

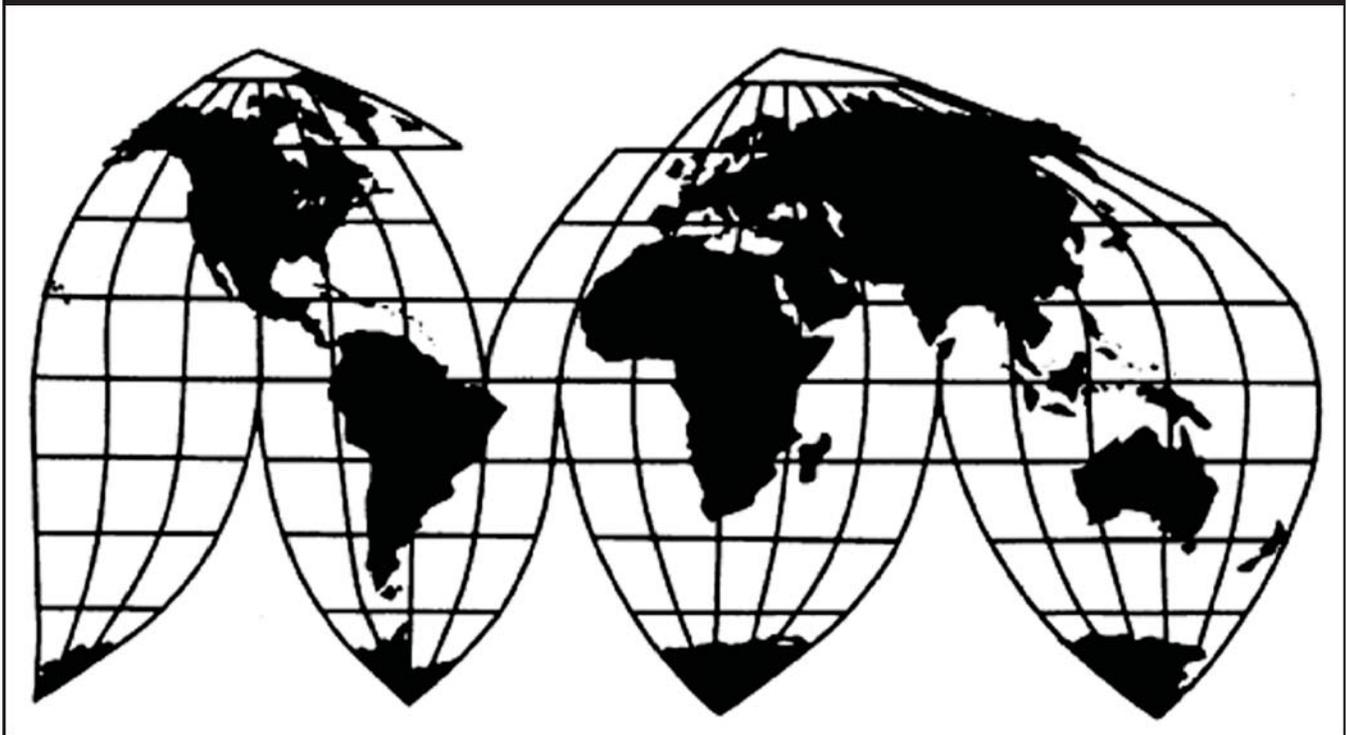
# **Non-Oriented Electrical Steel from China, Germany, Japan, Korea, Sweden, and Taiwan**

Investigation Nos. 701-TA-506-508 and 731-TA-1238-1243 (Preliminary)

**Publication 4441**

**December 2013**

**U.S. International Trade Commission**



Washington, DC 20436

# U.S. International Trade Commission

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## UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation Nos. 701-TA-506-508 and 731-TA-1238-1243 (Preliminary)

NON-ORIENTED ELECTRICAL STEEL FROM CHINA, GERMANY, JAPAN, KOREA,  
SWEDEN, AND TAIWAN

### DETERMINATIONS

On the basis of the record<sup>1</sup> 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, Germany, Japan, Korea, Sweden, and Taiwan of non-oriented electrical steel, provided for in subheadings 7225.19.00 and 7226.19.10, and 7226.19.90 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 non-oriented electrical steel that are allegedly subsidized by the Governments of China, Korea, and Taiwan.<sup>2</sup>

### 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.

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

<sup>2</sup> Commissioners Shara L. Aranoff and F. Scott Kieff did not participate.

## **BACKGROUND**

On September 30, 2013, a petition was filed with the Commission and Commerce by AK Steel Corp., West Chester, Ohio, alleging that an industry in the United States is materially injured or threatened with material injury by reason of LTFV and subsidized imports of non-oriented electrical steel from China, Korea, and Taiwan and LTFV imports of non-oriented electrical steel from China, Germany, Japan, Korea, Sweden, and Taiwan. Accordingly, effective September 30, 2013, the Commission instituted countervailing duty investigation Nos. 701-TA-506-508 and antidumping duty investigation Nos. 731-TA-1238-1243 (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* of October 22, 2013 (78 FR 62660). The conference was held in Washington, DC, on November 6, 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 non-oriented electrical steel (NOES) from China, Germany, Japan, Korea, Sweden, and Taiwan that are allegedly sold in the United States at less than fair value and imports of NOES that are allegedly subsidized by the Governments of China, Korea, and Taiwan.<sup>1</sup>

### 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.<sup>2</sup> 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.”<sup>3</sup>

### II. Background

The petitions in these investigations were filed on September 30, 2013, by AK Steel Corporation (AK Steel), a domestic producer of NOES. Petitioner appeared at the conference and submitted a postconference brief.

Several respondent entities participated in these investigations. Baoshan Iron & Steel Ltd., a producer of subject merchandise from China, and the China Iron and Steel Association (collectively Chinese Respondents) appeared at the conference and filed a postconference brief. ThyssenKrupp Steel Europe AG, a producer of subject merchandise from Germany, and ThyssenKrupp Steel North America, an importer of subject merchandise from Germany (collectively ThyssenKrupp), appeared at the conference and submitted a postconference brief, as did C.D. Walzholz KG (CDW), a producer of subject merchandise from Germany.<sup>4</sup> JFE Steel Corporation and Nippon Steel & Sunimoto Metal Corporation (collectively Japanese Respondents), producers of subject merchandise from Japan, appeared at the conference and

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<sup>1</sup> Commissioners Aranoff and Kieff did not participate in these investigations.

