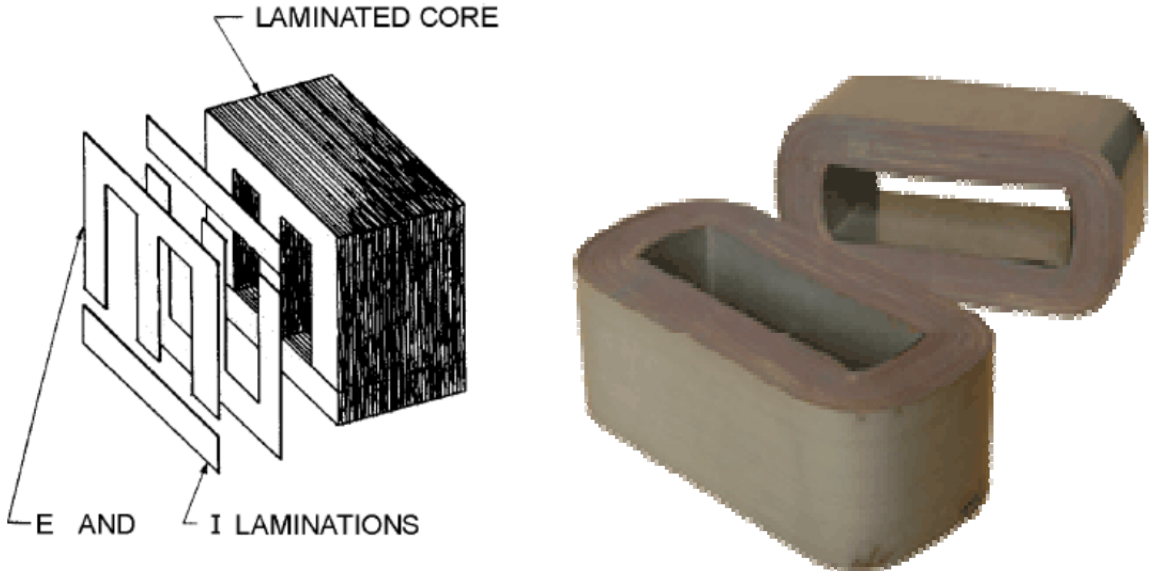
In addition to variations in thickness, GOES is produced in different levels of magnetic permeability: "conventional" and "high permeability." High-permeability product allows a transformer to operate at a higher level of flux density[34] than does conventional product, thus permitting a transformer to be smaller and have lower operating losses. High-permeability product is also produced as a domain-refined type that has even lower core loss at high flux density. Domain refinement occurs by scribing thin lines onto the surface of the steel, using laser scribing, mechanical scribing, or electrolytic etching. Product produced by laser scribing does not retain its enhanced magnetic characteristics when it is heat-treated to relieve internal stresses. As a result, laser-scribed GOES is not used to produce wound-core transformers, described below, that undergo heat-treatment to relieve internal stresses following their manufacturing. By contrast, domain-refined GOES produced by mechanical scribing or electrolytic etching retains its enhanced magnetic characteristics through stress relief.

The finish on GOES usually consists of an inorganic surface coating called coreplate, which serves as an electrical insulation between laminations. This insulation helps reduce core loss.

Electrical transformers are produced with either stacked or wound cores (figure I-2). In stacked cores, GOES is sheared or stamped into individual laminations, which are then stacked together to form the core. In smaller transformers, a special finish called "punching quality" may be applied to stamped laminations that comprise the core. In wound cores, a continuous length of GOES is wound around a mandrel multiple times to form the core. Wound cores undergo heat-treatment to relieve internal stresses following their manufacturing. Copper windings (electricity conductors) are wrapped around both stacked and wound cores.

[34] "Flux density" generally refers to total number of magnetic lines of force per unit area. It can also be understood as the density of magnetic lines of force, or magnetic flux lines, passing through a specific area.

Figure I-2
GOES: An example of a stacked core (left) and a wound core (right)



Sources: Navy-Marine Corps Military Auxiliary Radio System (MARS), found at http://www.navymars.org/national/training/nmo_courses/NMO2/Module2/14174_ch5.pdf, retrieved October 18, 2013; Technical Associated Ltd. website, found at http://www.techasso.com/Single%20Phase%20Wound%20Core%20transformers.htm, retrieved October 18, 2013.

Manufacturing processes

The production of GOES begins with the steel melting process, during which steel scrap and/or iron ore, and ferroalloys (primarily ferrosilicon) are melted either in an electric-arc furnace or a basic-oxygen furnace. Molten steel is then transferred to a vacuum degassing station, where the steel's chemistry is refined by reducing both dissolved gasses and the carbon content of the steel. The steel is then continuously cast into slabs or is cast into ingots that are subsequently hot rolled into slabs.

The slabs may be reheated and rolled on a continuous hot-strip mill to produce hot-rolled coils. The coils are then annealed and pickled (cleaned with acid to remove surface oxide) in a continuous processing line, and then cold reduced on either a multi-stand tandem cold-rolling mill or a reversing cold-rolling mill. The coils undergo this process twice to reach the final thickness.

The product is then processed through a line in which it is decarburized by heating in a controlled atmosphere and then coated with a magnesium oxide coating. It is then annealed at a high temperature in its coil form, a process that takes 5 or 6 days. The magnesium oxide prevents the layers of the coils from sticking together during the annealing process and also

fuses partially, forming a surface on the steel of a glass-like coating referred to as "mill-glass" or "glass film" even though it is not technically a glass. The mill-glass coating is also known as C-2 coreplate.

The coils are then processed through a continuous line in which excess magnesium oxide is removed by scrubbing. The coil is then heat flattened and a second coating is applied.[35] To manufacture punching-quality GOES, the mill-glass or C-2 coating is removed by pickling in acid before the second coreplate coating is applied. The coating applied to produce punching-quality GOES is an inorganic or mostly inorganic coating called C-5 coreplate, with ceramic fillers or film-forming components to increase the insulating ability of the coating. Finally, the product may be slit to a final width if necessary and packaged for shipment.

Foreign producers in China, the Czech Republic, Germany, Japan, Korea, Poland, and Russia generally use the same processes to produce GOES. Both U.S. producers of GOES produce additional products using some of the same equipment, machinery, and production workers that are used to produce GOES, including flat-rolled stainless steel sheet. AK Steel also produces non-oriented electrical steel ("NOES") at some of the same facilities used to produce GOES.

DOMESTIC LIKE PRODUCT ISSUES

The Commission's decision regarding the appropriate domestic products that are "like" the subject imported product is based on a number of factors including: (1) physical characteristics and uses; (2) common manufacturing facilities and production employees; (3) interchangeability; (4) customer and producer perceptions; (5) channels of distribution; and (6) price. Information regarding past Commission determinations in related proceedings concerning the domestic like product, the petitioners' and respondents' positions on the domestic like product in these proceedings, and the factors the Commission considers in making a domestic like product determination is discussed below.

In the original investigations and first five-year reviews concerning GOES from Italy and Japan, the Commission found that all types of GOES comprised a single domestic like product. The Commission rejected arguments advanced in the original investigations by the Japanese producers that high permeability and conventional grades of GOES constituted separate domestic like products, finding that the different grades represented a continuum of products. The Commission further found that the different grades of GOES were chemically alike, possessed essentially the same physical characteristics, were marketed through the same channels of distribution, had similar uses, were interchangeable to a certain degree, and shared common production facilities. In the first five-year reviews concerning the orders on GOES imports from Italy and Japan, parties raised no new like product issues, there were no significant changes in the nature, uses, and manufacture of GOES since the original

[35] AK Steel produces domain-refined GOES by laser-scribing lines on the surface of the steel using equipment installed on its heat flattening and coating lines. The laser scribing occurs after scrubbing and heat flattening, but before the coating is applied to the steel.

investigations, and there was no information that indicated a need to revisit the Commission's definition of the domestic like products in the original determinations.[36]

The petitioners propose that the Commission should define the domestic like product in these investigations to encompass all GOES, including both conventional and high permeability GOES products, co-extensive with the scope of the case.[37] The petitioners argue that a determination by the Commission defining the domestic like product as co-extensive with the scope of the investigation would be consistent with past Commission findings and the Commission's traditional like product analysis: (1) all GOES has the same basic physical characteristics - both with respect to its physical form and chemistry – and virtually all GOES has the same uses - in the production of electric power and distribution transformers; (2) conventional and high permeability GOES are made in common manufacturing facilities, using similar production processes, and the same production employees; (3) conventional and high permeability grades of GOES are separately designated in the market but are generally interchangeable with end users within one or two grade steps; (4) customers and producers generally perceive both types of GOES to be suitable for the construction of cores in transformers that are used in the generation and distribution of electricity; and (5) all GOES is sold in the same channels of distribution - primarily direct to end users (transformer manufacturers) and to a lesser extent to processors that slit coils of GOES and/or manufacture laminations that are used in building a transformer core. The petitioners added that none of the respondent witnesses appearing at the staff conference raised any argument suggesting that the Commission should find anything other than a single domestic like product, and such a determination would be consistent with the Commission's prior proceedings involving GOES.[38]

Although no respondent parties presented any arguments or data requests for an alternative domestic like product at the staff conference in these investigations, the Chinese and Russian respondents provided comments in their postconference briefs. Chinese respondents Baoshan Iron & Steel Co., Ltd. and Baosteel America, Inc. note in their postconference brief that "The respondents did not raise at this preliminary stage any issues on cumulation of subject imports or on like product that would justify collecting additional information and analyzing the data differently for the final investigation."[39] Russian respondent NLMK argues that although the Commission considered the issue of whether conventional and high permeability GOES were separate like products in the previous proceedings and found one domestic like product, the conditions of competition have changed such that the Commission should reconsider its previous decisions. It further argues that, in October 2007, the Department of Energy ("DOE") adopted revised energy efficiency standards that changed the market and created two distinct like products within GOES. It explains that conventional GOES is designated as grades M2, M3, M4, and M6 and higher grades are designated as high

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[36] *Grain-Oriented Silicon Electrical Steel From Italy and Japan, Inv. Nos. 701-TA-355 and 731-TA-659-660 (Review)*, USITC Publication 3396, February 2001, p. 5.

[37] Petition, p. 14.

[38] Petitioners' postconference brief, pp. 3-6.

[39] Baoshan Iron & Steel Co., Ltd. and Baosteel America, Inc. ("Baosteel"), postconference brief, p. 9.

permeability steel and amorphous steel. NLMK argues that, prior to 2007, these grades of GOES may have been a continuum of products which were substitutable with each other to some degree, but the DOE regulations have made it "technically impossible to substitute between grades M4/M6 for higher grades."[40]

Physical characteristics and uses

GOES is a flat-rolled alloy steel product having a grain structure that permits it to conduct a magnetic field with a high degree of efficiency. It primarily consists of a flat-rolled alloy steel product containing by weight at least 0.6 percent but not more than 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 a proportion that would give the steel the characteristics of another alloy steel. It is used primarily in the production of laminated cores for large and medium-sized electrical power transformers and distribution transformers.

Both conventional and high permeability GOES have similar physical forms and chemistry, but possess different levels of magnetic permeability. Both are used in power and distribution transformers, but the use of high permeability GOES can allow a transformer to operate at a higher level of flux density than conventional GOES, thus permitting a transformer to be smaller and have lower operating losses.

Manufacturing facilities and production employees

AK Steel, ***, manufactures both conventional and high permeability GOES on the same production equipment using the same manufacturing processes.[41] Allegheny Ludlum's production of GOES is concentrated on the conventional grades but indicates that it is in the process of expanding its product mix to include high permeability GOES and has successfully produced and shipped high permeability GOES in trial orders to select customers.[42]

Interchangeability and customer and producer perceptions

U.S. producers argue that conventional grades of GOES compete with high permeability products to a certain degree (i.e., within one or two grade steps) with purchasers evaluating different grades of GOES to minimize the total owning costs of a transformer.[43] AK Steel testified at the staff conference, "So based upon the type of transformer they're designing, the efficiency standards, the capabilities of the transformer, you have a range of products you could use that you can then consider what the core loss is of that product versus the price and figure out the best ratio of that core loss to determine the overall lowest own cost of the

[40] NLMK postconference brief, pp. 3-4.
[41] Conference transcript, p. 21 (Peterson).
[42] Conference transcript, p. 27 (Polinski).
[43] Conference transcript, p. 38 (Hermann), pp. 27 and 53-54 (Polinski), and p. 57 (Schoen).

transformer."[44] As previously indicated, Russian respondent NLMK argues that DOE energy efficiency standards for transformers have changed the GOES market such that there is no longer a continuum of grades for GOES in which different grades are substitutable with each other to some degree within several grade steps.[45]

Channels of distribution

Although the Commission did not collect separate data specific to channels of distribution for conventional and high-permeability GOES, AK Steel reported that it sells both conventional and high-permeability GOES *** to end users, with a *** amount being sold to distributors. Allegheny Ludlum also reported that *** its conventional GOES is sold to end users. As discussed in further detail in Part II of this report, *** percent of all such domestic producer shipments were shipped to end users in 2012.

Price

Petitioners testified that high permeability GOES may be sold at a higher price compared with conventional GOES because it has lower loss and is more expensive to manufacture.[46] Unit value data collected in these investigations on conventional and high-permeability GOES are presented in table I-2. Pricing data collected in these investigations for both conventional and high-permeability (domain-refined) GOES are presented in Part V of this report.

Table I-2
GOES: Unit values of U.S. producers' U.S. shipments of conventional and high-permeability GOES, by type, 2010-12, January-June 2012, and January-June 2013

* * * * * * *

[44] Conference transcript, p. 56 (Petersen).
[45] Conference transcript, pp. 131-132 (Chan).
[46] Conference transcript, p. 55 (Schoen).

PART II: CONDITIONS OF COMPETITION IN THE U.S. MARKET

U.S. MARKET CHARACTERISTICS

GOES is used primarily in the production of laminated cores for large and medium-sized electrical power transformers and distribution transformers. Power transformers are used to change the voltage of electric power between power plants, distributions centers, and commercial and residential consumers. The two domestic producers of GOES supplied approximately *** of the U.S. market during 2010-12.

CHANNELS OF DISTRIBUTION

U.S. producers sold mainly to end users, as did importers of subject product from China, Japan, Korea, and Russia, as shown in table II-1. Importers of subject product from Germany sold *** to slitters and laminators, while importers of subject product from the Czech Republic sold *** of their product to distributors, but *** to slitters and laminators.

GEOGRAPHIC DISTRIBUTION

One of two U.S. producers reported selling GOES to all regions in the contiguous United States (table II-2). *** did not sell GOES in the *** regions. Only one subject importer, ***, reported selling to all regions. Nonetheless, importers from each subject country reported selling product to each region, except that no importers of Chinese product sold to the Mountain region. For U.S. producers, over *** percent of sales were between 101 and 1,000 miles of their production facility. Most subject importers sold at least 80 percent within 1,000 miles of their U.S. point of shipment. Importers of Chinese GOES, however, made a majority of their sales over 1,000 miles and the rest between 101 and 1,000 from their U.S. point of shipment.

Table II-1
GOES: U.S. producers' and importers' U.S. shipments, by sources and channels of distribution, 2010-12, January-June 2012, and January-June 2013

* * * * * * *

Table II-2
GOES: Geographic market areas in the United States served by U.S. producers and importers, by number of responding firms

* * * * * * *

SUPPLY AND DEMAND CONSIDERATIONS

U.S. supply

Domestic production

Based on available information, U.S. producers of GOES have the ability to respond to changes in demand with large changes in the quantity of shipments of U.S.-produced GOES to the U.S. market. The main contributing factors to the high degree of responsiveness of supply are the existence of alternate markets and inventories, the ability to produce alternate products, and some availability of unused capacity.

Industry capacity

Domestic capacity utilization fluctuated between *** to *** percent between 2010 and 2012. More recently, in January-June 2003, domestic capacity utilization was less than *** percent. This suggests that U.S. producers may have moderate capacity to increase production of product in response to an increase in prices.

Alternative markets

U.S. producers' export shipments fell from about *** of total shipments in 2010 to just under *** percent of total shipments during the first half of 2013. This level of export shipments indicates that U.S. producers have an ability to shift shipments between the U.S. market and other markets in response to price changes, although the antidumping order in China may somewhat limit their ability to export.

Inventory levels

U.S. producers' inventories fluctuated between *** and *** percent of total shipment from 2010 to 2012. These inventory levels suggest that U.S. producers may have an ability to respond to changes in demand with changes in the quantity shipped from inventories.

Production alternatives

One of two responding U.S. producers stated that it could switch production from GOES to other products. AK Steel indicated that it could produce NOES ***.

Supply constraints

No U.S. producers reported it had refused, declined, or was unable to supply GOES since 2010.

Subject imports from China

Based on available information, the single responding Chinese producer (Baosteel) has the ability to respond to changes in demand with large changes in the quantity of shipments of GOES to the U.S. market. The main contributing factors to the high degree of responsiveness of supply are existence of alternate markets and inventories.

Industry capacity

With production increasing by a similar rate as capacity, capacity utilization remained greater than *** percent between 2010 and 2012. This high level of capacity utilization suggests that the Chinese producer may have little additional capacity to increase production of GOES in response to an increase in prices.

Alternative markets

Between 2010 and 2012, approximately *** percent of Chinese shipments were to the Chinese home market and *** were to export markets other than the United States. This indicates the Chinese producer likely has an ability to shift shipments from the Chinese home market in response to a change in price.