<sup>2</sup> 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*, 20 CIT 353, 354-55 (1996). No party argues that the establishment of an industry in the United States is materially retarded by the allegedly unfairly traded imports.

<sup>3</sup> *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).

<sup>4</sup> CDW and ThyssenKrupp are also referred to collectively as German Respondents.

jointly submitted a postconference brief. Cogent Power Inc. (Cogent) and Surahammars Bruk AB (collectively Swedish Respondents), an importer of the subject merchandise from Sweden and a producer of the subject merchandise from Sweden, respectively, appeared at the conference and submitted a postconference brief. China Steel Corporation (China Steel or Taiwanese Respondent), a producer of the subject merchandise from Taiwan, appeared at the conference and filed a postconference submission.

U.S. industry data are based on questionnaire responses of two firms, AK Steel and Nucor Corporation (Nucor), which are believed to account for all U.S. production of NOES during 2012.<sup>5</sup> Except as noted, U.S. import data are based on the official U.S. Department of Commerce (Commerce) statistics and questionnaire responses from 25 U.S. importers, representing 87.4 percent of total subject imports in 2012 (by country, 76.2 percent of imports from China, 108.5 percent of imports from Germany, 71.8 percent of imports from Japan, 99.3 percent of imports from Korea, 99.2 percent of imports from Sweden, and 90.1 percent of imports from Taiwan).<sup>6</sup> The Commission received responses to its questionnaires from ten foreign producers/exporters of subject merchandise: two producers of NOES in China, accounting for \*\*\* percent of U.S. imports of NOES from China in 2012; three producers of NOES in Germany, accounting for \*\*\* of U.S. imports of NOES from Germany in 2012; three producers/exporters of NOES from Japan, accounting for \*\*\* percent of U.S. imports of NOES from Japan in 2012; one producer of NOES in Korea, accounting for \*\*\* percent of U.S. imports of NOES from Korea in 2012; and one producer of NOES in Sweden, accounting for \*\*\* percent of U.S. imports of NOES from Sweden in 2012.<sup>7</sup>

### **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.”<sup>8</sup> 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.”<sup>9</sup> In turn, the Tariff Act defines

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<sup>5</sup> Confidential Report (CR) at I-4, III-1; Public Report (PR) at I-3, III-1.

<sup>6</sup> CR at I-4 – I-5, IV-1, PR at I-3-4, IV-1. Coverage was calculated based on official Commerce import statistics relative to the quantity of imports, in short tons, reported in questionnaire data in 2012. CR at I-5, n.4, PR at I-4, n.4.

<sup>7</sup> CR at VII-3, VII-5, VII-8, VII-12, VII-15, PR at VII-3, VII-5-8.

<sup>8</sup> 19 U.S.C. § 1677(4)(A).

<sup>9</sup> 19 U.S.C. § 1677(4)(A).

“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.”<sup>10</sup>

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 “most similar in characteristics and uses” on a case-by-case basis.<sup>11</sup> No single factor is dispositive, and the Commission may consider other factors it deems relevant based on the facts of a particular investigation.<sup>12</sup> The Commission looks for clear dividing lines among possible like products and disregards minor variations.<sup>13</sup> 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,<sup>14</sup> the Commission determines what domestic product is like the imported articles Commerce has identified.<sup>15</sup> The Commission may, where appropriate, include domestic articles in the domestic like product in addition to those described in the scope.<sup>16</sup>

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<sup>10</sup> 19 U.S.C. § 1677(10).

<sup>11</sup> 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).

<sup>12</sup> See, e.g., S. Rep. No. 96-249 at 90-91 (1979).

<sup>13</sup> 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.”).

<sup>14</sup> 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).

<sup>15</sup> *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).

<sup>16</sup> See, e.g., *Pure Magnesium from China and Israel*, Inv. Nos. 701-TA-403 and 731-TA-895-96 (Final), USITC Pub. 3467 at 8 n.34 (Nov. 2001); *Torrington*, 747 F. Supp. at 748-49 (holding that the Commission is not legally required to limit the domestic like product to the product advocated by the petitioner, co-extensive with the scope).

## B. The Product

In its notice of initiation, Commerce defined the imported merchandise within the scope of these investigations as follows:

The merchandise subject to these investigations consists of non-oriented electrical steel (NOES), which includes cold-rolled, flat-rolled, alloy steel products, whether or not in coils, regardless of width, having an actual thickness of 0.20 mm or more, in which the core loss is substantially equal in any direction of magnetization in the plane of the material. The term “substantially equal” in the prior sentence means that the cross grain direction of core loss is no more than 1.5 times the straight grain direction (*i.e.*, the rolling direction) of core loss. NOES has a magnetic permeability that does not exceed 1.65 tesla when tested at a field of 800 A/m (equivalent to 10 oersteds) along (*i.e.*, parallel to) the rolling direction of the sheet (*i.e.*,  $B_{800}$  value). NOES contains by weight at least 1.25 percent of silicon but less than 3.5 percent of silicon, not more than 0.08 percent of carbon, and not more than 1.5 percent of aluminum.

NOES is subject to these investigations whether it is fully processed (fully annealed to develop final magnetic properties) or semi-processed (finished to final thickness and physical form but not fully annealed to develop final magnetic properties); whether or not it is coated (*e.g.*, with enamel, varnish, natural oxide surface, chemically treated or phosphate surface, or other non-metallic materials). Fully processed NOES is typically made to the requirements of ASTM specification A 677, Japanese Industrial Standards (JIS) specification C 2552, and/or International Electrotechnical Commission (IEC) specification 60404-8-4. Semi-processed NOES is typically made to the requirements of ASTM specification A 683. However, the scope of these investigations is not limited to merchandise meeting the specifications noted above.