Inventory levels

The Chinese producer's inventories as a ratio to total shipments increased to *** percent in 2012. This inventory level suggests that Chinese producers may have an ability to respond to changes in demand with changes in the quantity shipped from inventories.

Production alternatives

The Chinese producer stated that it *** switch production from GOES to other products.

Supply constraints

One importer of Chinese GOES reported it had refused, declined, or was unable to supply GOES since 2010. *** indicated due to allocation and availability, it had to decline some inquires.

Subject imports from Czech Republic

Based on available information, the Czech producer has the ability to respond to changes in demand with large changes in the quantity of shipments of GOES to the U.S. market. The main contributing factor to the high degree of responsiveness of supply is existence of alternate markets.

Industry capacity

With production ***, capacity utilization remained greater than *** percent between 2010 and 2012. This high level of capacity utilization suggests that the Czech producer may have little additional capacity to increase production of GOES in response to an increase in prices.

Alternative markets

Between 2010 and 2012, more than *** percent of Czech shipments were to export markets other than the United States. This indicates the Czech producer likely has an ability to shift shipments from the Czech home market in response to a change in price.

Inventory levels

The Czech producer's inventories as a ratio to total shipments increased to about *** percent in 2012. This inventory level suggests that the Czech producer may have a limited ability to respond to changes in demand with changes in the quantity shipped from inventories.

Production alternatives

The Czech producer stated that it *** switch production from GOES to other products.

Supply constraints

No importers of Czech GOES reported it had refused, declined, or was unable to supply GOES since 2010.

Subject imports from Germany

Based on available information, the German producer has the ability to respond to changes in demand with large changes in the quantity of shipments of GOES to the U.S. market. The main contributing factor to the high degree of responsiveness of supply is the existence of alternate markets and the availability of some unused capacity.

Industry capacity

With production ***, capacity utilization remained greater than *** percent between 2010 and 2012. This relatively high level of capacity utilization suggests that the German producer may have some additional capacity to increase production of GOES in response to an increase in prices.

Alternative markets

Between 2010 and 2012, more than *** percent of German shipments were to the German home market or to export markets other than the United States. This indicates the

German producer likely has an ability to shift shipments from the German home market and other export markets in response to a change in price.

Inventory levels

The German producer's inventories as a ratio to total shipments increased to just above *** percent in 2012. This inventory level suggests that the German producer may have a limited ability to respond to changes in demand with changes in the quantity shipped from inventories.

Production alternatives

The German producer stated that it *** switch production from GOES to other products.

Supply constraints

Three importers of German GOES reported they had refused, declined, or were unable to supply GOES since 2010. *** indicated that they had not been able to meet short delivery times. *** stated that limited production capacity had constrained their supply.

Subject imports from Japan

Based on available information, Japanese producers have the ability to respond to changes in demand with large changes in the quantity of shipments of GOES to the U.S. market. The main contributing factors to the high degree of responsiveness of supply are existence of alternate markets.

Industry capacity

With production ***, capacity utilization remained greater than *** percent between 2010 and 2012. This high level of capacity utilization suggests that Japanese producers may have little additional capacity to increase production of GOES in response to an increase in prices.

Alternative markets

Between 2010 and 2012, more than *** percent of Japanese shipments were to the Japanese home market or to export markets other than the United States. This indicates Japanese producers likely have an ability to shift shipments from the Japanese home market and other export markets in response to a change in price.

Inventory levels

Japanese producers' inventories as a ratio to total shipments increased to just below *** percent in 2012. This inventory level suggests that the Japanese producers may have a

limited ability to respond to changes in demand with changes in the quantity shipped from inventories.

Production alternatives

Japanese producers stated that they *** switch production from GOES to other products.

Supply constraints

Four Japanese importers reported they had refused, declined, or were unable to supply GOES since 2010. *** indicated due to allocation and availability, it had to decline inquiry sometimes. *** indicated that its supply was constrained by *** production capacity. *** had difficulty to getting Japanese producers to allocate any production capacity to meet demand for conventional GOES. *** that their limited production capacity had constrained their supply.

Subject imports from Korea

Based on available information, the one responding Korean producer has the ability to respond to changes in demand with large changes in the quantity of shipments of GOES to the U.S. market. The main contributing factors to the high degree of responsiveness of supply are the existence of alternate markets and inventories, as well and as some available capacity.

Industry capacity

With production ***, capacity utilization remained greater than *** percent between 2010 and 2012. This relatively moderate level of capacity utilization suggests that Korean producers may have some additional capacity to increase production of GOES in response to an increase in prices.

Alternative markets

Between 2010 and 2012, more than *** percent of Korean shipments were to the Korean home market or to export markets other than the United States. This indicates the Korean producer likely has an ability to shift shipments from the Korean home market and other export markets in response to a change in price.

Inventory levels

The Korean producer's inventories as a ratio to total shipments increased to just over *** percent in 2012. This inventory level suggests that the Korean producer may have an ability to respond to changes in demand with changes in the quantity shipped from inventories.

Production alternatives

The Korean producer stated that it *** switch production from GOES to other products.

Supply constraints

One importer of Korean GOES reported it had refused, declined, or were unable to supply GOES since 2010. *** indicated that their supply is constrained by the few mills that can produce high-end grade steel, limited capacity, and low prices in the market for "low grade GOES."

Subject imports from Poland

There is limited information available about Polish imports because no Polish producers responding the Commission questionnaire. Almost 95 percent of Poland's exports are to non-U.S. markets.

Supply constraints

One importer of Polish GOES reported it had refused, declined, or were unable to supply GOES since 2010. ***, stated that limited production capacity had constrained their supply.

Subject imports from Russia

Based on available information, Russian producers have the ability to respond to changes in demand with large changes in the quantity of shipments of GOES to the U.S. market. The main contributing factors to the high degree of responsiveness of supply are existence of alternate markets and inventories.

Industry capacity

With production ***, capacity utilization remained greater than *** percent between 2010 and 2012. This high level of capacity utilization suggests that Russian producers may have limited additional capacity to increase production of GOES in response to an increase in prices.

Alternative markets

Between 2010 and 2012, more than *** percent of Russian shipments were to the Russian home market or to export markets other than the United States. This indicates Russian producers likely have an ability to shift shipments from the Russian home market and other export markets in response to a change in price.

Inventory levels

Russian producers' inventories as a ratio to total shipments fluctuated between *** to *** percent in 2012. This inventory level suggests that Russian producers may have an ability to respond to changes in demand with changes in the quantity shipped from inventories.

Production alternatives

Russian producers stated that they *** switch production from GOES to other products.

Supply constraints

No importers of Russian GOES reported it had refused, declined, or were unable to supply GOES since 2010.

Nonsubject imports

The largest sources of nonsubject imports during 2010-12 were Italy, Mexico, France, Sweden, and Brazil. Combined, these countries accounted for all of nonsubject imports in 2012.[1]

U.S. demand

Based on available information, the overall demand for GOES is likely to experience small changes in response to changes in price. The main contributing factors are the (somewhat limited range of substitute products and the small cost share of product in most of its end-use products.

End uses

U.S. demand for GOES depends on the demand for U.S.-produced power and distribution transformers. GOES is used primarily in the production of laminated cores for large and medium-sized electrical power transformers and distribution transformers. Power transformers are used to raise the voltage of electric power from the level at which it is generated by a power plant to a higher level for more efficient transmission, and to lower voltage to levels suitable for local distribution. Distribution transformers, in turn, further reduce electrical voltage to levels suitable for commercial and residential consumers. Stampers may also use GOES may also to punch laminations that are used in equipment having smaller transformers, including appliances and aerospace, aeronautical, and electronic equipment.[2]

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[1] Census data also show Canada as a large nonsubject source, but it is believed that these data were misreported since there is no known production of GOES in Canada. See Part IV for more information on this issue.

[2] Petition, p. 9.

Petitioners stated that the degree to which utilities replace transformers is a demand driver in the replacement market, which currently makes up about 65 to 70 percent of the market for GOES and made up 75 to 80 percent of the market in 2011. They indicate that because of aging transformers, there has been a small increase over the historical rate of 3 percent per year. Petitioners also indicated that increases in new energy generation can increase demand.[3]

Housing starts are the biggest driver for demand in the new transformer market for GOES.[4] Japanese respondents indicated that the trend is not linear, as transformer demand is somewhat dependent on the location and type of housing being constructed.[5] Seasonally adjusted housing starts increased by 46 percent between January 2010 and August 2013, with most of the increase since latter part of 2011 (figure II-2). Housing starts, however, remain well below historic averages.[6] Japanese respondents also indicated that utility capital investment correlates less closely with demand for GOES for new power transformers, and that three new power transformer manufactures have opened plants in U.S. market within the past few years, increasing demand. Capital expenditures by shareholder-owned electric utilities increased by just over 20 percent between 2010 and 2012.[7]

Japanese respondents indicate that demand for GOES in the U.S. market is expected to increase with housing starts and commercial use both expected to be strong in the imminent future, new regulatory requirements fostering a shift to more efficient transformer design, and ongoing shift in smaller transformer demand from NOES to GOES. They also expect demand outside the U.S. market to increase as in many countries the electrical grid is still being built.[8] Petitioners indicate the higher efficiency requirements for new distribution transformers that take effect in 2016 will likely affect the relative use of types of GOES rather than substantially increase demand.[9]

Business cycles

Only one of two responding U.S. producers and three of 14 responding importers indicated that the market was subject to business cycles or conditions of competition. Specifically, *** indicated that the market for GOES is subject to seasonal demand fluctuations, as weather conditions (hot, dry weather and hurricanes) and increased construction activity in the summer and fall result in greater transformer demand. Several importers indicated that

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[3] Conference transcript, pp. 64-65 (Pfeiffer), pp. 65-66 (Polinski). Petitioners' postconference brief, Response to Commission staff questions, pp. 7-8.

[4] Conference transcript, p. 63 (Pfeiffer), p. 168 (Suzuki).

[5] Japanese producers' postconference brief, Response to staff questions, pp. 9-10.

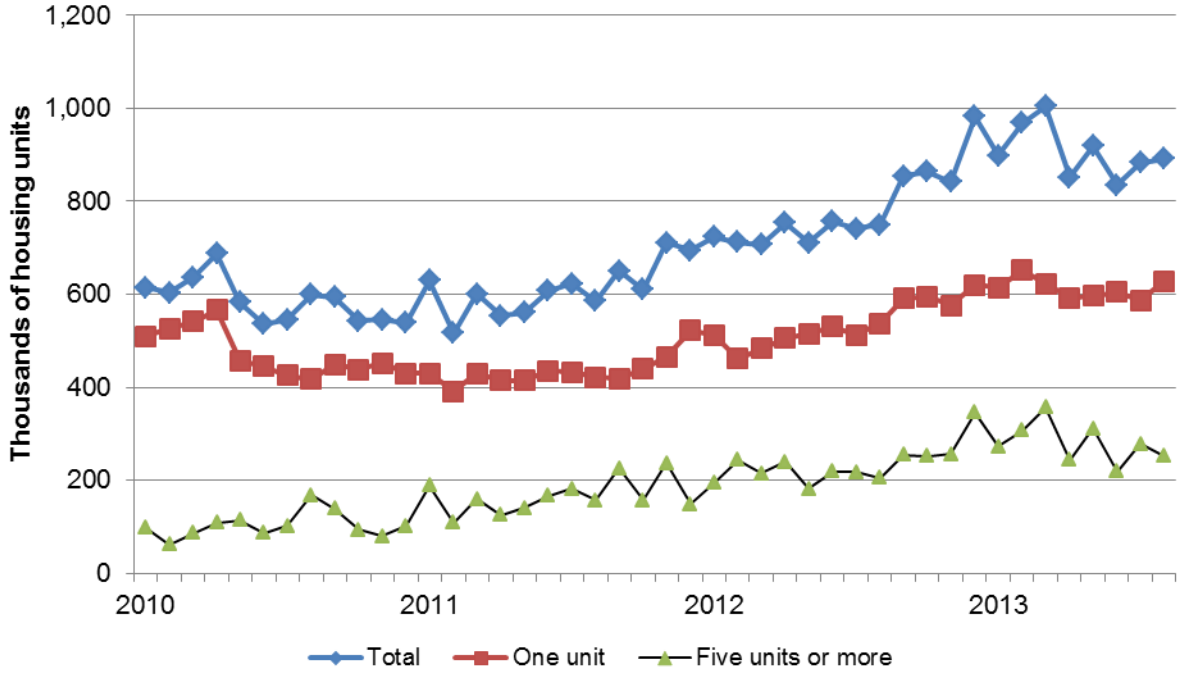
[6] U.S. Census Bureau, New Residential Construction. http://www.census.gov/construction/nrc/historical_data/

[7] Japanese producers' postconference brief, Response to staff questions, p. 10 and staff calculations using data from the Edison Electric Institute in exhibit I.

[8] Japanese producers' postconference brief, pp. 8-9.

[9] Petitioners' postconference brief, p. 7.

Figure II-2
Housing starts: Seasonally adjusted housing starts, monthly, January 2010-August 2013



Source: U.S. Census Bureau, New Residential Construction. http://www.census.gov/construction/nrc/historical_data/ (retrieved October 17, 2013).

business cycles or conditions of competition have changed since 2010, citing increased capacity for GOES China, the anticipated sale of ThyssenKrupp and a large number of transformer producers moving to countries with lower prices for GOES.[10] In addition, importer *** indicated that capacity has been added in the United States and reduced in Russia.

Demand trends

Both producers reported an increase in U.S. demand for GOES since 2010, while most importers reported a decrease in demand (table II-3). Most firms reporting an increase in demand attributed the increase the recovery in the economy or housing market, while most firms reporting a decline in demand cited the slowdown in the economy, housing sector, or the renewable energy sector.

Between 2010 and 2012 the quantity of apparent consumption of GOES increased by about half the rate as the average unit value of apparent consumption declined. This implies that demand increased to some extent between 2010 and 2012 assuming that demand is highly inelastic.

[10] In addition, importer *** indicated that capacity has been added in the United States and reduced in Russia since 2010. ***.

Table II-3

GOES: Firms' responses regarding U.S. demand, by number of responding firms since 2010

	Number of firms reporting			
Item	**Increase**	**No change**	**Decrease**	**Fluctuate**
Demand in the United States				
U.S. producers	2	0	0	0
Importers	4	1	9	2
Demand outside the United States:				
U.S. producers	***	***	***	***
Importers	5	2	5	3

Source: Compiled from data submitted in response to Commission questionnaires.

Substitute products

About one-half of responding U.S. producers and importers reported that there are substitutes for GOES. These included amorphous metal and NOES. Petitioners indicate that while amorphous metal may be used in certain transformer applications, limited production and low GOES prices preclude amorphous metal from being a realistic substitute in the vast majority of applications.[11] They also indicated that substitutability of NOES for GOES is limited to the low end of the GOES product spectrum because GOES shows magnetic behavior in one direction, while NOES has magnetic properties that are isotropic (multi-directional). Petitioners indicated the standard application for NOES is motor and generators which rotate and need multi-directional magnetization while GOES is for transformers which requires one direction of magnetization.[12]

Cost share

GOES accounts for small share of the cost of the end-use products in which it is used. Importers reported cost shares of 10 to 30 percent for power transformers.

SUBSTITUTABILITY ISSUES

The degree of substitution between domestic and imported GOES depends upon such factors as relative prices, quality (*e.g.*, grade standards, reliability of supply, defect rates, etc.), and conditions of sale (*e.g.*, price discounts/rebates, lead times between order and delivery dates, payment terms, product services, etc.). Based on available data, staff believes that there is moderate to high degree of substitutability between domestically produced GOES and GOES imported from subject sources.

[11] Petitioners' postconference brief, pp. 7-8.

[12] Petitioners' postconference brief, Response to Commission staff questions, pp. 8-9.

Lead times

GOES is primarily both produced-to-order and sold by inventory, depending on the supplier. ***. Five importers produce at least *** percent of their sales to order, two importers make *** of their shipments from foreign inventory, and two importers make *** of their shipments from U.S. inventory.

U.S. producer lead times from inventory are typically *** days, but sometimes are up to *** days. Importer lead times from U.S. inventory range from *** days, and lead times from foreign inventory can be from *** days. When they produce to order, U.S. producer lead time range from *** days while most importers' lead times range from *** days. Two importers (***) report a lead time for produced to order sales of *** days, and one importer (***) reports a lead time of *** days.

Factors affecting purchasing decisions

Petitioners indicate that since U.S.-produced and imported GOES are produced to ASTM or customer specifications, the most important factor for purchasers is price. They indicate that transformer manufacturers can use either conventional or high-permeability GOES to construct a medium voltage distribution transformer, such those outside of a home or attached to a pole. Petitioners estimate that these transformers make up about 70 percent of the market for GOES. However, they indicate that large voltage power transformers at utility companies that make up about 25 percent of the market typically use high-permeability steels.[13] They also indicate that although this type of substitution is typically stepping up or down one grade, an extreme price change would allow substitution beyond one adjacent grade.[14]

Petitioners indicate that producers' products need not be identical to be considered by purchasers for the same application, but only need to meet minimal criteria on key product characteristics such as core loss. They indicate that the ability of transformer manufacturers to analyze price has resulted in importers offering product with higher specifications and efficiency ratings than the domestic product a price that is not commensurate with the imported product's higher quality.[15]

Chinese respondents indicate that GOES is not a typical commodity product, but a specialty, high value-added steel product with complex and wide-ranging chemical properties.[16] Respondents indicate that although there is some overlap in competition between the various types and grades of GOES, the overlap is limited. They indicate that conventional GOES cannot be used in high-efficiency, low core loss, transformer applications. Also, they indicate that domain-refined GOES using a laser scribing process cannot be annealed and therefore cannot

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[13] Conference transcript, pp. 22-23, 57-59 (Petersen), pp. 57-59 (Polinski). Petitioners estimate that the remaining 5 percent of the market for GOES is made up of low voltage transformers. Conference transcript, pp. 58-59 (Polinski).