NOES is sometimes referred to as cold-rolled non-oriented electrical steel (CRNO), non-grain oriented (NGO), non-oriented (NO), or cold-rolled non-grain oriented (CRNGO). These terms are interchangeable.<sup>17</sup>

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<sup>17</sup> *Non-Oriented Electrical Steel From the People’s Republic of China, the Republic of Korea, and Taiwan: Initiation of Countervailing Duty Investigations*, 78 Fed. Reg. 68412, 68416 (Dep’t of Commerce Nov. 14, 2013); *Non-Oriented Electrical Steel From the People’s Republic of China, Germany, Japan, the Republic of Korea, Sweden, and Taiwan: Initiation of Antidumping Duty Investigations*, 78 Fed. Reg. 69041, 69047 (Dep’t of Commerce Nov. 18, 2013). On November 22, 2013, Petitioner requested that Commerce revise the scope language to define more precisely the intended scope of the investigations. *Petition Amendment To Clarify the Proposed Scope Definition*, November 22, 2013. Specifically, Petitioner seeks to revise the scope to require more than 1.00 percent silicon rather than 1.25 percent silicon and to require a surface oxide coating, removing the language which indicates that the scope (Continued...)

NOES is a flat-rolled, alloy steel product that is used to manufacture laminations that are assembled in stacks to produce magnetic cores for alternating-current electrical apparatus. NOES has desirable magnetic properties that are similar in all directions (nonoriented), in contrast to grain-oriented electrical steel (GOES), which has superior magnetic properties in the lengthwise direction of the sheet, but less favorable properties in other directions. Thus, NOES is used primarily to produce laminations for which the direction of the magnetic flux in the apparatus is constantly changing, such as for rotating machinery (*e.g.*, motors and generators), whereas GOES is used primarily in static equipment, such as transformers, for which the laminations can be produced in such a way as to take advantage of the favorable directionality of the steel. NOES is also used in small static apparatus, such as small, low-voltage transformers and lighting ballasts, if the higher cost of GOES cannot be justified by potential savings in improved energy efficiency.<sup>18</sup>

NOES is sold in sheet or strip form, either in coils or in straight lengths. Two types of NOES are produced: fully processed NOES, for which the producer performs the final annealing; and semi-processed NOES, which, although it is annealed by the producer, must be annealed once again by the end user after being punched or otherwise formed into laminations in order to achieve its potential magnetic properties. Both domestic and imported NOES are produced in compliance with specifications issued by ASTM International (ASTM), or proprietary or international specifications.<sup>19</sup>

NOES, as currently defined in the scope definition, is produced of steel that is alloyed with 1.25 percent or more of silicon, with aluminum usually added in lesser amounts. Both silicon and aluminum increase the electrical resistivity of steel, resulting in lower loss of energy in finished motors or apparatus produced using NOES.<sup>20</sup>

### C. Analysis

Petitioner argues that the Commission should define the domestic like product to be NOES, in a manner coextensive with the scope of the subject merchandise and not define the domestic like product to include GOES or cold-rolled motor lamination steel (CRML) because there are clear dividing lines between NOES and each of those products.<sup>21</sup> Chinese Respondents and the Taiwanese Respondent argue that the Commission should define the domestic like product to include CRML. They assert that CRML represents a low-cost alternative to NOES in a broad range of applications, that the 1.25 percent silicon level relied on

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(...Continued)

includes NOES “whether or not it is coated.” *Id.* If the request to modify the scope is granted, it would have the effect of excluding from the scope merchandise like the NOES product Nucor produces domestically. Commerce has not acted on Petitioner’s request as of the time the record closed in these preliminary phase investigations. Accordingly, we have relied on the scope definition Commerce published in its notices of initiation.

<sup>18</sup> CR at I-8 – I-9, PR at I-6.

<sup>19</sup> CR at I-9, PR at I-6-7.

<sup>20</sup> CR at I-9, PR at I-7.

<sup>21</sup> Petitioner’s Postconference Brief at 3-14.

by Petitioner to define NOES is artificial and arbitrary, and that the Commission previously found NOES and CRML to be part of a broader continuum of cold-rolled electrical sheet products.<sup>22</sup>

Based on the record in the preliminary phase of these investigations, we have defined a single domestic like product consisting of NOES that is coextensive with the scope of these investigations.<sup>23</sup>

*Physical Characteristics and Uses.* NOES and CRML are both produced from steel alloyed with silicon.<sup>24</sup> CRML is typically produced from steel having a somewhat lower content of silicon.<sup>25</sup> NOES, as currently defined in the scope, contains over 1.25 percent silicon and generally contains about 2 percent silicon, depending on the grade.<sup>26</sup> NOES derives its magnetic properties primarily from its silicon content, with semi-processed NOES requiring additional annealing to achieve its potential magnetic properties after it is stamped or otherwise formed into laminations to remove the strains caused by stamping or forming, which are harmful to magnetic properties.<sup>27</sup> NOES is not normally temper rolled.<sup>28</sup> The magnetic properties of CRML are developed as a result of heavy temper mill extension rolling at the producing mill followed by a decarburizing anneal of the stamped laminations by the customer to achieve its potential magnetic properties.<sup>29</sup> Both NOES and CRML have magnetic properties that are not oriented in a particular direction, and both NOES and CRML are used to produce laminations that are assembled to produce magnetic cores for electrical apparatuses, although the extent to which CRML may be used in the same applications as NOES is unclear on the current record.<sup>30</sup>

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<sup>22</sup> Chinese Respondents' Postconference Brief at 1-6; Taiwanese Respondent's Postconference Response to Staff Questions at 3-9. Although not challenging the definition of the domestic like product in the preliminary phase investigations, Japanese Respondents argue that in any final phase investigations, the Commission will need to examine whether the domestic like product should be expanded to include CRML, given its prior findings regarding competitive overlap between the two products. Japanese Respondents' Postconference Brief at 2-4.

<sup>23</sup> No party argues that GOES should be included in the domestic like product, and the record indicates that there are clear dividing lines between NOES and GOES. CR at I-8 – I-9, PR at I-6. Specifically, the magnetic properties of GOES are optimized in one direction, which dictates different end uses, and GOES is sold at a higher price. *Id.* The record also indicates that only two out of 17 responding importers reported that GOES could be used as a substitute for NOES. CR at II-21, PR at II-12. In addition, there is nothing in the record to contradict Petitioner's assertions that NOES and GOES are manufactured using distinct production processes, are sold to different customers, and are perceived by customers to be fundamentally different products. Petitioner's Postconference Brief at 6-7.

<sup>24</sup> CR at I-12, PR at I-8.

<sup>25</sup> CR at I-12, PR at I-8.

<sup>26</sup> CR at I-12, PR at I-8. Nucor,\*\*\*. CR at I-11 and I-18, n.45, PR at I-8 % I-12 n.45.

<sup>27</sup> CR at I-9, n.11, PR at I-6 n.11.

<sup>28</sup> CR at I-11, PR at I-8.

<sup>29</sup> CR at I-12, PR at I-8.

<sup>30</sup> CR at I-8 - I-13, PR at I-6-8. The parties dispute the extent of any overlap in end uses.

According to Petitioner, CRML is almost always used in low voltage, intermittent use household devices (Continued...)

*Manufacturing Facilities, Production Processes and Employees.* NOES production begins with the melting of steel in either an electric-arc furnace or a basic oxygen furnace, with the molten steel then being subjected to various procedures such as argon-oxygen refining, ladle metallurgy treatment, and vacuum degassing, all of which act to reduce undesirable contaminants and refine the chemistry of the steel.<sup>31</sup> Alloys including silicon and aluminum are added. The steel is next continuously cast into slabs that are rolled on a continuous hot strip mill to produce hot-rolled coils, which are then uncoiled for additional processing and recoiled.<sup>32</sup> In the subsequent coil processing, the coils are annealed and cleaned, rolled to ordered thickness on a cold-rolling mill, annealed again on a continuous annealing line using a controlled, decarburizing atmosphere, and provided with a tightly adherent surface oxide to prevent the laminations from sticking to one another and to increase electrical resistance.<sup>33</sup> Coils may be slit to ordered width.<sup>34</sup> Fully processed NOES is usually provided with an applied coating to further increase electrical resistance.<sup>35</sup> Semi-processed NOES is subsequently stamped or otherwise formed into laminations and must again be annealed by the end user to remove strains that are harmful to magnetic properties caused by the stamping or forming and to achieve its potential magnetic qualities.<sup>36</sup>

CRML is produced from steel that has been refined to a low carbon content, through vacuum or other processing, followed by continuous casting, hot rolling, pickling, cold rolling, annealing, and temper rolling.<sup>37</sup> The annealing process is typically performed on coils in batch annealing furnaces, although some producers may use continuous annealing.<sup>38</sup>

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(...Continued)

that can tolerate CRML's relatively poor core loss, heat buildups and inefficient electricity usage, such as hair dryers, handheld mixers, garage door openers, sump pumps, and power tools. Petitioner's Postconference Brief at 9 (citing Tr. at 29 (Pfeiffer)). In contrast, NOES is used in machines where the efficient use of electricity is desirable, such as higher voltage, higher power or compact-sized motors in locomotives, aircraft, and other industrial applications, where high power and excessive heat generation render materials with high core loss values unacceptable. *Id.* at 9 (citing Tr. at 29-30 (Pfeiffer)). Petitioner also claims that NOES, rather than CRML, is used in motors that operate continuously such as industrial fans, pumps, rolling mills, and oil and gas drilling equipment, so that end users do not incur excessive electricity costs. *Id.* On the other hand, the Chinese Respondents argue that in small and medium motors CRML can be a cost-effective alternative to NOES, that when properly annealed CRML can offer core losses comparable to many grades of NOES, and that the pricing products for which the Commission sought information overlap and compete with CRML. Chinese Respondents' Postconference Brief at 5-6 (citing Tr. at 94-95 (Weinstein)) & Response to Staff Questions at 3.

<sup>31</sup> CR at I-10, PR at I-7.

<sup>32</sup> CR at I-10, PR at I-7.

<sup>33</sup> CR at I-10, PR at I-7.

<sup>34</sup> CR at I-10, PR at I-7.

<sup>35</sup> CR at I-10, PR at I-7.

<sup>36</sup> CR at I-9, PR at I-6.

<sup>37</sup> CR at I-12, PR at I-8.

<sup>38</sup> CR at I-12 – I-13, PR at I-8.

Petitioner reported that it produces GOES and NOES, which involve distinct production processes, but that it does not produce CRML.<sup>39</sup> Petitioner also reported that it uses the same melting, casting, and hot rolling equipment to produce other products in addition to NOES, including stainless steel, GOES, and carbon steel, but its NOES coil processing equipment is used exclusively for NOES.<sup>40</sup> Nucor reported the production of \*\*\* using the same equipment, machinery, and workers as are used in Nucor's production of a CRML product that it states meets the definition of NOES.<sup>41</sup>

*Channels of Distribution.* The limited record in the preliminary phase of these investigations suggests that both NOES and CRML are sold to end users, service centers, and distributors, although Petitioner contends that NOES and CRML are typically sold in distinct market segments.<sup>42</sup>

*Interchangeability.* The limited record in the preliminary phase of these investigations suggests that there is at least some interchangeability between NOES and CRML, but the parties disagree as to the extent and frequency of any actual overlap in end uses. Petitioner agrees that CRML may be used instead of NOES in some applications but contends that those uses would be limited to low voltage, low efficiency motors where high efficiency is not required.<sup>43</sup> Respondents contend that CRML and NOES are highly interchangeable, but concede there are limitations on the extent to which CRML can replace NOES in all applications.<sup>44</sup>

*Producer and Customer Perceptions.* Petitioner perceives NOES and CRML to be distinct products, with very little overlap in end uses. Nucor produces CRML that satisfies the description of NOES, as defined by the scope of the product, but the limited record does not indicate whether Nucor perceives NOES and CRML to be distinct products.<sup>45</sup> Moreover, \*\*\* and 17 importers reported that there were no substitutes for NOES, while only three importers named CRML as a substitute for NOES in laminations, transformers, and motors.<sup>46</sup>

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<sup>39</sup> CR at III-3, PR at III-2; Petitioner's Postconference Brief at 7, 11 & Exhibit 1.

<sup>40</sup> CR at I-11, PR at I-7.

<sup>41</sup> CR at III-3, PR at III-2. Nucor, \*\*\*. CR at I-11 and I-18, n.45, PR at I-8 & I-12 n.45.