[14] Conference transcript, p. 91 (Petersen).

[15] Petitioners' postconference brief, pp. 9-10.

[16] Baosteel's postconference brief, p. 1.

substitute for heat proof domain-refined GOES using either an electrolytic-etching or mechanical scribing process. In addition, respondents indicate that DOE regulations make M4 and M6 grade GOES obsolete in the United States market.[17]

Comparison of U.S.-produced and imported GOES

Both U.S. producers indicated imports from all subject and nonsubject countries are "always" interchangeable U.S.-produced GOES and that GOES imported from all subject and nonsubject countries is "always" interchangeable (see table II-4). At least two-thirds of responding importers indicated that GOES imported from all subject countries is either "frequently" or "sometimes" interchangeable with U.S.-produced GOES. At least one-half of responding importers indicated that GOES imported from all subject countries is either "frequently" or "sometimes" interchangeable with GOES imported from other subject countries and nonsubject countries and that U.S.-produced GOES is either "frequently" or "sometimes" interchangeable with GOES imported from nonsubject countries.

Limitations with interchangeability cited by importers included Japanese steel having a lower performance variability in steel quality characteristics; high-permeability steel available in in *** widths only being availability from Japanese producers, *** grade that is not produced by U.S. producers; performance quality of Japanese produced steel cannot be matched by U.S. producers; GOES with a width of *** or thinner that is produced by Japanese producers, but not U.S. producers; mechanical-scribed domain-refined GOES which in not interchangeable with laser-scribed product produced by U.S. producers; and Japan, Korea, China, and Germany producing the highest grade of laser-scribed domain-refined GOES.

Both U.S. producers indicated that differences other than price between imports from all subject and nonsubject countries are U.S.-produced GOES were "never" significant and that these differences were "never" significant between GOES imported from all subject and nonsubject countries (see table II-5). Most responding importers indicated that differences other than price between GOES imported from all subject and nonsubject countries and U.S.-produced GOES were at least "sometimes" significant and that these differences were at least "sometimes" significant between GOES imported from subject and nonsubject countries.

Petitioners contend that all GOES products cited in the U.S. importers questionnaire as not being interchangeable are generally interchangeable with other GOES products. They also indicated that the many different grades of GOES are capable of meeting the new Department of Energy (DOE) efficiency standards including conventional, high-permeability, and heat-proof domain-refined.[18]

[17] Conference transcript, pp. 145-147 (Becker). Baosteel postconference brief, p. 2. Japanese producers' postconference brief, pp. 7, 13, 35-36. NLMK's postconference brief, p. 4.

[18] Petitioners' postconference brief, Response to Commission staff questions, p. 10.

Table II-4

GOES: Perceived interchangeability between GOES produced in the United States and in other countries, by country pairs

	Number of U.S. producers reporting				Number of U.S. importers reporting			
Country pair	**A**	**F**	**S**	**N**	**A**	**F**	**S**	**N**
U.S. vs. subject countries:								
U.S. vs. China	2	0	0	0	1	2	4	0
U.S. vs. Czech Republic	2	0	0	0	1	1	1	0
U.S. vs. Germany	2	0	0	0	1	6	3	0
U.S. vs. Japan	2	0	0	0	1	3	7	1
U.S. vs. Korea	2	0	0	0	0	2	4	0
U.S. vs. Poland	2	0	0	0	2	4	2	0
U.S. vs. Russia	2	0	0	0	0	3	3	0
Subject countries comparisons:								
China vs. Czech Republic	2	0	0	0	2	1	1	0
China vs. Germany	2	0	0	0	2	1	1	0
China vs. Japan	2	0	0	0	1	1	4	0
China vs. Korea	2	0	0	0	1	1	1	0
China vs. Poland	2	0	0	0	1	2	1	0
China vs. Russia	2	0	0	0	0	2	1	0
Czech Republic vs. Germany	2	0	0	0	0	2	1	0
Czech Republic vs. Japan	2	0	0	0	1	1	3	0
Czech Republic vs. Korea	2	0	0	0	0	2	1	0
Czech Republic vs. Poland	2	0	0	0	1	1	1	0
Czech Republic vs. Russia	2	0	0	0	0	2	1	0
Germany vs. Japan	2	0	0	0	1	1	3	0
Germany vs. Korea	2	0	0	0	1	1	1	0
Germany vs. Poland	2	0	0	0	1	2	1	0
Germany vs. Russia	2	0	0	0	0	2	1	0
Japan vs. Korea	2	0	0	0	0	1	2	0
Japan vs. Poland	2	0	0	0	1	3	2	0
Japan vs. Russia	2	0	0	0	0	1	2	0
Korea vs. Poland	2	0	0	0	0	2	1	0
Korea vs. Russia	2	0	0	0	0	2	1	0
Poland vs. Russia	2	0	0	0	1	1	1	0
Nonsubject countries comparisons:								
United States vs. Other	2	0	0	0	1	2	1	0
China vs. Other	2	0	0	0	0	1	1	0
Czech Republic vs. Other	2	0	0	0	1	0	1	0
Germany vs. Other	2	0	0	0	0	1	1	0
Japan vs. Other	2	0	0	0	0	0	2	0
Korea vs. Other	2	0	0	0	0	1	1	0
Poland vs. Other	2	0	0	0	1	2	1	0
Russia vs. Other	2	0	0	0	1	0	1	0

Note.—A=Always, F=Frequently, S=Sometimes, N=Never.

Source: Compiled from data submitted in response to Commission questionnaires.

Table II-5

GOES: Significance of differences other than price between GOES produced in the United States and in other countries, by country pair

	Number of U.S. producers reporting				Number of U.S. importers reporting			
Country pair	**A**	**F**	**S**	**N**	**A**	**F**	**S**	**N**
U.S. vs. subject countries:								
U.S. vs. China	0	0	0	2	2	1	3	0
U.S. vs. Czech Republic	0	0	0	2	2	0	3	1
U.S. vs. Germany	0	0	0	2	2	2	3	0
U.S. vs. Japan	0	0	0	2	4	3	2	0
U.S. vs. Korea	0	0	0	2	2	0	2	0
U.S. vs. Poland	0	0	0	2	3	0	4	1
U.S. vs. Russia	0	0	0	2	2	0	2	1
Subject countries comparisons:								
China vs. Czech Republic	0	0	0	2	1	0	2	0
China vs. Germany	0	0	0	2	1	0	1	0
China vs. Japan	0	0	0	2	2	0	1	0
China vs. Korea	0	0	0	2	1	0	1	0
China vs. Poland	0	0	0	2	1	0	2	0
China vs. Russia	0	0	0	2	1	0	2	0
Czech Republic vs. Germany	0	0	0	2	1	0	1	0
Czech Republic vs. Japan	0	0	0	2	2	0	1	0
Czech Republic vs. Korea	0	0	0	2	1	0	1	0
Czech Republic vs. Poland	0	0	0	2	1	0	1	0
Czech Republic vs. Russia	0	0	0	2	1	0	1	1
Germany vs. Japan	0	0	0	2	2	0	3	0
Germany vs. Korea	0	0	0	2	1	0	1	0
Germany vs. Poland	0	0	0	2	1	0	3	0
Germany vs. Russia	0	0	0	2	1	0	2	0
Japan vs. Korea	0	0	0	2	2	0	1	0
Japan vs. Poland	0	0	0	2	2	0	3	0
Japan vs. Russia	0	0	0	2	2	0	2	0
Korea vs. Poland	0	0	0	2	1	0	1	0
Korea vs. Russia	0	0	0	2	1	0	1	0
Poland vs. Russia	0	0	0	2	1	0	1	1
Nonsubject countries comparisons:								
United States vs. Other	0	0	0	2	2	0	2	0
China vs. Other	0	0	0	2	1	0	0	0
Czech Republic vs. Other	0	0	0	2	1	0	0	0
Germany vs. Other	0	0	0	2	1	0	2	0
Japan vs. Other	0	0	0	2	2	0	2	0
Korea vs. Other	0	0	0	2	1	0	0	0
Poland vs. Other	0	0	0	2	1	0	2	0
Russia vs. Other	0	0	0	2	1	0	0	0

Note.--A = Always, F = Frequently, S = Sometimes, N = Never.

Source: Compiled from data submitted in response to Commission questionnaires.

Japanese respondents indicate imports from Japan consist *** of heat-proofed domain-refined GOES that is not substitutable with U.S.-produced GOES. They indicate that the heat-proof GOES as a share of total Japanese sales ***. They indicate that domain-refined GOES imported from Japan use either an electrolytic-etching process (JFE) or mechanical scribing (NSSMC), while domain-refined GOES produced by the only U.S. producer of domain-refined GOES (AK Steel) uses a laser scribing process that cannot be annealed. They indicate that because post-winding annealing creates a stronger and more efficient transformer, certain transformer manufacturers have developed specialized wound transformer designs based exclusively on heat-proof domain-refined GOES imported from Japan.[19] Japanese respondents also indicate that U.S. producers serve a majority of the GOES market for distribution transformers without these very high efficiency design requirements.[20]

Russian respondents indicate that the conventional grades of GOES produced in Russia cannot compete with the higher grades required under DOE regulations for transformer production. They indicate that the regulation makes M4 and M6 obsolete in the United States market and eliminated NLMK's sales to the United States. Russian respondents also indicate that NLMK can make an M3 grade of GOES, but its standards are high enough to be used in most transformers.[21]

[19] Japanese producers'postconference brief, pp. 7, 13, 35-36.
[20] Japanese producers' postconference brief, Response to staff questions pp. 1-2.
[21] NLMK's postconference brief, pp. 4, 12.

PART III: U.S. PRODUCERS' PRODUCTION, SHIPMENTS, AND EMPLOYMENT

The Commission analyzes a number of factors in making injury determinations (see 19 U.S.C. §§ 1677(7)(B) and 1677(7)(C)). Information on the subsidies was presented in *Part I* of this report and information on the volume and pricing of imports of the subject merchandise is presented in *Part IV* and *Part V*. Information on the other factors specified is presented in this section and/or *Part VI* and (except as noted) is based on the questionnaire responses of two firms that accounted for all U.S. production of GOES during 2012.

U.S. PRODUCERS

The Commission sent U.S. producer questionnaires to the two petitioning firms: AK Steel and Allegheny. Both firms provided useable data on their production operations. Staff believes that these responses represent all U.S. production of GOES. Table III-1 lists the two U.S. producers of GOES, their production locations, positions on the petition, and shares of total production.

Table III-1
GOES: U.S. producers of GOES, their positions on the petition, production locations, and shares of reported production, 2012

Firm	Position on orders	U.S. production locations	Share of production (percent)
AK Steel[1]	Petitioner	Butler, Pennsylvania Zanesville, Ohio West Chester, Ohio	***
Allegheny Ludlum[2]	Petitioner	Brackenridge, Pennsylvania Leechburg, Pennsylvania	***
Total			100.0

[1] ***.
[2] Allegheny Ludlum is wholly owned by Allegheny Technologies Inc. (Pittsburgh, Pennsylvania).

Source: Compiled from data submitted in response to Commission questionnaires.

AK Steel is the larger of the two domestic producers, accounting for *** percent of total domestic production of GOES. Neither U.S. producer directly imports the subject merchandise or purchases the subject merchandise from U.S. importers. In addition, both U.S. producers indicated in their questionnaire responses that they were not related to any foreign producers of the subject merchandise or any U.S. importers of the subject merchandise. However, Japanese GOES producer Nippon Steel & Sumitomo Metal Corp. ("Nippon") operates two GOES service centers in the United States through Vicksmetal Armco Associates, a *** joint-venture

operation owned by Japanese producer Nippon and domestic producer AK Steel. Vicksmetal Armco Associates is a slitter of master coils of electrical steel with two facilities in the United States, one in Indiana and the other in Mississippi.[1]

In the Commission's questionnaire, U.S. producers were asked if they experienced any plant openings, plant closings, relocations, expansions, acquisitions, consolidations, prolonged shutdowns or production curtailments, or revised labor agreements since January 1, 2010. Table III-2 summarizes the domestic producers' responses regarding such changes.

Table III-2
GOES: U.S. producers changes in operations, since 2010

* * * * * * *

U.S. PRODUCTION, CAPACITY, AND CAPACITY UTILIZATION

GOES

Table III-3 presents U.S. producers' production, capacity, and capacity utilization. Total annual capacity to produce GOES in the United States has remained unchanged at *** short tons since 2010. Total GOES production increased from 2010 to 2011 by *** percent, but declined by *** percent in 2012 to a level that was *** percent lower than reported in 2010. Total GOES production in January-June 2013 was *** percent lower than in January-June 2012. Both domestic producers experienced similar trends in GOES production. The rate of capacity utilization rose and decreased alongside the year-to-year changes in production during 2010-12, ranging from a low of *** percent in 2012 to a high of *** percent in 2011. Capacity utilization was lower at *** percent in January-June 2013 than in January-June 2012, reflecting a lower level of production.

Table III-3
GOES: U.S. producers' production, capacity, and capacity utilization, 2010-12, January-June 2012, and January-June 2013

* * * * * * *

[1] Conference transcript, pp. 105 and 155 (Saito).

Overall capacity and production

Domestic producers were asked to provide data on the overall capacity and production in their GOES facilities, by type of item produced. AK Steel reported that, in addition to producing high permeability GOES (including both domain-refined and non-domain-refined) and conventional GOES, it also produces NOES ***. Allegheny Ludlum reported that it currently produces only conventional GOES in commercial quantities at its GOES facilities, but it noted that it is in the process of expanding its product mix to include high permeability GOES and has successfully produced and shipped high permeability GOES in trial orders to select customers.[2]

Table III-4 presents the domestic industry's overall U.S. capacity, production, and capacity utilization of NOES and the different varieties of GOES. Production of NOES increased as a share of total production from *** percent in 2010 to *** percent in 2012. *** accounted for *** percent of total plant production in January-June 2012 and *** percent in January-June 2013. Conventional GOES accounted for *** percent of total overall plant production in the United States during 2012, whereas high-permeability GOES (*** of which was domain-refined) accounted for *** percent of overall production.

Table III-4
GOES: U.S. producers' overall capacity, production, and capacity utilization, by type, 2010-12, January-June 2012, and January-June 2013

* * * * * * *

Producers were asked to describe the constraint(s) that set the limit(s) of their production capacity and their ability to shift production capacity between products. AK Steel reported "***." Allegheny Ludlum reported "***."

U.S. PRODUCERS' U.S. SHIPMENTS AND EXPORTS

Table III-5 presents U.S. producers' U.S. shipments, export shipments, and total shipments. Neither U.S. GOES producer reported internal consumption or transfers of GOES to related firms in the United States.[3] U.S. producers' U.S. commercial shipments accounted for a relatively large and increasing share of aggregate total shipments. U.S. commercial shipments accounted for *** percent of total shipments in 2012, compared to *** percent in 2010. During January-June 2013, U.S. commercial shipments accounted for *** percent of total shipments.

[2] Conference transcript, p. 27 (Polinski).
[3] ***. E-mail from ***, October 24, 2013.

Table III-5

GOES: U.S. producers' U.S. shipments, exports shipments, and total shipments, 2010-12, January-June 2012, and January-June 2013

* * * * * * *

The quantity of U.S. producers' U.S. shipments of GOES increased by *** percent from 2010 to 2011 but declined by *** percent in 2012 to a level that was *** percent higher than reported in 2010. U.S. shipments were *** percent higher in January-June 2013 than in January-June 2012. Average unit values of U.S. commercial shipments decreased steadily by *** percent during 2010-12, and were *** percent lower in January-June 2013 than in January-June 2012.

The quantity of U.S. producers' exports of GOES increased by *** percent from 2010 to 2011 but declined by *** percent in 2012 to a level that was *** percent lower than reported in 2010. Exports were *** percent lower in January-June 2013 than in January-June 2012. Average unit values of exports, which were below the average unit values of U.S. commercial shipments in every period, decreased steadily by *** percent during 2010-12, and were *** percent lower in January-June 2013 than in January-June 2012. The aggregate trend in exports reflects in large part the experience of ***.[4] Exports accounted for only about *** of Allegheny Ludlum's total GOES shipments. AK Steel's export markets include: ***. Allegheny Ludlum's export market include: ***.

Table III-6 presents U.S. producers' U.S. shipments and export shipments, by types of GOES. These data show that conventional GOES account for the substantial majority (*** percent in 2012) of U.S. producers' U.S. shipments. High-permeability domain-refined GOES accounted for *** percent of U.S. producers' U.S. shipments in 2012, whereas high-permeability non-domain-refined GOES accounted for only *** percent. As a share of U.S. producers' exports in 2012, conventional GOES accounted for *** percent, high-permeability domain-refined GOES accounted for *** percent, and high-permeability non-domain-refined GOES accounted for *** percent.

Table III-6

GOES: U.S. producers' U.S. shipments and exports shipments, by type of GOES, 2010-12, January-June 2012, and January-June 2013

* * * * * * *

[4] AK Steel ***. Emails from ***, November 13, 2013. AK Steel explained that its ***. Email from ***, November 6, 2013.