<sup>42</sup> Petitioner's Postconference Brief at 11.

<sup>43</sup> Petitioner's Postconference Brief at 9.

<sup>44</sup> Tr. at 94-95 (Weinstein) (stating that CRML is not a good substitute for NOES in variable and high frequency motors); Tr. at 149 (Weinstein) (stating that there is a very large percentage of the NOES market that cannot be replaced by CRML); Chinese Respondents' Postconference Brief, Response to Staff Questions at 3 (stating that customers prefer NOES to CRML in several circumstances, including integral motors that require high efficiency and consistent working conditions; motors in which the design imposes size restrictions that prevent the use of CRML, which cannot be sufficiently laminated; some larger size industrial motors, which need thick coating, and use NOES with extra coating; and new electrical vehicle motor designs that need thin gauge, low core loss NOES).

<sup>45</sup> CR at I-11 and I-18, n.45, PR at I-8 and I-12 n.45. In its questionnaire response, Nucor \*\*\*.

<sup>46</sup> CR at II-20, PR at II-12. One importer noted that CRML could substitute for semi-processed NOES but not fully processed NOES, and another described CRML as a substitute for NOES up to the highest grade for NOES, claiming that some of its purchasers stated that they switch from NOES to CRML if NOES prices rise. CR at II-20, PR at II-12.

*Price.* The record indicates that NOES is typically sold at a higher price than CRML.<sup>47</sup>

*Conclusion.* Based on the limited record in the preliminary phase of these investigations, we define a single domestic like product, NOES, that is coextensive with the scope in these investigations.<sup>48</sup> The record indicates that there are differences between NOES and CRML in physical characteristics, production processes, and prices and that the Petitioner along with a majority of importers report that there are no products that could serve as substitutes for NOES. The limited record also suggests that there is at least some degree of interchangeability between the two products. Although the parties have presented divergent views regarding this issue, they appear to agree that CRML may be able to replace NOES in some applications. \*\*\*, for example, produces CRML that fits the physical and chemical definition of NOES, as defined by the scope of these investigations. We intend to examine this like product issue further in any final phase investigations.<sup>49</sup>

#### **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.”<sup>50</sup> 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.

The Commission received questionnaire responses from two firms, Petitioner and Nucor, believed to represent all U.S. production of NOES, with Petitioner accounting for the large majority of NOES production in the United States.<sup>51</sup> There are no related party issues in this preliminary phase of these investigations.<sup>52</sup>

Accordingly, based on our definition of the domestic like product, we define the domestic industry as AK Steel and Nucor, the two known U.S. producers of NOES.

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<sup>47</sup> CR at I-11, II-21, PR at I-8, II-12.

<sup>48</sup> The domestic like product analysis begins with the scope definition, and the in-scope product in these investigations is limited to NOES. Consequently, respondents’ arguments that the Commission defined the domestic like products more broadly in prior investigations having much broader scope definitions – i.e., all cold-rolled steel – have little pertinence to our analysis.

<sup>49</sup> We invite any party that plans to assert an alternative domestic like product definition in any final phase investigation to raise the issue and indicate those products on which the Commission should collect data in its comments on the draft questionnaires.

<sup>50</sup> 19 U.S.C. § 1677(4)(A).

<sup>51</sup> CR at III-1, PR at III-1.

<sup>52</sup> CR at III-1, n.1 & III-6, PR at III-1, n.1 & III-4.

## V. Cumulation<sup>53</sup>

### 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;
- (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.<sup>54</sup>

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

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<sup>53</sup> 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)). Negligibility is not an issue in these investigations. The data available, based on official Commerce statistics, indicate that subject imports from each subject country exceed the requisite 3 percent statutory negligibility threshold. From August 2012 to July 2013, the most recent 12-month period prior to the filing of the petitions for which data are available, U.S. imports from China accounted for 22.4 percent of the total imports of NOES by quantity, U.S. imports from Germany accounted for 11.8 percent of the total imports of NOES by quantity, U.S. imports from Japan accounted for 22.2 percent of the total imports of NOES by quantity, U.S. imports from Korea accounted for 5.6 percent of the total imports of NOES by quantity, U.S. imports from Sweden accounted for 11.6 percent of the total imports of NOES by quantity, and U.S. imports from Taiwan accounted for 20.3 percent of the total imports of NOES by quantity. CR at IV-6 – IV-7, PR at IV-5 & CR/PR at Table IV-4.

<sup>54</sup> *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).

determining whether the subject imports compete with each other and with the domestic like product.<sup>55</sup> Only a “reasonable overlap” of competition is required.<sup>56</sup>

## B. Analysis

Petitioner argues that, because the relevant criteria for cumulation are satisfied, the Commission should cumulate subject imports from China, Germany, Japan, Korea, Sweden, and Taiwan.<sup>57</sup> Swedish Respondents argue that the Commission should not cumulate subject imports from Sweden with imports from the other subject countries because of differences in the form of the product sold from Sweden, channels of distribution, and non-price factors, which it contends are of paramount importance to its customers. They also contend that they serve a niche market and a limited number of long-time customers in discrete geographic locations and consequently do not participate in the larger market for NOES.<sup>58</sup>

In these investigations, the threshold criterion for cumulation is satisfied because Petitioner filed the antidumping duty petitions with respect to subject countries and the countervailing duty petitions with respect to China, Korea, and Taiwan on the same day, September 30, 2013.<sup>59</sup> We thus examine whether there is a reasonable overlap of competition between subject imports from China, Germany, Japan, Korea, Sweden, and Taiwan and between subject imports from each source and the domestic like product.

*Fungibility.* The record in the preliminary phase of these investigations indicates that NOES is at least moderately fungible, regardless of source.<sup>60</sup> Both U.S. producers described NOES from all sources as \*\*\* interchangeable, while most responding importers reported that NOES from the various sources was “frequently” or “sometimes” interchangeable.<sup>61</sup> When asked whether differences other than price are ever significant to purchasers choosing between the domestic like product and subject imports or among subject imports, both U.S. producers reported that differences other than price are \*\*\* significant, while a large majority of importers indicated that differences other than price were at least “sometimes” significant.<sup>62</sup>

Although Swedish Respondents contend that subject imports from Sweden are not fungible with the domestic like product or subject imports from other subject countries, the

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<sup>55</sup> See, e.g., *Wieland Werke, AG v. United States*, 718 F. Supp. 50 (Ct. Int’l Trade 1989).