U.S. PRODUCERS' INVENTORIES

Table III-7 presents U.S. producers' end-of-period inventories and the ratio of these inventories to U.S. producers' production, U.S. shipments, and total shipments. Producers' inventories decreased from 2010 to 2012, but peaked in absolute terms in June 2012 and were at their lowest level in June 2013. *** accounted for approximately *** of the aggregate inventories held.

Table III-7

GOES: U.S. producers' end-of-period inventories, 2010-12, January-June 2012, and January-June 2013

* * * * * * *

U.S. PRODUCERS' IMPORTS AND PURCHASES

Neither U.S. producer reported direct imports or purchases of GOES during 2010-12, January-June 2012, or January-June 2013.

U.S. EMPLOYMENT, WAGES, AND PRODUCTIVITY

Table III-8 shows U.S. producers' employment-related data for GOES during 2010-12, January-June 2012, and January-June 2013. Both AK Steel and Allegheny Ludlum exhibited similar overall trends in the employment indicators reported. In the aggregate, U.S. producers reported an increase in the number of production and related workers ("PRWs") from 2010 to 2011 and a decline in 2012 to a level below that reported for 2010. The number of PRWs in January-June 2013 was lower than reported in the comparable period in 2012. Total hours worked, hours worked per PRW, wages paid, and productivity likewise showed overall declines from 2010 to 2012, and these indicators were lower in January-June 2013 than in January-June 2012. However, hourly wages increased overall from 2010 to 2012, as did unit labor costs. Hourly wages were lower in January-June 2013 than in January-June 2012, whereas unit labor costs were higher.

Table III-8

GOES: Average number of production and related workers ("PRWs"), hours worked, wages paid to such employees, hourly wages, productivity, and unit labor costs, 2010-12, January-June 2012, and January-June 2013

* * * * * * *

PART IV: U.S. IMPORTS, APPARENT U.S. CONSUMPTION, AND MARKET SHARES

U.S. IMPORTERS

The Commission issued importer questionnaires to 33 firms believed to be importers of GOES, as well as to all U.S. producers of GOES.[1] Usable questionnaire responses were received from 18 companies representing *** percent of total imports from China, *** percent of total imports from the Czech Republic, *** percent of total imports from Germany, *** percent of total imports from Japan, *** percent from Korea, *** percent from Poland, *** percent from Russia, and *** percent from all nonsubject sources from January 2010 to June 2013 under HTS statistical reporting numbers 7225.11.0000, 7226.11.1000, 7226.11.9030, and 7226.11.9060, as adjusted.[2] [3]

Table IV-1 lists all responding U.S. importers of GOES from China, the Czech Republic, Germany, Japan, Korea, Poland, Russia, and other sources, their locations, and their shares of reported U.S. imports, during January 2010-June 2013.

Table IV-1
GOES: U.S. importers by source, January 2010-June 2013

* * * * * * *

[1] The Commission issued questionnaires to those firms identified in the petition, along with firms that, based on a review of data provided by U.S. Customs and Border Protection ("Customs"), may have accounted for more than one percent of total imports under HTS statistical reporting numbers 7225.11.0000, 7226.11.1000, 7226.11.9030, and 7226.11.9060 since January 1, 2010.

[2] Adjustments to the import data presented are described below, under "U.S. Imports."

[3] In general, temporary importation under bond ("TIB") is a procedure whereby merchandise may be temporarily entered into the U.S. customs territory free of duty by posting a bond in an amount equal to double the estimated duties had all the articles covered by the entry been entered under an ordinary consumption entry. 19 C.F.R. §§ 10.31(f). Under the terms of the bond, the importer agrees to export or destroy the merchandise within a specified time or pay liquidated damages, generally equal to twice the normal duty. See 19 C.F.R. sec. 10.39 (d) (1); Titanium Metals Corp. v. United States, 901 F. Supp. 362, 364 (Ct. Int'l Trade 1995). However, under NAFTA article 303.3, if merchandise were re-exported to a NAFTA country, and subject to an antidumping duty order, antidumping duties would be assessed at such time of re-exportation. A summary of data that includes TIB imports reported by U.S. importer *** is presented in appendix C, table C-2. *** imported *** short tons ($***) of GOES from *** during 2012 and *** short tons ($***) under the TIB program. These TIB imports were re-exported to ***.

U.S. IMPORTS

Table IV-2 presents data for U.S. imports of GOES from China, the Czech Republic, Germany, Japan, Korea, Poland, Russia, and all other sources combined. The import data presented are compiled from official statistics (HTS statistical reporting numbers 7225.11.0000, 7226.11.1000, 7226.11.9030, and 7226.11.9060), as adjusted to remove the data reported for Canada and to supplement the data reported ***.[4]

Table IV-2
GOES: U.S. imports by source, 2010-12, January-June 2012, and January-June 2013

Item	Calendar year			January-June	
	2010	2011	2012	2012	2013
Quantity (*short tons*)					
China	***	***	***	***	***
Czech Republic	***	***	***	***	***
Germany	***	***	***	***	***
Japan	***	***	***	***	***
Korea	***	***	***	***	***
Poland	***	***	***	***	***
Russia	***	***	***	***	***
Subtotal, subject	31,380	28,424	32,318	14,805	16,297
All other sources, nonsubject	3,422	4,372	2,925	1,739	1,036
All sources	34,802	32,796	35,243	16,544	17,334
Value (*1,000 dollars*)					
China	***	***	***	***	***
Czech Republic	***	***	***	***	***
Germany	***	***	***	***	***
Japan	***	***	***	***	***
Korea	***	***	***	***	***
Poland	***	***	***	***	***
Russia	***	***	***	***	***
Subtotal, subject	97,095	80,590	86,738	39,951	39,475
All other sources, nonsubject	11,762	13,371	8,803	5,314	2,832
All sources	108,857	93,961	95,542	45,265	42,307

Table continued on following page.

[4] Official Commerce statistics show entries of GOES from Canada during January 2010-June 2013. However, because there is no GOES production capacity in Canada, the data reported for Canada were removed from the U.S. import presentation in this report. According to proprietary Customs records, ***.

Table IV-2--*Continued*
GOES: U.S. imports by source, 2010-12, January-June 2012, and January-June 2013

Item	Calendar year			January-June	
	2010	2011	2012	2012	2013
			Unit value (*dollars per short ton*)		
China	***	***	***	***	***
Czech Republic	***	***	***	***	***
Germany	***	***	***	***	***
Japan	***	***	***	***	***
Korea	***	***	***	***	***
Poland	***	***	***	***	***
Russia	***	***	***	***	***
Subtotal, subject	3,094	2,835	2,684	2,698	2,422
All other sources, nonsubject	3,437	3,058	3,009	3,056	2,733
All sources	3,128	2,865	2,711	2,736	2,441
			Share of quantity (*percent*)		
China	***	***	***	***	***
Czech Republic	***	***	***	***	***
Germany	***	***	***	***	***
Japan	***	***	***	***	***
Korea	***	***	***	***	***
Poland	***	***	***	***	***
Russia	***	***	***	***	***
Subtotal, subject	90.2	86.7	91.7	89.5	94.0
All other sources, nonsubject	9.8	13.3	8.3	10.5	6.0
All sources	100.0	100.0	100.0	100.0	100.0
			Share of value (*percent*)		
China	***	***	***	***	***
Czech Republic	***	***	***	***	***
Germany	***	***	***	***	***
Japan	***	***	***	***	***
Korea	***	***	***	***	***
Poland	***	***	***	***	***
Russia	***	***	***	***	***
Subtotal, subject	89.2	85.8	90.8	88.3	93.3
All other sources, nonsubject	10.8	14.2	9.2	11.7	6.7
All sources	100.0	100.0	100.0	100.0	100.0

Source: Compiled from official statistics of the U.S. Department of Commerce with adjustments made based on data submitted in response to Commission questionnaires.

NEGLIGIBILITY

The statute requires that an investigation be terminated without an injury determination if imports of the subject merchandise are found to be negligible.[5] Negligible imports are generally defined in the Tariff Act of 1930, as amended, as imports from a country of merchandise corresponding to a domestic like product where such imports account for less than 3 percent of the volume of all such merchandise imported into the United States in the most recent 12-month period for which data are available that precedes the filing of the petition or the initiation of the investigation. However, if there are imports of such merchandise from a number of countries subject to investigations initiated on the same day that individually account for less than 3 percent of the total volume of the subject merchandise, and if the imports from those countries collectively account for more than 7 percent of the volume of all such merchandise imported into the United States during the applicable 12-month period, then imports from such countries are deemed not to be negligible.[6]

Table IV-3 presents data for U.S. imports during September 2012-August 2013 (i.e., the most recent 12-month period preceding the filing of the petition) for each subject country and its share of total imports. The U.S. import data presented for September 2012-August 2013 are from official Commerce data.[7] Official Commerce data show that shares of imports from the seven subject countries individually account for more than 3 percent of the volume of total imports of GOES – China (5.1 percent), Czech Republic (8.8 percent), Germany (6.8 percent), Japan (43.8 percent), Korea (9.8 percent), Poland (5.9 percent), and Russia (6.9 percent) – and combined more than 7 percent of the volume of total imports of GOES – (87.1 percent).

[5] Sections 703(a)(1), 705(b)(1), 733(a)(1), and 735(b)(1) of the Act (19 U.S.C. §§ 1671b(a)(1), 1671d(b)(1), 1673b(a)(1), and 1673d(b)(1)).

[6] Section 771 (24) of the Act (19 U.S.C § 1677(24)).

[7] The data presented for nonsubject sources are overstated by the amount reported for Canada and the data presented for *** are understated by the amount of GOES entered into the United States through Canada.

Table IV-3
GOES: U.S. imports by source and share of imports, September 2012-August 2013 and July 2012-June 2013

Source	Official Commerce data September 2012-August 2013	Adjusted official Commerce data July 2012-June 2013
	Quantity (*short tons*)	
China	1,854	***
Czech Republic	3,225	***
Germany	2,489	***
Japan	16,088	***
Korea	3,607	***
Poland	2,177	***
Russia	2,517	***
Subject, subtotal	31,956	33,810
All other sources	4,734	2,223
Total	36,690	36,033
	Share of quantity (*percent*)	
China	5.1	***
Czech Republic	8.8	***
Germany	6.8	***
Japan	43.8	***
Korea	9.8	***
Poland	5.9	***
Russia	6.9	***
Subject, subtotal	87.1	93.8
All other sources	12.9	6.2
Total	100.0	100.0

Source: Compiled from official statistics of the U.S. Department of Commerce and from data submitted in response to Commission questionnaires.

Also presented in table IV-3 are official Commerce import statistics for U.S. imports of GOES, as adjusted to eliminate U.S. imports from Canada and to supplement reported U.S. imports originating in *** with certain questionnaire data for GOES reported to be entered from these sources through Canada. The adjusted import statistics presented are for July 2012-June 2013—the time period closest to the most recent 12-month period preceding the filing of the petition for which Commission questionnaire data are available. The adjusted import data show that shares of imports from the seven subject countries individually account for more than 3 percent of the volume of total imports of GOES – China (*** percent), Czech Republic (*** percent), Germany (*** percent), Japan (*** percent), Korea (*** percent), Poland (*** percent), and Russia (*** percent) – and combined more than 7 percent of the volume of total imports of GOES – (93.8 percent).

CUMULATION CONSIDERATIONS

In assessing whether imports should be cumulated, the Commission determines whether U.S. imports from the subject countries compete with each other and with the domestic like product and has generally considered four factors: (1) fungibility, (2) presence of sales or offers to sell in the same geographical markets, (3) common or similar channels of distribution, and (4) simultaneous presence in the market. Additional information concerning fungibility, geographical markets, and simultaneous presence in the market is presented below.

Fungibility

Table IV-4 presents the shares of U.S. importers' U.S. shipments by type of GOES and by source of import. These data show that during 2012 a majority (*** percent) of U.S. producers' U.S. shipments of GOES were of the conventional type, although U.S. producers also reported U.S. shipments of both domain-refined and non-domain-refined, high-permeability GOES to the U.S. market. U.S. shipments of imports of GOES from the Czech Republic, Poland, and Russia were *** of the conventional type of GOES during January 2010-June 2013. *** U.S. shipments of GOES imported from Germany (*** percent) were conventional GOES, although *** of high permeability, non-domain-refined GOES were also reported. The data also show that during 2012 *** of U.S. shipments of GOES imported from China (*** percent) and Japan (*** percent) were high-permeability GOES, although *** of U.S. shipments of imports from these two subject countries were of the conventional type of GOES. U.S. shipments of imports of GOES from Korea were *** high-permeability GOES (both domain- and non-domain-refined) during January 2010-June 2013. There were *** more U.S. shipments of imports from nonsubject sources of conventional GOES (*** percent) than high-permeability, domain-refined GOES (*** percent) during 2012.

Table IV-4
GOES: Share of U.S. producers' and U.S. importers' U.S. shipments, by type of GOES and by source, 2010-12, January-June 2012, and January-June 2013

* * * * * * *

Presence in the market

Official Commerce data for U.S. imports were used to evaluate subject import presence in the market. Table IV-5 summarizes the number of months in which imports were present from each subject source. Imports from Japan were present in every month during January 2010-June 2013. Imports from China were present for one month in 2010, present for three months in 2011, five months in 2012. Imports from the Czech Republic and Germany were present for eight and ten months, respectively, in 2010 and all months during 2011-12. Imports from Korea were present all months during 2010-11 and nine months in 2012. Imports from Poland were present for nine months in 2010, all months in 2011, and 11 months in 2012. Imports from Russia were present for 10 months in 2010, 11 months in 2011, and all months in 2012. All subject countries' imports were present in all six months during January-June 2013, with the exception of Korea, which were imported into the United States for four of the six months in 2013.

Table IV-5
GOES: Number of months of presence of imports, 2010-12 and January-June 2013

	Calendar year			January-June	
Source	2010	2011	2012	2013	Total
	Number of months of import entries				
China	1	3	5	6	15
Czech Republic	8	12	12	6	38
Germany	10	12	12	6	40
Japan	12	12	12	6	42
Korea	12	12	9	4	37
Poland	9	12	11	6	38
Russia	10	11	12	6	39

Source: Compiled from official Commerce statistics.

Geographical markets

Official Commerce statistics show that in during January 2010-June 2013, U.S. imports of GOES from the subject countries entered the United States through 24 Customs districts nationwide.[8] All subject countries entered GOES imports through Buffalo, New York, and Detroit, Michigan. In addition, all subject countries, except for China and Russia, entered GOES

[8] The 24 Customs districts are: Baltimore, Maryland; Buffalo, New York; Charleston, South Carolina; Charlotte, North Carolina; Chicago, Illinois; Cleveland, Ohio; Detroit, Michigan; Houston-Galveston, Texas; Laredo, Texas; Los Angeles, California; Milwaukee, Wisconsin; Mobile, Alabama; New Orleans, Louisiana; New York, New York; Nogales, Arizona; Norfolk, Virginia; Ogdensburg, New York; Philadelphia, Pennsylvania; San Diego, California; San Francisco, California; San Juan, Puerto Rico; Savannah, Georgia; St. Louis, Missouri; and Tampa, Florida.

imports into the United States through the Customs district of Chicago, Illinois; all but Czech Republic and Poland entered imports through Los Angeles, California; all but Czech Republic and Korea entered imports through New Orleans, Louisiana; and all but China and Korea entered imports through New York, New York. Table IV-6 presents the shares of U.S. imports, by Customs district and by source of import for January 2010-June 2013.

Table IV-6
GOES: Share of U.S. imports, by Customs district and by source, January 2010-June 2013

Item	January 2010-June 2013	
	Quantity (*short tons*)	Share of quantity (*percent*)
U.S. imports from China:		
San Diego, CA	1,153	60.5
Detroit, MI	482	25.3
Buffalo, NY	137	7.2
Other Customs districts	132	6.9
Total, all Customs districts	1,904	100.0
U.S. imports from the Czech Republic:		
Chicago, IL	12,094	54.0
Buffalo, NY	6,125	27.3
Detroit, MI	2,236	10.0
Other Customs districts	1,944	8.7
Total, all Customs districts	22,399	100.0
U.S. imports from Germany:		
Chicago, IL	6,608	43.7
Los Angeles, CA	4,650	30.8
Savannah, GA	1,828	12.1
Other Customs districts	2,034	13.5
Total, all Customs districts	15,120	100.0
U.S. imports from Japan:		
Laredo, TX	36,285	34.5
New Orleans, LA	24,016	22.9
Buffalo, NY	16,867	16.1
Other Customs districts	27,921	26.6
Total, all Customs districts	105,089	100.0
U.S. imports from Korea:		
Mobile, AL	9,248	58.4
Los Angeles, CA	5,922	37.4
Detroit, MI	416	2.6
Other Customs districts	237	1.5
Total, all Customs districts	15,823	100.0
U.S. imports from Poland:		
St. Louis, MO	12,064	68.1
Norfolk, VA	2,870	16.2
Chicago, IL	1,919	10.8
Other Customs districts	865	4.9
Total, all Customs districts	17,718	100.0
U.S. imports from Russia:		
Buffalo, NY	4,490	41.3
Norfolk, VA	4,279	39.4
Detroit, MI	1,082	10.0
Other Customs districts	1,019	9.4
Total, all Customs districts	10,870	100.0

Source: Compiled from official Commerce statistics.