<sup>56</sup> 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.”).

<sup>57</sup> Petitioner’s Postconference Brief at 15-19.

<sup>58</sup> Swedish Respondents’ Postconference Brief at 4-12.

<sup>59</sup> None of the statutory exceptions to cumulation applies.

<sup>60</sup> CR at II-22, PR at II-13.

<sup>61</sup> CR at II-24 – II-25, PR at II-14 & CR/PR at Table II-4.

<sup>62</sup> CR/PR at Table II-5.

record indicates that market participants' perceptions of the interchangeability of subject imports from Sweden with the domestic like product and imports from other subject countries were not appreciably different from their perceptions of the interchangeability of imports from other countries.<sup>63</sup> Furthermore, with respect to the assertion that imports from Sweden are not fungible with imports from other sources because imports from Sweden are sold in slit form rather than wide coils, the record indicates that imports from Sweden consisted of both wide coils and slit coils.<sup>64</sup>

*Channels of Distribution.* The limited record in these preliminary investigations indicates some overlap in the channels of distribution. U.S. producers and importers of NOES from \*\*\* sold \*\*\*, while importers of NOES from \*\*\* reported selling only to end users.<sup>65</sup> Importers of NOES from \*\*\* sold mainly to distributors, but also sold to end users in each year and each interim period of the period of investigation (POI), with appreciable shares of import shipments being directed to end users in 2010 and interim 2013.<sup>66</sup>

*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 NOES to all six regions in the contiguous United States, and all importers of NOES from each of the subject countries, except for Sweden and Taiwan, also reported selling NOES to all six regions of the contiguous United States.<sup>67</sup> Importers of subject NOES from Taiwan reported selling to five of the six specified regions, while importers of subject NOES from Sweden reported selling to four of the six specified regions.<sup>68</sup>

*Simultaneous Presence in Market.* Official import statistics indicate that imports of NOES from Germany, Japan, and Sweden entered the United States every month during the POI and that imports of NOES from China and Taiwan entered in every month but one, while imports of NOES from Korea entered the United States in 36 out of 42 months.<sup>69</sup>

*Conclusion.* Although Swedish Respondents argue that subject imports from Sweden do not compete with the domestic like product and subject imports from other sources, the record, as discussed above, indicates a reasonable overlap of competition between subject imports from Sweden and the domestic like product and between subject imports from Sweden and other subject imports. The record in the preliminary phase of these investigations does not indicate a lack of fungibility between subject imports from Sweden and imports from other subject countries and the domestic like product. As previously discussed, subject imports from

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<sup>63</sup> CR/PR at Table II-4.

<sup>64</sup> CR/PR at Tables V-3 – V-10 (showing pricing data on imports of NOES from Sweden for each of the eight pricing products, which represent NOES sold in coils).

<sup>65</sup> CR at II-2, PR at II-2 & CR/PR at Table II-1.

<sup>66</sup> CR/PR at Table II-1. Specifically, importers of NOES from \*\*\* reported that \*\*\* percent of shipments were to end users in 2010, \*\*\* percent of shipments were to end users in 2011, \*\*\* percent of shipments were to end users in 2012, and \*\*\* percent of shipments were to end users from January to June 2013. *Id.* The record further indicates that one importer sold subject imports from Taiwan and imports from three other subject countries. CR at V-12, PR at V-7 & CR/PR at Table V-3, note.

<sup>67</sup> CR/PR at Table II-2.

<sup>68</sup> CR/PR at Table II-2.

<sup>69</sup> CR at IV-8 – IV-9, PR at IV-6.

Sweden do not appear to be a distinct product, and market participants' perceptions of the interchangeability of subject imports from Sweden paralleled those for other subject sources.<sup>70</sup> The record further indicates geographic overlap and simultaneous presence. While all subject imports from Sweden are sold to end users, the domestic industry and all subject sources except Taiwan sell heavily to that channel, and subject imports from Taiwan have had sufficient presence in that channel to constitute a reasonable overlap.

Consequently, the record indicates a reasonable overlap of competition among subject imports from China, Germany, Japan, Korea, Sweden, and Taiwan 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 subject imports and the domestic like product, we cumulate subject imports from China, Germany, Japan, Korea, Sweden, and Taiwan 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.<sup>71</sup> 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.<sup>72</sup> The statute defines "material injury" as "harm which is not inconsequential, immaterial, or unimportant."<sup>73</sup> 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.<sup>74</sup> 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."<sup>75</sup>

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,<sup>76</sup> it does not define the phrase "by reason of," indicating that this aspect of the

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<sup>70</sup> CR/PR at Table II-4.

<sup>71</sup> 19 U.S.C. §§ 1671b(a), 1673b(a).

<sup>72</sup> 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).

<sup>73</sup> 19 U.S.C. § 1677(7)(A).

<sup>74</sup> 19 U.S.C. § 1677(7)(C)(iii).

<sup>75</sup> 19 U.S.C. § 1677(7)(C)(iii).

<sup>76</sup> 19 U.S.C. §§ 1671b(a), 1673b(a).

injury analysis is left to the Commission's reasonable exercise of its discretion.<sup>77</sup> 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.<sup>78</sup>

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.<sup>79</sup> In performing its examination, however, the Commission need not isolate the injury caused by other factors from injury caused by unfairly traded imports.<sup>80</sup> Nor does the

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<sup>77</sup> *Angus Chemical Co. v. United States*, 140 F.3d 1478, 1484-85 (Fed. Cir. 1998) ("the statute does not 'compel the commissioners' to employ {a particular methodology}.", *aff'g* 944 F. Supp. 943, 951 (Ct. Int'l Trade 1996).

<sup>78</sup> 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).

<sup>79</sup> SAA, H.R. Rep. 103-316, Vol. I at 851-52 (1994) ("the 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.

<sup>80</sup> SAA at 851-52 ("the 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. ("the 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 (Continued...)