During January 2010-June 2013, most U.S. imports of GOES from China (93.1 percent) entered the United States through the Customs districts of San Diego, California; Detroit, Michigan; and Buffalo, NY; although U.S. imports of GOES from China also entered the United States in relatively smaller amounts since January 2010 through the Customs districts of Laredo, Texas; Los Angeles, California; New Orleans, Louisiana; Nogales, Arizona; Philadelphia, Pennsylvania; Savannah, Georgia; and Tampa, Florida. Almost all U.S. imports of GOES from the Czech Republic (97.3 percent) entered the United States through the Customs districts of Buffalo, New York; Chicago, Illinois; Detroit, Michigan; and Baltimore, Maryland during the same time period. Relatively minor amounts of Czech Republic GOES also entered the United States through the Customs districts of Laredo, Texas; Milwaukee, Wisconsin; New York, New York; and Ogdensburg, New York. Imports of GOES from Germany during January 2010-June 2013 primarily entered the United States through the Customs districts of Chicago, Illinois; Los Angeles, California; and Savannah, Georgia (86.5 percent of total U.S. imports from Germany). Smaller amounts of U.S. GOES imports from Germany also entered the United States through Baltimore, Maryland; Buffalo, New York; Charlotte, North Carolina; Detroit, Michigan; New Orleans, Louisiana; New York, New York; and San Francisco, California. GOES imports from Japan entered the United States through 11 separate Customs districts since January 2010 (Buffalo, New York; Chicago, Illinois; Detroit, Michigan; Laredo, Texas; Los Angeles, California; New Orleans, Louisiana; New York, New York; Ogdensburg, New York; Philadelphia, Pennsylvania; San Diego, California; and Savannah, Georgia), more than half of which (57.4 percent) entered through the Laredo and New Orleans Customs districts during January 2010-June 2013. Almost all U.S. imports of GOES from Korea (95.9 percent during January 2010-June 2013) entered the United States through the Customs districts of Los Angeles, California, and Mobile, Alabama, although smaller amounts of Korea GOES also entered the United States through the Customs districts of Buffalo, New York; Chicago, Illinois; Detroit, Michigan; Laredo, Texas; Ogdensburg, New York; and San Juan, Puerto Rico. Since January 2010, slightly more than 95 percent of U.S. imports of GOES from Poland entered the United States through three Customs districts (St. Louis, Missouri; Norfolk, Virginia; and Chicago, Illinois), although relatively minor amounts also entered through Baltimore, Maryland; Buffalo, New York; Cleveland, Ohio; Detroit, Michigan; New Orleans, Louisiana; and New York, New York. GOES imports from Russia entered the United States through 13 separate Customs districts since January 2010 (Baltimore, Maryland; Buffalo, New York; Charleston, South Carolina; Charlotte, North Carolina; Cleveland, Ohio; Detroit, Michigan; Houston-Galveston, Texas; Los Angeles, California; New Orleans, Louisiana; New York, New York; Norfolk, Virginia; Ogdensburg, New York; and Philadelphia, Pennsylvania), 90.6 percent of which entered through three districts (Buffalo, Norfolk, and Detroit) during January 2010-June 2013.

APPARENT U.S. CONSUMPTION

Table IV-7 presents data on apparent U.S. consumption and U.S. market shares for GOES during 2010-12, January-June 2012, and January-June 2013. These data show that apparent U.S. consumption, by quantity, increased by *** percent from 2010 to 2011, but decreased by ***

percent in 2012 to a level *** percent higher than in 2011. Apparent U.S. consumption of GOES, by quantity, was *** percent higher in January-June 2013 than in January-June 2012. However, there was a different trend in apparent U.S. consumption observed, by value. Reflecting a general decline in unit values of U.S.-produced and imported GOES in the United States, apparent U.S. consumption of GOES, by value, declined by *** percent from 2010 to 2012, and was *** percent lower in January-June 2013 than in January-June 2012.

Table IV-7

GOES: U.S. shipments of domestic product, U.S. shipments of imports, and apparent U.S. consumption, 2010-12, January-June 2012, and January-June 2013

Item	Calendar year			January-June	
	2010	2011	2012	2012	2013
	Quantity (*short tons*)				
U.S. producers' shipments					
U.S. imports from--					
China	***	***	***	***	***
Czech Republic	***	***	***	***	***
Germany	***	***	***	***	***
Japan	***	***	***	***	***
Korea	***	***	***	***	***
Poland	***	***	***	***	***
Russia	***	***	***	***	***
Subtotal, subject imports	31,380	28,424	32,318	14,805	16,297
All other import sources	3,422	4,372	2,925	1,739	1,036
All import sources	34,802	32,796	35,243	16,544	17,334
Apparent U.S. consumption	***	***	***	***	***
	Value ($1,000)				
U.S. producers' shipments	***	***	***	***	***
U.S. imports from--					
China	***	***	***	***	***
Czech Republic	***	***	***	***	***
Germany	***	***	***	***	***
Japan	***	***	***	***	***
Korea	***	***	***	***	***
Poland	***	***	***	***	***
Russia	***	***	***	***	***
Subtotal, subject imports	97,095	80,590	86,738	39,951	39,475
All other import sources	11,762	13,371	8,803	5,314	2,832
All import sources	108,857	93,961	95,542	45,265	42,307
Apparent U.S. consumption	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires and adjusted official statistics of the U.S. Department of Commerce.

U.S. MARKET SHARES

U.S. market share data are presented in table IV-8.

Table IV-8
GOES: U.S. consumption and market shares, 2010-12, January-June 2012, and January-June 2013

* * * * * * *

RATIO OF IMPORTS TO U.S. PRODUCTION

Table IV-9 presents data on the ratio of U.S. imports to U.S. production. During 2012, U.S. imports of GOES from subject countries amounted to *** percent of total domestic GOES production.

Table IV-9
GOES: Ratio of U.S. imports to U.S. production, 2010-12, January-June 2012, and January-June 2013

Item	Calendar year			January-June	
	2010	2011	2012	2012	2013
	Quantity (*short tons*)				
U.S. production	***	***	***	***	***
U.S. imports from--					
China	***	***	***	***	***
Czech Republic	***	***	***	***	***
Germany	***	***	***	***	***
Japan	***	***	***	***	***
Korea	***	***	***	***	***
Poland	***	***	***	***	***
Russia	***	***	***	***	***
Subject sources	31,380	28,424	32,318	14,805	16,297
All others sources	3,422	4,372	2,925	1,739	1,036
All import sources	34,802	32,796	35,243	16,544	17,334
	Ratio (*percent*)				
Ratio to U.S. production of imports from.--					
China	***	***	***	***	***
Czech Republic	***	***	***	***	***
Germany	***	***	***	***	***
Japan	***	***	***	***	***
Korea	***	***	***	***	***
Poland	***	***	***	***	***
Russia	***	***	***	***	***
Subject sources	***	***	***	***	***
All others sources	***	***	***	***	***
All import sources	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires and adjusted official statistics of the U.S. Department of Commerce.

PART V: PRICING DATA

FACTORS AFFECTING PRICES

Raw material costs

Steel scrap and silicon are the predominant material input costs to produce GOES. Raw material costs made up between *** to *** percent of U.S. producers' cost of goods sold during 2010 to 2012. U.S. producers described raw material costs as increasing while most importers indicated that these costs have either decreased or fluctuated. The domestic industry's per-ton raw material costs increased between 2010 and 2012, but were lower in January-June 2013 than in January-June 2012. Petitioners indicate that increases in the price of electricity have been a major driver increasing raw material costs and that increases in the cost of magnesium oxide and of coatings such as phosphoric acid and base coatings have increased.[1] *** indicated that iron scrap prices have been relatively stable since 2010, but that prices for high purity ferrosilicon have increased by about *** percent since 2010. *** indicated that principal raw material used to produce GOES is hot-rolled band and that its price has been declining since 2010. Japanese and Chinese respondents stated that Japanese and Chinese producers have a different raw material cost structure than U.S. producers since they are integrated steel mills.[2]

Prices for ferrosilicon and ferrous scrap have increased and fluctuated since January 2010, increasing overall by about 20 percent by September 2013 (figure V-1). Aside from seasonal fluctuations, the industrial price of electricity generally remained at the same level since January 2010. The NYMEX futures price for natural gas has declined since January 2010; decreasing by almost 40 percent through August 2013.

U.S. producers also use raw material surcharges in contract prices.[3] The *** primary surcharge elements are ***. Allegheny Ludlum calculates its raw material surcharge *** and its surcharges are publicly available on the company website. AK Steel ***.[4]

U.S. inland transportation costs

The only responding U.S. producers and importers reported that they typically arrange transportation to their customers. U.S. producers reported that their U.S. inland transportation costs ranged up to *** percent while most importers reported costs of ranging up to 5 percent.

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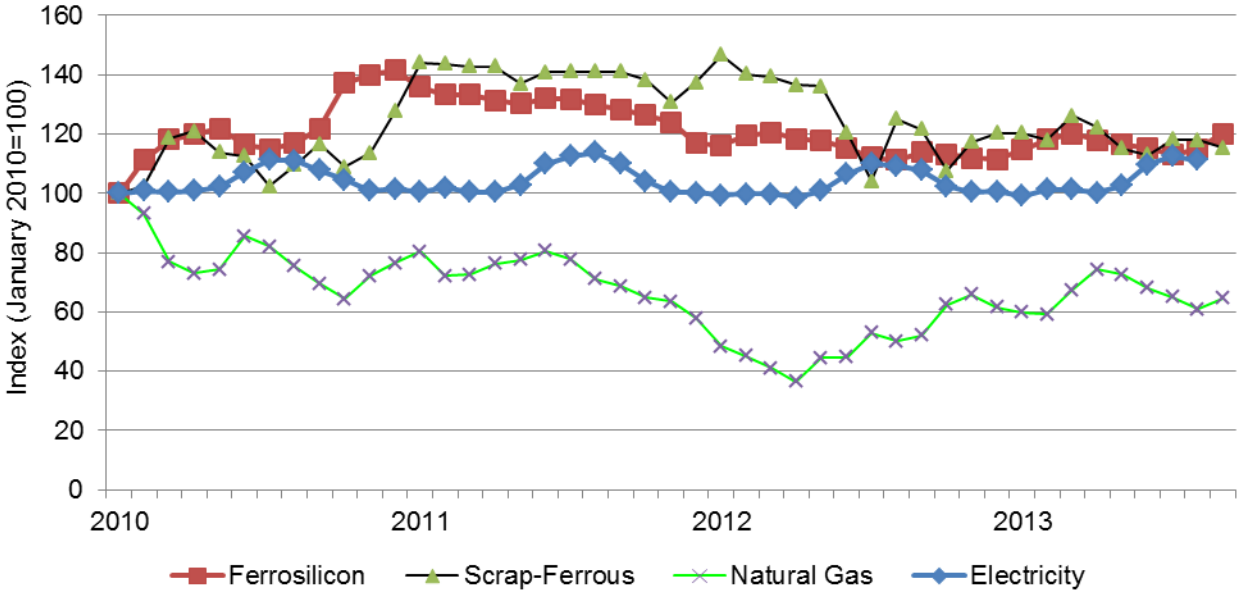
[1] Conference transcript, p. 51 (Petersen), p. 51 (Polinski).
[2] Conference transcript, pp. 168-69 (Suzuki), p. 169 (Huang).
[3] Conference transcript, p. 52 (Petersen), p. 52 (Polinski).
[4] Petitioners' postconference brief, Response to staff questions, p. 6 and exhibit 13.

Figure V-1

Raw material costs: Price indices for ferrosilicon, ferrous scrap, natural gas, and electricity, monthly, January 2010-September 2013



Sources: Prices for ferrosilicon-AMM free market and scrap, ferrous, no. 1 heavy melt-consumers/Chicago from American Metal Markets, downloaded October 29, 2013; NYNEX natural gas futures "contract 1" price and average retail price of electricity, industrial from EIA, downloaded October 31, 2013.

PRICING PRACTICES

Pricing methods

U.S. producers and most importers reported using both transaction-by-transaction negotiations and contracts (table V-1). U.S. producers and importers reported selling *** GOES through contracts with fixed quantities. U.S. producers reporting making *** percent of their sales with short term contracts and *** with long term contracts, and the remaining amount were spot sales. Most importers reports making the bulk of their sales with short terms contracts, although three importers (***) make at least 80 percent of their sales on a spot basis.

Petitioners indicate that ***. They also indicate that approximately ***.[5]

[5] Petitioners' postconference brief, Response to Commission staff's questions, p. 5.

Table V-1

GOES: U.S. producers and importers reported price setting methods, by number of responding firms[1]

Method	U.S. producers	Importers
Transaction-by-transaction	2	8
Contract	2	8
Set price list	0	1
Other	0	1

[1] The sum of responses down will not add up to the total number of responding firms as each firm was instructed to check all applicable price setting methods employed.

Source: Compiled from data submitted in response to Commission questionnaires.

Sales terms and discounts

Both U.S. producers typically quote prices on f.o.b. basis, while almost all importers typically quote prices on a delivered basis. ***. *** importer reported offering discounts. ***. Most importers offer sales term of net 30 days.

PRICE DATA

The Commission requested U.S. producers and importers to provide quarterly data for the total quantity and f.o.b. value of the following GOES products shipped to unrelated U.S. customers during January 2010-June 2013.[6]

<u>Product 1.—</u>Conventional GOES, 9 mil (0.23 mm) thickness, maximum core loss 1.20W/kg, (50 hz, 1.7T), U.S. grade M-3

<u>Product 2.</u>-- Conventional GOES, 11 mil (0.27 mm) thickness, maximum core loss 1.25 W/kg, (50 hz, 1.7T), U.S. grade M-4

<u>Product 3</u>.-- Conventional GOES, 14 mil (0.35 mm) thickness, maximum core loss 1.58W/kg, (50 hz, 1.7T), U.S. grade M-6

[6] Japanese respondents stated that the Commission should ensure that the pricing data is collected on an equivalent basis, including specifying whether the product is being sold after slitting, or a as a master coil. They also indicated that products 4 and 5 are laser-scribed domain-refined GOES and do not include dissimilar domain-refined Japanese products produced through mechanical scribing or electrolytically-etching surface treatments. Japanese producers' postconference brief, Response to staff questions, pp. 2-3.

<u>Product 4</u>.— Domain-refined high-permeability GOES, 9 mil (0.23mm) thickness, maximum core loss 0.80 W/kg, (50 hz, 1.7T), U.S. grade H-O DR

<u>Product 5</u>.-- Domain-refined high-permeability GOES, 11 mil (0.27mm) thickness, maximum core loss 0.90 W/kg, (50 hz, 1.7T), U.S. grade H-1 DR

Two U.S. producers and 11 importers provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters.[7] [8] Pricing data reported by these firms accounted for approximately *** percent of U.S. producers' shipments of product and *** percent of subject imports from China, *** percent of subject imports from the Czech Republic, *** percent of subject imports from Germany, *** percent of subject imports from Japan, *** percent of subject imports from Korea, *** percent of subject imports from Poland, *** percent of subject imports from Russia, and 26 percent all subject imports since 2010. Price data for products 1-5 are presented in Tables V-3 to V-7 and Figure V-2.

Table V-3

GOES: Weighted-average f.o.b. prices and quantities of domestic and imported product 1 and margins of underselling/(overselling), by quarters, January 2010-June 2013

* * * * * * *

Table V-4

GOES: Weighted-average f.o.b. prices and quantities of domestic and imported product 2 and margins of underselling/(overselling), by quarters, January 2010-June 2013

* * * * * * *

Table V-5

GOES: Weighted-average f.o.b. prices and quantities of domestic and imported product 3 and margins of underselling/(overselling), by quarters, January 2010-June 2013

* * * * * * *

Table V-6

GOES: Weighted-average f.o.b. prices and quantities of domestic and imported product 4 and margins of underselling/(overselling), by quarters, January 2010-June 2013

* * * * * * *

[7] ***.

[8] ***.

Table V-7

GOES: Weighted-average f.o.b. prices and quantities of domestic and imported product 5 and margins of underselling/(overselling), by quarters, January 2010-June 2013

* * * * * * *

Figure V-2

GOES: Weighted-average prices and quantities of domestic and imported product, by quarters, January 2010-June 2013

* * * * * * *

Price trends

Most prices for price products decreased during January 2010 to June 2013. Table V-8 summarizes the price trends, by country and by product. As shown in the table, domestic price decreases ranged from about *** to *** percent during 2010 to the middle of 2013 while most import prices decreased by amounts ranging up to 40 percent.

Citing average unit value of trade data and U.S. producer shipment data, Japanese respondents indicate that prices for subject and nonsubject producers to the U.S. market and U.S. producers to export markets ***. They also claim that these data indicate that U.S. producers are price leaders because the average unit value for U.S. industry shipments fell by a *** amount.[9] Japanese respondents also indicated that U.S.-producer prices fell because of a price war between the two U.S. producers. Japanese respondents stated that the price war was started by purchaser Howard Industries shifting its annual purchases of GOES of *** from Allegheny Ludlum to AK Steel due to a dispute over terms of their contract as well as the loss of approximately *** of exports sales.[10] Petitioners indicate that *** was significantly reduced to compete with extremely low pricing for GOES from Japan and Russia.

Table V-8

GOES: Summary of weighted-average f.o.b. prices for products 1-5 from the United States and subject countries

* * * * * * *

[9] Japanese respondents' postconference brief, pp. 16-17, citing Petition Exhibit General-4 and Exhibit General-9.

[10] Japanese respondents' postconference brief, pp. 19-20.