“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.<sup>81</sup> It is clear that the existence of injury caused by other factors does not compel a negative determination.<sup>82</sup>

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.”<sup>83 84</sup> Indeed, the Federal Circuit has examined and affirmed various Commission methodologies and has disavowed “rigid adherence to a specific formula.”<sup>85</sup>

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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.”).

<sup>81</sup> S. Rep. 96-249 at 74-75; H.R. Rep. 96-317 at 47.

<sup>82</sup> 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.”).

<sup>83</sup> *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.

<sup>84</sup> 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 non-subject imports, albeit without reliance upon presumptions or rigid formulas. *Mittal Steel* explains as follows:

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

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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.<sup>86</sup> 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.<sup>87</sup> 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 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.<sup>88</sup>

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

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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.

<sup>85</sup> *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.").

<sup>86</sup> *Mittal Steel*, 542 F.3d at 875-79.

<sup>87</sup> *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).

<sup>88</sup> 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 phase 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 phase investigations in which there are substantial levels of nonsubject imports.

evidence standard.<sup>89</sup> Congress has delegated this factual finding to the Commission because of the agency's institutional expertise in resolving injury issues.<sup>90</sup>

## **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**

U.S. demand for NOES depends on demand for U.S.-produced downstream products, such as electric motors, low-voltage transformers, and generators.<sup>91</sup> NOES accounts for a highly variable share of the cost of end-use products. NOES is estimated to account for 20-84 percent of the cost of an electrical motor, 80 percent of the cost of a transformer, and 20 percent of the cost of a generator.<sup>92</sup> U.S. purchasers of NOES are end users, distributors, and service centers that perform laminating or stamping prior to selling the NOES products to the same end users.<sup>93</sup>

Market participants' perceptions of demand trends were mixed. \*\*\* indicated that demand has decreased since January 1, 2010, due to lower demand from the mining, locomotive, and industrial segments, but that NOES would resume a longer-term trend of increased growth in these segments after the next 12 to 18 months.<sup>94</sup> \*\*\* reported that demand for NOES has fluctuated since 2010 with no clear trend.<sup>95</sup> Importers were divided regarding changes in U.S. demand for NOES during the POI.<sup>96</sup>

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<sup>89</sup> 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.

<sup>90</sup> *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.").

<sup>91</sup> CR at II-16, PR at II-10. Petitioner reported that new U.S. Department of Energy efficiency requirements for small transformers will go into effect in January 2016 and that, although that segment of the market does not account for a major portion of its business, those requirements will effectively eliminate NOES from that segment. CR at II-16, n.22, PR at II-10, n.22.

<sup>92</sup> CR at II-16 – II-17, PR at II-10.

<sup>93</sup> CR at II-2 & II-23, PR at II-1 & II-13; CR/PR at Table II-1; Tr. at 53 (Pfeiffer), 63 (Konstantinidis).

<sup>94</sup> CR at II-19, PR at II-11.

<sup>95</sup> CR at II-19, PR at II-11.

<sup>96</sup> CR/PR at Table II-3. The large majority of importers indicated that U.S. demand for NOES increased, fluctuated, or remained unchanged. Importers that reported increased U.S. demand for NOES attributed the increase to various reasons, including recovery from the recession in 2009 and the new production of electric vehicles. CR at II-19, PR at II-11. Importers reporting decreased demand attributed it to weakness in the broader economy, producers of downstream products moving production to Asia and Mexico, and lower natural gas prices, which led to decreased demand for non-gas electrical energy applications and made annealing CRML more cost effective. CR at II-19 – II-20, PR at II-11 – II-12.

As measured by apparent U.S. consumption, demand increased \*\*\* percent from 2010 to 2011, before decreasing \*\*\* percent between 2011 and 2012.<sup>97</sup> Overall, it increased by \*\*\* percent from 2010 to 2012.<sup>98</sup>

Several respondents argued that demand for NOES suffered due to competitive pressure from domestically produced CRML, which they state has competed with NOES since well before 2010.<sup>99</sup> As discussed above, only three importers named CRML as a substitute for NOES in laminations, transformers, and motors, while \*\*\* and 17 importers reported that there were no substitutes for NOES.<sup>100</sup> As also discussed above, the limited record in the preliminary phase of these investigations suggests at least some interchangeability between NOES and CRML, although the parties have presented disparate views about the degree and extent of overlap in end uses. In any final phase of these investigations, we intend to examine whether and to what extent the availability of CRML affects U.S. demand for NOES.

## 2. Supply Conditions

Sources of supply of NOES to the U.S. market during the POI included the domestic industry, subject imports, and imports from nonsubject sources.<sup>101</sup>

Petitioner AK Steel and Nucor are the U.S. manufacturers of NOES.<sup>102</sup> AK Steel accounted for \*\*\* percent of total domestic production in 2012, while Nucor, which produced CRML that meets the physical and chemical description of NOES, accounted for \*\*\* percent.<sup>103</sup> Both firms reported that most of their overall U.S. production consisted of products other than NOES.<sup>104</sup>

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<sup>97</sup> CR at II-18 & IV-9, PR at II-11 & IV-6. Apparent U.S. consumption of NOES increased from \*\*\* short tons in 2010 to \*\*\* short tons in 2011, then declined to \*\*\* short tons in 2012; apparent U.S. consumption of NOES was \*\*\* short tons in January-June 2012 (“interim 2012”) and \*\*\* short tons in interim 2013. CR/PR at Table IV-6. Apparent U.S. consumption was \*\*\* percent lower in interim 2013 than in interim 2012. CR at II-18 & IV-9, PR at II-11 & IV-6.

<sup>98</sup> CR/PR at Table C-1.

<sup>99</sup> *E.g.*, Japanese Respondents’ Postconference Brief at 5-21; Chinese Respondent’s Postconference Brief at 1-6; Taiwanese Respondent’s Postconference Response to Staff Questions at 2-9. The Taiwanese Respondent claims that CRML began seriously to compete with NOES more than 15 years ago and that competition has accelerated in recent years with the development of more advanced CRML products. Taiwanese Respondent’s Postconference Response to Staff Questions at 2. Chinese Respondents similarly describe CRML as a mature product. Chinese Respondents’ Postconference Brief, Responses to Staff Questions at 3.