Price comparisons

As shown in table V-9, prices for GOES imported from subject countries were below those for U.S.-produced product in 104 of 165 instances; margins of underselling ranged from 0.4 to 52.7 percent. In the remaining 61 instances, prices for GOES from subject countries were between 0.1 to 42.6 percent above prices for the domestic product.

German respondents described any comparison of price data from Germany with U.S. price data as "meaningless." They indicated that it is likely that more than *** percent of the domestic price data is based on sales to end users, while virtually none of the imports for GOES from Germany are sold to end users.[11] U.S. producers reported that about *** percent of their overall shipments are to end users and *** percent or less are to slitters or laminators (see table II-1).

Table V-9
GOES: Instances of underselling/overselling and the range and average of margins, by country, January 2010-June 2013

Source	Underselling			Overselling		
	Number of instances	Range (*percent*)	Average margin (*percent*)	Number of instances	Range (*percent*)	Average margin (*percent*)
China	7	***	***	9	***	***
Czech Republic	17	***	***	0	-	-
Germany	35	***	***	1	***	***
Japan	11	***	***	17	***	***
Korea	17	***	***	0	-	-
Poland	8	***	***	29	***	***
Russia	9	***	***	5	***	***
Total	104	0.4 to 52.7	14.7	61	0.1 to 42.6	15.9

Source: Compiled from data submitted in response to Commission questionnaires.

LOST SALES AND LOST REVENUE

The Commission requested U.S. producers of GOES to report any instances of lost sales or revenue they experienced due to competition from imports of GOES from subject countries since 2010. Of the two responding U.S. producers, *** reported that they had to either reduce prices or roll back announced price increases. The *** lost sales allegations totaled $*** dollars and involved *** pounds (*** short tons) of GOES and the 27 lost revenue allegations totaled

[11] TKES postconference brief, pp. 8-10.

$*** and involved *** pounds (*** short tons) of GOES.[12] Staff attempted to contact all purchasers and a summary of the information obtained follows.

Purchasers responding to the lost sales allegations also were asked whether they shifted their purchases of GOES from U.S. producers to suppliers of GOES from subject countries since 2011. In addition, they were asked whether U.S. producers reduced their prices in order to compete with suppliers of GOES from subject countries. Five of the eight responding purchasers reported that they had shifted purchases of GOES from U.S. producers to subject imports since 2010; two of these purchasers reported that price was the reason for the shift. Two of five purchasers reported that the U.S. producers had reduced their prices in order to compete with the prices of subject imports since 2010.

Table V-10
GOES: U.S. producers' lost sales allegations

* * * * * * *

Table V-11
GOES: U.S. producers' lost revenue allegations

* * * * * * *

[12] These included two lost sales allegations for which ***. Email from ***, October 21, 2013.

PART VI: FINANCIAL EXPERIENCE OF U.S. PRODUCERS

BACKGROUND

Two U.S. producers, AK Steel and Allegheny Ludlum, which together accounted for all U.S. production of GOES since 2010, supplied financial data on their GOES operations.[1] *** reported transfer sales of GOES to related firms; These sales accounted for *** percent of the industry's 2012 sales values. The unit sales values of ***.[2] Neither firm reported any internal consumption of GOES.

OPERATIONS ON GOES

Table VI-1 presents aggregate income-and-loss data for the U.S. producers. To summarize, the overall financial condition of the domestic GOES industry deteriorated between 2010 and 2012. While the domestic industry continued to report *** between 2010 and 2012, the level declined from *** in 2010 to *** in 2012. From 2010 to 2011, the decrease in unit sales price (*** per short ton) in conjunction with the increase in unit total cost[3] (by *** per short ton), resulted in a *** lower per-unit operating income in 2011. From 2011 to 2012, both sales quantities and net sales values decreased, with lower per-unit sales value and higher per-unit total cost. Therefore, the operating income further decreased from *** in 2011 to *** in 2012, reflecting both the decrease in unit sales value (by ***) and the increase in unit total cost (by ***).

Table VI-1
GOES: Results of operations of U.S. producers, fiscal years 2010-12, January-June 2012, and January-June 2013

* * * * * * *

Both net sales quantities and values were lower in January-June ("interim") 2013 than interim 2012. Operating income in interim 2012 (***) changed to *** (***) in interim 2013, due mainly to lower per-unit sales value and higher per-unit total cost combined. As a result, the operating income margin, which was *** percent in interim 2012, was *** percent in interim 2013.

Table VI-2 presents selected company-by-company data. Total net sales (quantities and values), per-unit values (sales, COGS, SG&A, and operating income), operating income (loss), and the ratio of operating income (loss) to net sales are presented in this table on a firm-by-firm basis. Both producers experienced *** between 2010 and 2012 and *** in January-June 2013 than in January-June 2012. Both firms reported *** between 2010 and 2012 and in January-June 2013 relative to January-June 2012. Both producers reported *** between 2010

[1] Both firms have their fiscal years ending December 31.

[2] In response to the Commission staff's inquiry, ***. The transfer sales are ***. E-mail from ***, October 24, 2013.

[3] Total cost is cost of goods sold ("COGS") and selling, general, and administrative ("SG&A") expenses combined.

and 2012 and *** in January-June 2013. Both firms reported *** in January-June 2013 while both reported *** between 2010 and 2012 as well as higher levels in January-June 2013.

***. AK Steel reported ***. However, as instructed ***.[4] Neither firm reported any nonrecurring items for any period. Both producers reported ***.[5]

Table VI-2
GOES: Results of operations of U.S. producers, by firm, fiscal years 2010-12, January-June 2012, and January-June 2013

* * * * * * *

Selected aggregate per-short ton cost data of the producers on their operations, i.e., COGS and SG&A expenses, are presented in table VI-3. Overall per-short ton COGS and total cost (which includes SG&A expenses) increased continuously between 2010 and 2012, driven mainly by changes in raw material costs and fabrication costs (labor and factory overhead), while per-unit SG&A expenses decreased during the same period. Per-short ton COGS and per-unit total costs were somewhat higher in interim 2013 compared to interim 2012, due to the ***. The ratio of total COGS to net sales increased *** between 2010 and 2012 (from *** percent to *** percent), and were higher in interim 2013 than in interim 2012 (*** percent compared to *** percent).

---

[4] E-mail from ***, October 24, 2013.

[5] Based on AK Steel's Form 10-K submitted to the Securities and Exchange Commission ("SEC") for the twelve months of 2012, AK Steel has six product categories; Stainless/Electrical, Coated, Cold-Rolled, Tubular (these four are value-added products), Hot-Rolled, and Secondary (these are additional two non value-added). During 2012, shipment tonnage from Stainless/Electrical was 849 thousand tons (15.6 percent of total shipment tons of 5.4 million tons). AK Steel's loss from operations for 2012 was $248 million compared to a consolidated operating loss of $128 million of AK Steel Holding Corporation for the same year. In its 2012 10-K, p. 32, AK Steel notes that "it sells electrical steel products, which are iron-silicon alloys with unique magnetic properties, primarily to manufacturers of power transmission and distribution transformers and electrical motors and generators in the infrastructure and manufacturing markets. AK Steel experienced a significant decrease in both its domestic and international sales of GOES products as a result of the major global recession which started in late 2008. Internationally, this reduction was caused principally by a decline in spending for new electric power transmission and distribution transformers in developing countries. To a lesser extent, its international electrical sales were negatively impacted by the determination in a China trade case to impose duties on GOES imported from the U.S. The domestic GOES market likewise was negatively impacted by reduced maintenance and capital spending by utilities and the decline in the U.S. housing and construction markets, which principally drive the domestic need for new electrical transformers. Overall pricing for GOES continues to be well below pre-recession levels. In addition, AK Steel's GOES shipment volume has been affected by changes in mix and by changes in production requirements to meet evolving quality requirements, principally for sales to the international market. Under current market conditions, its GOES production capacity is approximately 285,000 tons. As demand improves, it anticipates that it will be able to adjust its market mix and make other changes to increase its current capacity."

Table VI-3
GOES: Average unit costs of U.S. producers, fiscal years 2010-12, January-June 2012, and January-June 2013

* * * * * * *

A variance analysis for showing the effects of prices and volume on the producers' sales of GOES, and of costs and volume on their total costs is presented in table VI-4.[6] The information for this variance analysis is derived from table VI-1. The analysis indicates that the decrease in operating income between 2010 and 2012 (by ***) was the result of the combined negative effects of decreased price, increased per-unit costs and expenses, as well as decreased sales volume. The summary at the bottom of the table illustrates that the negative effect of decreased prices (***), the negative effects of increased costs and expenses (***), and lower sales quantities (***) between 2010 and 2012. Comparing the two interim periods, the variance analysis indicates that operating income was lower by (***) which resulted from the combined negative effects of lower prices (***), higher costs/expenses (***), and decreased sales volume (***).

Table VI-4
GOES: Variance analysis of operations of U.S. producers, fiscal years 2010-12, January-June 2012, and January-June 2013

* * * * * * *

CAPITAL EXPENDITURES AND RESEARCH AND DEVELOPMENT EXPENSES

Table VI-5 presents aggregate data on capital expenditures and research and development ("R&D") expenses. Both producers reported capital expenditures. Capital expenditures decreased continuously and *** from 2010 to 2012. Capital expenditures were *** higher in 2010 and 2011 (higher expenditures were mainly associated with *** compared to 2012. Data for capital expenditures on a firm-by-firm basis are shown in table VI-6. Both producers reported R&D expenses.

[6] The Commission's variance analysis is calculated in three parts: Sales variance, cost of sales variance (COGS variance), and SG&A expense variance. Each part consists of a price variance (in the case of the sales variance) or a cost or expense variance (in the case of the COGS and SG&A expense variance), and a volume variance. The sales or cost/expense variance is calculated as the change in unit price or per-unit cost/expense times the new volume, while the volume variance is calculated as the change in volume times the old unit price or per-unit cost/expense. Summarized at the bottom of the table, the price variance is from sales; the cost/expense variance is the sum of those items from COGS and SG&A variances, respectively, and the net volume variance is the sum of the price, COGS, SG&A volume variance. All things equal, a stable overall product mix generally enhances the utility of the Commission's variance analysis.

Table VI-5
GOES: Capital expenditures and R&D expenses by U.S. producers, fiscal years 2010-12, January-June 2012, and January-June 2013

* * * * * * *

Table VI-6
GOES: Capital expenditures by U.S. producers, by firms, fiscal years 2010-12, January-June 2012, and January-June 2013

* * * * * * *

ASSETS AND RETURN ON ASSETS

Table VI-7 presents data on the U.S. producers' total net assets and their return on assets. Total net assets increased *** from 2010 to 2011, due primarily to the increase of ***. At the same time, the return on assets decreased between 2010 and 2012 due to lower operating income during the same period. The trend of return on assets during 2010-12 was the same as the trend of the operating income (loss) margin shown in table VI-1.

Table VI-7
GOES: Value of assets and return on assets of U.S. producers, fiscal years 2010-12

* * * * * * *

CAPITAL AND INVESTMENT

The Commission requested U.S. producers to describe any actual negative effects on their return on investment, or their growth, investment, ability to raise capital, existing development and production efforts, or the scale of capital investments as a result of imports of GOES from China, Czech Republic, Germany, Japan, Korea, Poland, and Russia. Their comments are as follows:

Actual Negative Effects

AK Steel.–***

Allegheny Ludlum.–***

Anticipated Negative Effects

AK Steel.–***

Allegheny Ludlum.–***

PART VII: THREAT CONSIDERATIONS AND INFORMATION ON NONSUBJECT COUNTRIES

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 subject merchandise, the Commission shall consider, among other relevant economic factors*[1]*--*
>
> *(I) if a countervailable 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 countervailable subsidy is a subsidy described in Article 3 or 6.1 of the Subsidies Agreement), and whether imports of the subject merchandise are likely to increase,*
>
> *(II) any existing unused production capacity or imminent, substantial increase in production capacity in the exporting country indicating the likelihood of substantially increased imports of the subject merchandise into the United States, taking into account the availability of other export markets to absorb any additional exports,*
>
> *(III) a significant rate of increase of the volume or market penetration of imports of the subject merchandise indicating the likelihood of substantially increased imports,*
>
> *(IV) whether imports of the subject merchandise are entering at prices that are likely to have a significant depressing or suppressing effect on domestic prices, and are likely to increase demand for further imports,*
>
> *(V) inventories of the subject merchandise,*

---

[1] Section 771(7)(F)(ii) of the Act (19 U.S.C. § 1677(7)(F)(ii)) provides that "The Commission shall consider {these factors} . . . as a whole in making a determination of whether further dumped or subsidized imports are imminent and whether material injury by reason of imports would occur unless an order is issued or a suspension agreement is accepted under this title. The presence or absence of any factor which the Commission is required to consider . . . shall not necessarily give decisive guidance with respect to the determination. Such a determination may not be made on the basis of mere conjecture or supposition."

(VI) the potential for product-shifting if production facilities in the foreign country, which can be used to produce the subject merchandise, are currently being used to produce other products,

(VII) 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),

(VIII) 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 domestic like product, and

(IX) any other demonstrable adverse trends that indicate the probability that there is likely to be material injury by reason of imports (or sale for importation) of the subject merchandise (whether or not it is actually being imported at the time).[2]

Information on the nature of the alleged subsidies was presented earlier in this report; information on the volume and pricing of imports of the subject merchandise is presented in *Parts IV* and *V*; and information on the effects of imports of the subject merchandise on U.S. producers' existing development and production efforts is presented in *Part VI*. Information on inventories of the subject merchandise; foreign producers' operations, including the potential for "product-shifting;" any other threat indicators, if applicable; and any dumping in third-country markets, follows. Also presented in this section of the report is information obtained for consideration by the Commission on nonsubject countries.

[2] 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 WTO 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."

THE INDUSTRY IN CHINA

Overview

The petition identified four producers/exporters of GOES in China: (1) Wuhan Iron & Steel ("Wuhan"); (2) Baoshan Iron & Steel Co., Ltd. (subsidiary of Shanghai Baosteel Group Corporation) ("Baosteel"); (3) Anshan Iron & Steel Group Corporation ("Anshan"); and, (4) Hebei Shougang Qian'an Iron & Steel ("Shougang"). In its postconference brief, the petitioners identified a fifth producer of GOES in China: Hunan Valin. Wuhan and Baosteel are identified as the two largest producers of GOES in China, with reported annual production capacity of approximately 440,000 short tons and approximately 330,000 short tons, respectively. The petitioners indicated that Shougang began producing GOES in China during 2011 with an annual production capacity of approximately 165,000 short tons. They also indicated that Anshan, which began production of GOES in the same year with an annual production capacity of approximately 110,000 short tons, has expanded its GOES annual capacity to approximately 330,000 short tons. Hunan Valin ("Valin") is identified as a Chinese joint venture operation with ArcelorMittal that includes cold-rolling and processing operations for the production of electrical steels, which includes approximately 220,000 short tons of GOES capacity. The petitioners contend that the Chinese GOES industry is the largest in the world.[3]

The Commission issued foreign producers'/exporters' questionnaires to the four known firms identified in the petition as producers or exporters of GOES from China. The Commission received a completed response from one firm in China: Baosteel. Baosteel reported that *** percent of its total sales in the most recent fiscal year were sales of GOES. Baosteel reported *** exports to the United States of GOES from China during January 2010-June 2013. According to the estimate requested of the responding Chinese producer, the production of GOES in China reported in this Part of the report accounts for approximately *** percent of overall production of GOES in China. In response to a question concerning changes in its GOES operations, Baosteel reported ***. Baosteel also reported ***.

Operations on GOES

Table VII-1 presents information on the GOES operations reported by Baosteel. Baosteel's capacity increased by *** percent from 2010 to 2012, and was *** percent higher in January-June 2013 relative to January-June 2012. Capacity is projected to increase by *** percent from 2012 to 2014. Baosteel's production in China increased by *** percent from 2010 to 2012, and was *** percent higher in January-June 2013 than in January-June 2012. Production is projected to increase by *** percent from 2012 to 2014. Baosteel's capacity utilization fluctuated downward at levels above *** percent since 2010. In particular, the producer's capacity utilization fell from *** percent in 2010 to *** percent in 2011, but increased to *** percent in 2012. Capacity utilization was lower at *** percent in January-June

[3] Petition, pp. 24-25; and petitioners' postconference brief, pp. 40-41.

2013 compared with *** percent in January-June 2012. Baosteel's capacity utilization is projected to be *** and *** percent in 2013 and 2014, respectively.

Table VII-1
GOES: Data for the producer in China, 2010-12, January-June 2012, January-June 2013, and projections 2013-14

* * * * * * *

In 2012, *** percent of total shipments of GOES produced by Baosteel in China was exported to markets other than the United States, predominantly ***, and *** percent of total shipments were shipped to the commercial home market. The company reported *** internal consumption/transfers of GOES and *** exports of GOES from China to the United States since January 2010.

Alternative products

Baosteel reported ***. Data regarding Baosteel's overall GOES facility capacity and production, by type of GOES (i.e., conventional, high permeability domain-refined, and high permeability non-domain-refined), are presented in table VII-2. These data show that, although conventional GOES accounted for *** of total GOES production by Baosteel during 2010, *** percent of total GOES production during 2012 was conventional product. High-permeability, non-domain-refined GOES has accounted for *** of GOES produced in China by Baosteel since 2010, ranging from *** percent of Baosteel's GOES production during 2010 to *** percent in 2012. High-permeability, domain-refined GOES has accounted for *** of Baosteel's Chinese production since 2010.

Table VII-2
GOES: Overall plant capacity, production, and capacity utilization in China (Baosteel), 2010-12, January-June 2012, and January-June 2013

* * * * * * *

THE INDUSTRY IN THE CZECH REPUBLIC

Overview

ArcelorMittal Frýdek-Místek A.S. ("Frýdek-Místek"), a subsidiary of ArcelorMittal S.A., is the sole producer of GOES in the Czech Republic. The Commission issued a foreign producer questionnaire to Frýdek-Místek and received a completed response. Frýdek-Místek reported that *** percent of its total company sales in the most recent fiscal year were sales of GOES. Although a comparison of Frýdek-Místek's export data to official Commerce import statistics shows that in 2012 it accounted for *** percent of U.S. imports from the Czech Republic, the

producer confirmed that it accounts for all production of GOES in the Czech Republic. In response to a question concerning changes in its GOES operations, Frýdek-Místek reported ***.

Operations on GOES

Table VII-3 presents information on the GOES operations of the responding producer in the Czech Republic. Frýdek-Místek's annual capacity to produce GOES has remained unchanged at *** short tons since 2010 and is projected to remain unchanged in 2013 and 2014. Reported production in the Czech Republic increased by *** percent from 2010 to 2012, and was *** percent higher in January-June 2013 than in January-June 2012. Production is projected to increase by *** percent from 2012 to 2014. Frýdek-Místek's capacity utilization also has increased consistently since 2010.

In 2012, *** percent of total shipments of GOES from the Czech Republic was exported to the United States. Exports of GOES from Czech Republic to the United States increased overall by *** percent from 2010 to 2012 and were *** percent higher in January-June 2013 than in January-June 2012. In 2012, *** percent of total shipments of GOES produced by Frýdek-Místek in the Czech Republic were exported to markets other than the United States, predominantly in ***, and *** percent of total shipments were shipped to the commercial home market. The company reported *** internal consumption/transfers of GOES since January 2010.

Table VII-3
GOES: Data for the producer in the Czech Republic (Frýdek-Místek), 2010-12, January-June 2012, January-June 2013, and projections 2013-14

* * * * * * *

Alternative products

Frýdek-Místek reported ***. Data regarding Frýdek-Místek's overall plant capacity and production, by type of item produced, are presented in table VII-4. These data show that production of ***. *** accounted for *** percent of total plant production in 2010, *** percent in 2011, and *** percent in 2012. Production of *** was *** in January-June 2013 than reported in January-June 2012. Production of the conventional GOES product, which is the only type of GOES produced in the Czech Republic, accounted for *** of items produced in Frýdek-Místek's facility since 2010, ranging from *** percent of overall plant production in 2010 to *** percent in 2012.

Table VII-4
GOES: Overall plant capacity, production, and capacity utilization in the Czech Republic (Frýdek-Místek), 2010-12, January-June 2012, and January-June 2013

* * * * * * *

THE INDUSTRY IN GERMANY

Overview

ThyssenKrupp Electrical Steel GmbH ("TKES") is the sole producer of GOES in Germany. TKES is a subsidiary of ThyssenKrupp Steel Europe AG ("TKS-Europe"), which is one of the six business areas of ThyssenKrupp AG ("TKAG"). The ThyssenKrupp group also operates GOES manufacturing facilities in Isbergues, France and Nashik, India. ***.

The Commission issued a foreign producer questionnaire to TKES and received a completed response. TKES reported that *** percent of its total company sales in the most recent fiscal year were sales of GOES and that it accounts for all production of GOES in Germany. A comparison of TKES's export data to official Commerce import statistics shows that in 2012 it accounted for *** percent of U.S. imports from Germany. In response to a question concerning changes in its German GOES operations, TKES reported under the category ***.

Operations on GOES

Table VII-5 presents information on the GOES operations of the responding producer in Germany. TKES' annual capacity to produce GOES, which remained at *** short tons during 2010 and 2011, fell to *** short tons in 2012 and is projected to fall further to *** in 2013 and 2014. Reported production in Germany fell by *** percent from 2010 to 2012, and was *** percent lower in January-June 2013 than in January-June 2012. Although production by TKES in Germany is projected to fall by *** percent from 2012 to 2013, it is expect to increase by *** percent in 2014. TKES's capacity utilization fluctuated between a high of *** percent in January-June 2012 to a low of *** percent in January-June 2013.

Table VII-5
GOES: Data for the producer in Germany (TKES), 2010-12, January-June 2012, January-June 2013, and projections 2013-14

* * * * * * *

In 2012, *** percent of total shipments of GOES produced in Germany was exported to the United States. Exports of GOES from Germany to the United States increased from 2010 to 2011, but fell in 2012 to a level higher than reported for 2010. Exports of German GOES to the United States were higher in January-June 2013 than in January-June 2012. In 2012, ***

percent of total shipments of GOES produced in Germany were exported to markets other than the United States, predominantly in ***, and *** percent of total German shipments were shipped to the commercial home market. The company reported *** internal consumption/transfers of GOES since January 2010.

Alternative products

Data regarding TKES's overall plant capacity and production, by type of item produced, are presented in table VII-6. TKES reported ***. However, TKES did report the residual production of *** at its facility (reported as "all other products" in table VII-6). This *** product accounted for *** percent of total facility production during 2012. These data show that *** accounted for greater than *** of total plant production in every period since 2010 and domain-refined and non-domain-refined high-permeability GOES accounted for *** and *** percent of total plant production in 2012, respectively.

Table VII-6
GOES: Overall plant capacity, production, and capacity utilization in Germany (TKES), 2010-12, January-June 2012, and January-June 2013

* * * * * * *

THE INDUSTRY IN JAPAN

Overview

There are two producers of GOES in Japan: JFE Steel Corp. ("JFE") and Nippon Steel & Sumitomo Metal Corp. ("Nippon"). The Commission issued foreign producers' questionnaires to these two firms in Japan and responses to the Commission's questionnaire were received from both firms. *** is the larger of the two Japanese GOES producers, accounting for *** percent of total GOES production in Japan during 2012. JFE reported that *** percent of its total company sales in the most recent fiscal year were sales of GOES. Nippon reported that *** percent of its total company sales in the most recent fiscal year were sales of GOES. The two firms indicate that together they account for all production of GOES in Japan. A comparison of questionnaire export data to official Commerce import statistics shows that in 2012, JFE and Nippon together accounted for *** percent of U.S. imports from Japan. In response to a question concerning changes in its Japanese GOES operations, Nippon indicated that, on October 1, 2012, Nippon Steel Corp. and Sumitomo Metal Industries, Ltd. merged. Nippon added that, prior to the merger, Sumitomo Metal Industries, Ltd. did not produce GOES. JFE reported no changes in its Japanese GOES operations since 2010.

Operations on GOES

Table VII-7 presents information on the GOES operations of the responding producers in Japan. The annual capacity reported by JFE to produce GOES in Japan remained constant throughout all periods since 2010 at *** short tons and is projected to remain the same in 2013 and 2014. Nippon's reported annual capacity to produce GOES fluctuated *** throughout the periods since 2010, ranging from a low of *** short tons in 2011 to a high of *** short tons in 2012. The firm indicated that its capacity "varies every year depending on product-mix and is calculated under normal operating conditions, where the time for proper maintenance and repair is excluded." Aggregate Japanese capacity to produce GOES was *** short tons in 2012 but company projections indicate that aggregate capacity will fall to *** short tons in 2014. Reported production in Japan increased by *** percent from 2010 to 2012, but was *** percent lower in January-June 2013 than in January-June 2012. GOES production in Japan is projected to fall by *** percent from 2012 to 2014. Capacity utilization in Japan increased overall from *** in 2010 to *** in 2012, but was lower at *** percent in January-June 2013 than in January-June 2012. Projections indicate that capacity utilization in Japan is expected to increase to *** percent in 2014.

Table VII-7
GOES: Data for producers in Japan (JFE and Nippon), 2010-12, January-June 2012, January-June 2013, and projections 2013-14

* * * * * * *

In 2012, *** percent of total shipments of GOES produced in Japan was exported to the United States. Exports of GOES from Japan to the United States fell from 2010 to 2011, but increased in 2012 to a level lower than reported for 2010. Exports of Japanese GOES to the United States were higher in January-June 2013 than in January-June 2012 and projections indicated that exports to the United States will be higher in 2014 than reported in 2012 (although ***). *** share of total GOES shipments made by Japanese producers is accounted for by exports to markets other than the United States. In 2012, *** percent of total shipments of GOES produced in Japan were exported to markets other than the United States. JFE reported that its export markets other than the United States were primarily *** and Nippon reported that its other export markets were ***. Commercial home market shipments accounted for *** percent of total Japanese shipments in 2012. There were *** internal consumption/transfers of GOES reported by the Japanese producers since January 2010.

Alternative products

Neither JFE nor Nippon reported ***. Aggregate data regarding the Japanese producers' overall plant capacity and production, by type of item produced, are presented in table VII-8. These data show that *** accounted for *** percent of total plant production in 2012, and domain-refined and nondomain-refined high-permeability GOES accounted for *** and ***

percent of total plant production in 2012, respectively. Both JFE and Nippon reported production of all three types of GOES in their Japanese facilities.

Table VII-8
GOES: Overall plant capacity, production, and capacity utilization in Japan (JFE and Nippon), 2010-12, January-June 2012, and January-June 2013

* * * * * * *

The Japanese respondents argue that GOES imports from Japan do not compete with products manufactured in the United States for the U.S. market because most (***) of the imported Japanese GOES is "heat-proof" product for the high-end, premium GOES market that uses proprietary, patent-protected domain-refined processes. This premium heat-proof GOES imported from Japan is used in specialty transformers where small size, high efficiency, and low noise are at a premium. The Japanese respondents argue that this premium product is not produced in the United States and is not imported into the United States from any other country. The following tabulation shows the Japanese producers' shares of exports to the United States accounted for by "heat-proof" and "non-heat-proof" GOES.[4]

* * * * * * *

THE INDUSTRY IN KOREA

Overview

POSCO is the sole producer of GOES in Korea and the sole exporter of GOES from Korea to the United States. The Commission issued a foreign producer questionnaire to POSCO and received a completed response. POSCO reported that *** percent of its total sales in the most recent fiscal year were sales of GOES. A comparison of POSCO's export data to official Commerce import statistics shows that in 2012 it accounted for *** percent of U.S. imports from Korea. POSCO reported that *** percent of its exports to the United States are made through its related U.S importer, POSCO-America. In response to a question concerning changes in its Korean GOES operations since January 1, 2010, POSCO reported ***.

Operations on GOES

Table VII-9 presents information on the GOES operations of POSCO, the sole producer and exporter in Korea. The annual capacity reported by POSCO to produce GOES in Korea remained constant since 2010 at *** short tons per year and is projected to remain the same in 2013 and 2014. POSCO's production in Korea increased by *** percent from 2010 to 2012, but

[4] Japanese respondents' postconference brief, pp. 35-36.

was *** percent lower in January-June 2013 than in January-June 2012. Production is projected to be *** percent lower in 2014 than in 2012. Capacity utilization increased from *** percent in 2010 to *** percent in 2012, but was *** percent in January-June 2013 compared to *** percent in January-June 2012.

Table VII-9
GOES: Data for the producer in Korea (POSCO), 2010-12, January-June 2012, January-June 2013, and projections 2013-14

* * * * * * *

In 2012, *** percent of total shipments of GOES from Korea was exported to the United States, and *** percent were exported to other markets, predominantly ***. Exports of GOES from Korea to the United States increased from *** short tons in 2010 to *** short tons in 2012, but were *** percent lower in January-June 2013 than in January-June 2012. Company projections indicate that exports to the United States are expected to be *** percent lower in 2014 than reported in 2012. Commercial home market shipments accounted for *** percent of total Korean shipments in 2012. POSCO reported *** internal consumption/transfers of GOES since January 2010.

Alternative products

POSCO reported ***. Data regarding POSCO's overall plant capacity and production, by type of item produced, are presented in table VII-10. These data show that *** accounted for *** of POSCO's total plant production: *** percent of total plant production in 2010, *** percent in 2011, and *** percent in 2012. POSCO's production of *** fell by *** percent from *** short tons in 2010 to *** short tons in 2012, and was *** percent lower in January-June 2013 than reported in January-June 2012.

Production of the conventional GOES product by POSCO, which accounted for the *** share of GOES production, accounted for *** percent of POSCO's total plant production in 2012. Domain-refined and non-domain-refined high-permeability GOES accounted for *** and *** percent of POSCO's total plant production in 2012, respectively.

Table VII-10
GOES: Overall plant capacity, production, and capacity utilization in Korea (POSCO), 2010-12, January-June 2012, and January-June 2013

* * * * * * *

THE INDUSTRY IN POLAND

Overview

The petition identified one producer of GOES in Poland: Stalprodukt S.A. ("Stalprodukt"). The Commission issued a foreign producers' questionnaire to Stalprodukt, but a response to the Commission's request for information was not provided. The petitioner argued that Stalprodukt is "heavily focused on exports, with an increasing share targeted for the U.S. market."[5] According to *Global Trade Atlas* data presented in table VII-11, total exports of GOES from Poland during 2012 amounted to 89,723 short tons, 5.2 percent of which was exported to the United States.

Table VII-11
GOES: Poland exports, by country market, 2010-12

Country	Calendar year		
	2010	2011	2012
	Quantity (*short tons*)		
India	24,958	27,291	23,046
Germany	6,803	10,029	9,084
Turkey	5,924	9,282	6,690
Ukraine	7,754	7,696	6,486
Italy	7,969	7,173	5,885
United States	2,468	4,040	4,700
China	1,055	6,616	4,666
Czech Republic	322	343	3,990
Austria	3,144	1,922	3,825
Ireland	2,644	2,668	2,640
All other	21,779	27,485	18,710
Total	84,820	104,544	89,723
	Share of quantity (*percent*)		
India	29.4	26.1	25.7
Germany	8.0	9.6	10.1
Turkey	7.0	8.9	7.5
Ukraine	9.1	7.4	7.2
Italy	9.4	6.9	6.6
United States	2.9	3.9	5.2
China	1.2	6.3	5.2
Czech Republic	0.4	0.3	4.4
Austria	3.7	1.8	4.3
Ireland	3.1	2.6	2.9
All other	25.7	26.3	20.9
Total	100.0	100.0	100.0

Source: *Global Trade Atlas*, 7225.11 and 7226.11.

[5] Petition, p. 27.

In 2010, Stalprodukt completed a capacity expansion of its GOES facility from approximately 66,000 short tons to approximately 110,000 shorts per year. In addition, Stalprodukt noted in its 2011 annual report the production of new steel grades (i.e., HiB sheets or high-permeability GOES) was projected to launch during 2013.[6]

Stalprodukt's home market and export sales of transformer sheets and strips for 2011 and 2012 are presented in the following tabulation (*in short tons*):

Item	2011	2012
Home market sales	7,934	7,452
Export sales	104,592	84,997
Total sales	112,527	92,449

Source: Annual Consolidated Financial Statement of Stalprodukt S.A. Capital Group for year 2012, pp. 4-6.

These data show that most of Stalprodukt's total sales in 2012 (91.9 percent) was for export markets. Stalprodukt's total sales of transformer sheets and strips declined by 17.8 percent from 112,527 short tons in 2011 to 92,449 short tons in 2012. The company noted that a larger decline in sales volume was recorded in exports sales (18.7 percent) than in home market sales (6.1 percent). It explained that "the sales volume decline was partly caused by unfavorable market conditions, resulting from the reduction of demand and presence of excessive production capacity on a global scale." It added, however, that "the reduction of output and sales was caused, in a greater degree, by the implemented investments program, connected with the start-up of the HiB technology. It caused switch-offs and stoppages of some production lines, reducing the production capacity of the sheets segment, especially in the second half of the previous year."[7]

THE INDUSTRY IN RUSSIA

Overview

The Commission issued foreign producers' or exporters' questionnaires to the following two firms believed to produce GOES in Russia: Novolipetsk Steel ("NLMK") and Public Joint Stock Company Ashinskiy Metallurgical Works ("Ashinskiy").[8] Useable responses to the

[6] *Stalprodukt Annual Report 2011*, http://www.stalprodukt.com.pl/pub/File/RAPORTY_EN/roczne/raport%20roczny%202011.pdf.

[7] *Annual Consolidated Financial Statement of Stalprodukt S.A. Capital Group for year 2012*, pp. 4-6.

[8] These firms were identified through a review of information submitted in the petition and contained in proprietary Customs records. The Russian respondents also indicated that, in addition to U.S. imports of regular standard GOES produced by NLMK and Ashinskiy in Russia, substandard GOES obtained from dismantled used transformers is exported to the United States by Russian exporter Asero.

(*continued*...)

Commission's questionnaire were received from both firms. NLMK is, ***, the larger of the two Russian producers, accounting for *** percent of total GOES production in Russia during 2012. Ashinskiy reported that *** percent of its total company sales in the most recent fiscal year were sales of GOES. NLMK reported that *** percent of its total company sales in the most recent fiscal year were sales of GOES. According to estimates requested of the responding Russian producers, the production of GOES in Russia reported in this part of the report is believed to account for all production of GOES in Russia. A comparison of questionnaire export data to official Commerce import statistics shows that in 2012, NLMK and Ashinskiy together accounted for *** percent of U.S. imports from Russia. In response to a question concerning changes in GOES operations in Russia, NLMK responded ***. Ashinskiy did not identify any changes to its GOES operations in Russia.

Operations on GOES

Table VII-12 presents information on the GOES operations of the responding producers in Russia. Aggregate Russian capacity to produce GOES increased overall by *** percent from *** short tons in 2010 to *** short tons in 2012. Reported production in Russia also increased by *** percent from 2010 to 2012, but was *** percent lower in January-June 2013 than in January-June 2012. GOES production in Russia is projected to increase by *** percent from 2012 to 2014. Capacity utilization in Russia fell from overall from *** percent in 2010 to *** percent in 2012, and was lower at *** percent in January-June 2013 than in January-June 2012. Projections indicate that capacity utilization in Russia is expected to increase to *** percent in 2014.

Table VII-12
GOES: Data for producers in Russia (Ashinskiy and NLMK), 2010-12, January-June 2012, January-June 2013, projections 2013-14

* * * * * * *

In 2012, *** percent of total shipments of GOES produced in Russia was exported to the United States. Exports of GOES from Russia to the United States increased from *** short tons in 2010 to *** short tons in 2012. Exports of Russian GOES to the United States were lower in January-June 2013 than in January-June 2012 and projections indicated that exports to the United States are expected to fall to *** in 2014. Russian producer NLMK argued that the conventional grades of GOES produced in Russia cannot compete with the higher grades required under the 2007 DOE regulations for transformer production and that these regulations have effectively eliminated NLMK's sales to the United States. It explained that, prior to 2007, transformers were regulated under DOE regulation TSL-1, which could be met by using GOES

(…*continued*)
Postconference brief of the Ministry of Economic Development of the Russian Federation, p. 2. Asero is not identified as a Russian exporter or producer of GOES in proprietary Customs documents.

grades M2 through M6. However, the 2007 DOE regulations can only be met by using GOES grades of M3, M2, or higher.[9]

*** share of total GOES shipments made by Russian producers is accounted for by exports to markets other than the United States. In 2012, *** percent of total shipments of GOES produced in Russia were exported to markets other than the United States. Ashinskiy reported that its export markets other than the United States were primarily *** and NLMK reported that its other export markets were ***. Commercial home market shipments accounted for *** percent of total Russian shipments in 2012. There were *** internal consumption/transfers of GOES reported by the Russian producers since January 2010.

Alternative products

In response to a Commission request for information concerning the production of products other than GOES, NLMK reported ***. Ashinskiy did not provide a response to this Commission request. NLMK's overall plant capacity and production data, by type of item produced, indicate that the Russian GOES producer manufactures only *** in its facility.

COMBINED SUBJECT COUNTRY DATA

Table VII-13 presents information on GOES operations of the reporting producers and exporters in the subject countries.

Table VII-13
GOES: Aggregate data for producers in the subject countries (except for Poland), 2010-12, January-June 2012, January-June 2013, and projections 2013-14

* * * * * * *

U.S. INVENTORIES OF IMPORTED MERCHANDISE

Table VII-14 presents data on U.S. importers' reported inventories of GOES.

Table VII-14
GOES: U.S. importers' inventories, 2010-12, January-June 2012, and January-June 2013

* * * * * * *

[9] NLMK postconference brief, p. 4.

U.S. IMPORTERS' OUTSTANDING ORDERS

The Commission requested importers to indicate whether they imported or arranged for the importation of GOES from any country after June 30, 2013. Table VII-15 presents U.S. import shipments of GOES arranged for importation after June 30, 2013.

Table VII-15
GOES: U.S. importers' arranged imports, July-September 2013, October-December 2013, January-March 2014, and April-June 2014

* * * * * * *

ANTIDUMPING OR COUNTERVAILING DUTY ORDERS IN THIRD-COUNTRY MARKETS

Antidumping and countervailing duty investigations on GOES were initiated by China against the United States on June 1, 2009. Preliminary duties were imposed on December 10, 2009 and final duties became effective on April 10, 2010. Final subsidy rates of 11.7 percent for AK Steel and 12 percent for Allegheny Ludlum were imposed and a dumping margin of 7.8 percent for AK Steel and 19.9 percent for Allegheny were imposed. In response to a WTO dispute settlement proceeding brought by the United States, China recalculated the countervailing duty rates on July 31, 2013. The revised antidumping duty rate is 3.4 percent for both AK Steel and Allegheny.[10]

Although there are no antidumping and countervailing duties imposed on imports of GOES into India, the Indian Steel Ministry reportedly effectively banned imports of low-grade electrical steel in June 2011 through the issuance of a quality control order that mandates certification for cold-rolled grain-oriented steel sheets by the Bureau of Indian Standards. [11]

INFORMATION ON NONSUBJECT COUNTRIES

Little public data is available on the global consumption and production of GOES. Global demand for GOES is driven principally by growth in electricity consumption, reflected in the expansion or upgrading of electrical transmission and generating capacity (e.g., transformers) to accommodate growing electricity demand. According to the U.S. Energy Information Administration (EIA), between 2008 and 2010 (the latest year for which data are available) global energy consumption increased by 6 percent to 18.5 trillion kilowatt hours (kWh).[12] During the same period, global installed electricity capacity increased by 9 percent to 5.1 billion

[10] TKES postconference brief, p. 11.
[11] TKES postconference brief, exh. A.
[12] EIA, International Energy Statistics online interactive database, found at http://www.eia.gov, retrieved October 21, 2013.

kilowatts (kW). China is the second largest global consumer of electricity and has the second largest installed electricity capacity after the United States.

According to Metal Bulletin Research (MBR), global GOES consumption totaled 2.8 million short tons (2.5 million metric tons) in 2011, of which 22 percent was high-permeability GOES.[13] According to MBR, China is the largest global consumer of GOES. Regionally, China, together with Southeast Asia, India, and Latin America reportedly account for over half of global demand for GOES. Looking forward, MBR estimates that global demand for GOES will grow by 3.7 percent annually between 2011 and 2020, compared with 6 percent annually between 1996 and 2011. Emerging markets are expected to account for 70 percent of global demand for GOES by 2020.[14]

According to MBR, global annual GOES production capacity totaled 3.3 million short tons (3.0 million metric tons) in 2011, with an additional 330,000 short tons (300,000 metric tons) expected to come online in 2013. Table VII-16 shows global reported exports of GOES during 2010–12. Subject countries accounted for 70 percent of global exports of GOES in 2012. Leading nonsubject producers and exporters of GOES include France, the United Kingdom, and Belgium, which together accounted for 14 percent of global GOES exports in 2012. ThyssenKrupp Electrical Steel, a subsidiary of German industrial conglomerate ThyssenKrupp, produces GOES in Gelsenkirchen, Germany; Isbergues, France; and Nashik, India.[15] Orb Electrical Steels, a part of Canada-based, electrical transformer producer Cogent Power (itself a wholly owned subsidiary of Indian industrial conglomerate TATA Group) produces GOES in Newport, United Kingdom.[16] Commission staff is unaware of any producers of GOES in Belgium. Tables VII-17 and VII-18 show global reported exports of GOES from France and the United Kingdom.

[13] Metal Bulletin Research (MBR), "A Strategic Five Year Outlook for the Global Grain Oriented Electrical Steel Market," Whitepaper, November 2012.

[14] Metal Bulletin Research (MBR), "A Strategic Five Year Outlook for the Global Grain Oriented Electrical Steel Market," Whitepaper, November 2012.

[15] ThyssenKrupp Electrical Steel website, found at http://www.tkes.com/web2010/tkeswebcms.nsf/www/en_Standorte_is.html, retrieved October 21, 2013.

[16] Cogent Power website, found at http://www.cogent-power.com/orb/, retrieved October 21, 2013.

Table VII-16
GOES: Global exports by reporting countries, 2010–12

Country	Calendar year		
	2010	2011	2012
	Quantity (*short tons*)		
Japan	431,635	473,220	466,767
Russia	168,695	149,107	263,584
Korea	163,656	161,816	171,251
United States	163,946	186,185	140,157
Germany	108,550	106,918	101,560
France	93,037	102,238	96,168
Poland	84,821	104,545	89,724
United Kingdom	78,983	81,674	76,282
Belgium	49,445	60,757	62,535
Czech Republic	52,229	56,232	55,097
Netherlands	5,951	8,240	39,402
China	13,447	13,766	38,642
Italy	21,573	23,744	17,148
Hungary	38,475	13,737	13,562
Canada	10,149	9,342	11,201
Singapore	1,382	7,451	11,007
Mexico	9,948	7,481	8,798
Taiwan	3,179	5,356	8,038
Brazil	7,228	4,543	7,797
Malaysia	10,060	12,850	6,975
India	2,073	2,702	3,788
Sweden	1,683	3,767	2,970
Hong Kong	9,762	2,770	2,866
Austria	1,151	1,004	2,137
Spain	2,653	1,756	1,290
All other	9,468	9,485	4,361
Total	1,543,180	1,610,685	1,703,102

Source: Global Trade Atlas (accessed September 25, 2013), HS subheadings 7225.11 and 7226.11.

Table VII-17
GOES: France's reported exports, 2010–12

Country	Calendar year		
	2010	2011	2012
	Quantity (*short tons*)		
To the United States	718	1,609	243
Top export markets:			
Italy	16,083	8,670	10,373
Germany	12,567	8,627	9,972
China	8,253	12,704	9,412
Belgium	1,508	11,974	7,179
Spain	6,471	5,730	6,042
Portugal	8,069	5,795	5,703
Turkey	933	2,255	4,413
Pakistan	1,905	1,735	4,070
Thailand	1,779	2,585	3,807
Netherlands	2,786	2,161	3,322
India	6,325	8,106	2,733
Morocco	1,887	2,474	2,366
Saudi Arabia	1,662	2,241	2,303
Brazil	1,705	2,508	2,272
Poland	2,488	2,033	2,260
Colombia	1,215	1,127	2,123
Lebanon	1,209	2,306	1,810
Algeria	489	0	1,685
United Arab Emirates	41	680	1,369
South Africa	1,690	2,883	1,345
Ecuador	1,254	502	1,226
Chile	2,054	1,725	1,039
Taiwan	767	796	1,019
Mexico	830	1,281	1,017
Czech Republic	24	322	794
All other	8,329	9,412	6,271
Total	93,041	102,238	96,166

Source: Global Trade Atlas (accessed September 25, 2013), HS subheadings 7225.11 and 7226.11.

Table VII-18
GOES: United Kingdom's reported exports, 2010–12

Country	Calendar year		
	2010	2011	2012
	Quantity (*short tons*)		
To the United States	0	0	0
Top export markets:			
Canada	9,268	9,895	9,916
India	9,535	6,299	7,899
Malaysia	8,884	11,352	7,501
Turkey	3,810	2,402	7,499
Germany	2,331	3,817	5,150
Italy	6,320	4,339	4,957
Spain	2,980	8,492	4,621
Sweden	3,799	2,749	3,978
Croatia	3,029	2,492	3,231
France	4,373	5,248	2,728
Pakistan	3,487	2,156	2,589
Ireland	1,264	1,433	2,162
United Arab Emirates	77	2,594	1,968
China	2,406	3,619	1,498
Taiwan	1,088	1,649	1,227
Slovakia	1,095	2,689	1,133
Saudi Arabia	643	629	896
Netherlands	330	98	758
Austria	754	1,513	729
Kuwait	981	227	723
Czech Republic	1,359	941	626
Portugal	292	843	548
Egypt	800	474	528
Thailand	150	331	521
Belgium	4,467	516	511
All other	5,461	4,876	2,381
Total	78,981	81,674	76,280

Source: Global Trade Atlas (accessed September 25, 2013), HS subheadings 7225.11 and 7226.11.

APPENDIX A

FEDERAL REGISTER NOTICES

The Commission makes available notices relevant to its investigations and reviews on its website, www.usitc.gov. In addition, the following tabulation presents, in chronological order, *Federal Register* notices issued by the Commission and Commerce during the current proceeding.

Citation	Title	Link
78 FR 59059, September 25, 2013	*Grain-Oriented Electrical Steel From China, Czech Republic, Germany, Japan, Korea, Poland, and Russia; Institution of Antidumping and Countervailing Duty Investigations and Scheduling of Preliminary Phase Investigations*	http://www.gpo.gov/fdsys/pkg/FR-2013-09-25/pdf/2013-23277.pdf
78 FR 64011, October 25, 2013	*Tolling of Activity in Antidumping and Countervailing Duty Proceedings*	http://www.gpo.gov/fdsys/pkg/FR-2013-10-25/pdf/2013-25082.pdf
78 FR 65283, October 31, 2013	*Grain-Oriented Electrical Steel From the People's Republic of China, the Czech Republic, Germany, Japan, the Republic of Korea, Poland, and the Russian Federation: Initiation of Antidumping Duty Investigations*	http://www.gpo.gov/fdsys/pkg/FR-2013-10-31/pdf/2013-25805.pdf
78 FR 65265, October 31, 2013	*Grain-Oriented Electrical Steel from the People's Republic of China: Initiation of Countervailing Duty Investigation*	http://www.gpo.gov/fdsys/pkg/FR-2013-10-31/pdf/2013-26002.pdf

APPENDIX B

CALENDAR OF THE PUBLIC STAFF CONFERENCE

CALENDAR OF PUBLIC PRELIMINARY CONFERENCE

Those listed below appeared as witnesses at the United States International Trade Commission's preliminary conference:

Subject:	Grain-Oriented Electrical Steel from China, Czech Republic, Germany, Japan, Korea, Poland, and Russia
Inv. Nos.:	701-TA-505 and 731-TA-1231-1237 (Preliminary)
Date and Time:	October 25, 2013 - 9:00 a.m.

Sessions were held in connection with these preliminary investigations in the Main Hearing Room (room 101), 500 E Street, S.W., Washington, DC.

OPENING REMARKS:

Petitioners (**David A. Hartquist**, Kelley Drye & Warren LLP)
Respondents (**J. Christopher Wood**, Gibson, Dunn & Crutcher LLP)

In Support of the Imposition of Antidumping and Countervailing Duty Orders:

Kelley Drye & Warren LLP
Washington, DC
on behalf of

Petitioners

Raymond Polinski, General Manager, Grain-Oriented Electrical Steel, Allegheny Ludlum, LLC

Ronald James, Manager, Sales & Marketing, Grain-Oriented Electrical Steel, Allegheny Ludlum, LLC

James Rakowski, Manager, Grain-Oriented Electrical Steel Market & Product Development, Allegheny Ludlum, LLC

Jamie Bishop, Commercial and Litigation Counsel, Allegheny Ludlum, LLC

In Support of the Imposition of
Antidumping and Countervailing Duty Orders (coutinued):

Eric Petersen, Vice President, Sales & Customer Service,
AK Steel Corporation

Geoff Pfeiffer, General Manager - Specialty Steel Sales,
AK Steel Corporation

Jerry Schoen, Principal Engineer, Product Development & Applications
Engineering, AK Steel Corporation

Steve Konstantinidis, Product/Marketing Manager, AK Steel Corporation

Jeffrey Zackerman, Assistant General Counsel, Commercial Affairs,
AK Steel Corporation

Michael Kerwin, Director, Georgetown Economic Services, LLC

Brad Hudgens, Economist, Georgetown Economic Services, LLC

David A. Hartquist)
John M. Hermann)
) – OF COUNSEL
Grace W. Kim)
Benjamin B. Caryl)

In Opposition to the Imposition of
Antidumping and Countervailing Duty Orders:

Foley & Lardner LLP
Washington, DC
on behalf of

JFE Steel Corporation

Hidenari Suzuki, Staff Manager, Electrical Export Sec,
Electrical Steel Sales Dept., JFE Steel Corporation

Bruce Becker, Manager, Steel Trading Unit-Midwest Manager,
Toyota Tsusho America

David Hickerson)
Gregory Husisian)
Robert Huey) – OF COUNSEL
Christopher Swift)
Morgan West)

Gibson, Dunn & Crutcher LLP
Washington, DC
on behalf of

Nippon Steel & Sumitomo Metal Corporation ("NSSMC")

Shinichiro Kondo, Senior Manager, Electrical Sheet Global
Marketing Department, NSSMC

Takahiro Saito, Director/Unit Head, Flat Rolled Products
Business Unit, Sumitomo Corporation of America

J. Christopher Wood) – OF COUNSEL

In Opposition to the Imposition of
Antidumping and Countervailing Duty Orders:

Dentons US LLP
Washington, DC
on behalf of

Novolipetsk Steel ("NLMK")

Connie Chan, Queen City Steel, Inc.

Mark P. Lunn) – OF COUNSEL

Greenberg Traurig, LLP
Washington, DC
on behalf of

Baoshan Iron & Steel Co., Ltd.
Baosteel America, Inc. ("Baosteel")

Yi (Steve) Huang, Department Manager, Baosteel

Philippe Bruno) – OF COUNSEL

DeKieffer & Horgan, PLLC
Washington, DC
on behalf of

ThyssenKrupp Electrical Steel GmbH ("TKES")

J. Kevin Horgan) – OF COUNSEL

International Magnetic Solutions
New York, NY

Alper Isogren, President, International Magnetic Solutions

REBUTTAL/CLOSING REMARKS:

Petitioners (**David A. Hartquist**, Kelley Drye & Warren LLP)
Respondents (**Gregory Husisian**, Foley & Lardner LLP)

APPENDIX C

SUMMARY DATA

The data contained in tables C-1 and C-2 are entirely confidential, with the limited exception of cumulated subject imports, nonsubject imports, and total imports. These data are presented publicly in table IV-2.