<sup>100</sup> CR at II-20, PR at II-12.

<sup>101</sup> CR/PR at Table IV-5.

<sup>102</sup> CR at III-1 – III-2, PR at III-1.

<sup>103</sup> CR/PR at Table III-1.

<sup>104</sup> CR at III-3, n.5, PR at III-2, n.5. Specifically, AK Steel reported that in its facilities where it produces both GOES and NOES, \*\*\* percent of its production in 2012 consisted of GOES, while the remaining \*\*\* percent consisted of NOES. *Id.* Nucor reported that \*\*\* percent of its overall production consisted of \*\*\*, with the remaining \*\*\* percent consisting of NOES. *Id.*

For most of the POI, the domestic industry was the second largest source of NOES, supplying \*\*\* of the U.S. market in 2011 and 2012, but supplying \*\*\* of the U.S. market in 2010. The domestic industry's share of apparent consumption, by quantity, was \*\*\* percent in 2010, \*\*\* percent in 2011, and \*\*\* percent in 2012.<sup>105</sup>

Cumulated subject imports were the largest suppliers of NOES to the U.S. market in 2011 and 2012. The market share of cumulated subject imports was, by quantity, \*\*\* percent in 2010, \*\*\* percent in 2011, and \*\*\* percent in 2012.<sup>106</sup>

Nonsubject imports had a very small presence in the U.S. market throughout the POI. Nonsubject imports' market share, by quantity, was \*\*\* percent in 2010, \*\*\* percent in 2011, and \*\*\* percent in 2012.<sup>107</sup>

### 3. Substitutability and Other Conditions

Based on the record in the preliminary phase of these investigations, we find that there is a moderate-to-high degree of substitutability among domestically produced NOES and NOES from all subject sources. As explained above, both U.S. producers described NOES from all sources as \*\*\* interchangeable, while most responding importers reported that NOES from the various sources was "frequently" or "sometimes" interchangeable.<sup>108</sup>

We also find that price is at least a moderately important factor in purchasing decisions. As described above, when asked whether differences other than price are ever significant to purchasers choosing between the domestic like product and subject imports or among subject imports, both U.S. producers reported that differences other than price are \*\*\* significant.<sup>109</sup> Responses from importers were mixed, but an appreciable percentage of importers reported

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<sup>105</sup> CR/PR at Table IV-6. The domestic industry's share of apparent consumption, by quantity, was \*\*\* percent in interim 2012 and \*\*\* percent in interim 2013. *Id.*

<sup>106</sup> CR/PR at Table IV-6. The market share of cumulated subject imports was, by quantity, \*\*\* percent in interim 2012 and \*\*\* percent in interim 2013. *Id.*

<sup>107</sup> CR/PR at Table IV-6. Nonsubject imports' market share, by quantity, was \*\*\* percent in interim 2012 and \*\*\* percent in interim 2013. *Id.*

<sup>108</sup> CR at II-24–II-25, PR at II-14 & CR/PR at Table II-4. Petitioner asserts that most NOES sold in the U.S. market is warranted to meet ASTM specifications and, therefore, is highly interchangeable. CR at II-24, PR at II-14. In contrast, in their responses to the Commission's questionnaires, several importers claimed that they imported products from subject sources that the domestic industry did not produce. CR at II-26, PR at II-14. For example, certain importers claimed that certain grades of NOES were not available, or were only available in limited quantity, from the domestic industry. *Id.* Some importers claimed that customers requested NOES from specific mills. *Id.* \*\*\* stated that it exports a specially-designed NOES product developed to meet the specifications of a dedicated customer. *Id.*; see also CDW's Postconference Brief at 2-3. An importer likewise stated that some of its NOES products were produced to particular specifications developed by a specific producer of a certain type of electrical vehicle motor. *Id.* \*\*\* stated that its \*\*\* is DFARS compliant and designed for use by the customer without further processing. *Id.*

<sup>109</sup> CR/PR at Table II-5. A large majority of importers indicated that differences other than price were at least "sometimes" significant. *Id.*

that factors other than price were only \*\*\* or \*\*\* significant.<sup>110</sup> Several purchasers indicated that price was a pertinent consideration in their purchasing decisions.<sup>111</sup>

Several parties reported qualification processes for supplying NOES, but disputed the extent to which these processes act as a barrier to supplying NOES to a particular customer. Petitioner contends that, due to the limited number of NOES suppliers, the qualification process is relatively easy, generally resulting in approval within a matter of weeks following a trial shipment.<sup>112</sup> Several respondents, on the other hand, describe a longer and more involved process.<sup>113</sup> Other respondents describe long-standing customer relationships, some of which involve producing NOES to unique specifications, co-developed by the NOES producer and its customer.<sup>114</sup>

Raw material inputs in the production of NOES include steel scrap, ferrosilicon, natural gas, and electricity.<sup>115</sup> Raw material costs represented between \*\*\* and \*\*\* percent of the costs of goods sold (COGS) for NOES over 2010 to 2012.<sup>116</sup> U.S. producers' average cost of raw materials per short ton increased from \$\*\*\* in 2010 to \$\*\*\* in 2011, and decreased to \$\*\*\* in 2012; it was lower in interim 2013 (\$\*\*\* ) than in interim 2012 (\$\*\*\*).<sup>117</sup> \*\*\*. \*\*\*.<sup>118</sup>

### 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."<sup>119</sup>

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<sup>110</sup> CR/PR at Table II-5. When asked whether differences other than price are ever significant to purchasers choosing between the domestic like product and subject imports, approximately 37 to 60 percent of responding importers reported that non-price factors were only \*\*\* or \*\*\* significant. *Id.* When asked whether differences other than price are ever significant to purchasers choosing among subject imports, generally between 30 to 80 percent of responding importers reported that non-price factors were only \*\*\* or \*\*\* significant. *Id.*

<sup>111</sup> CR at V-48, PR at V-9.

<sup>112</sup> CR at II-23, PR at II-14; Tr. at 24 (Pfeiffer).

<sup>113</sup> CR at II-24, PR at II-14. Chinese Respondents claim that the qualification process to supply NOES to customers in the United States takes one to one and a half years, and this creates a substantial barrier for new vendors. CR at II-24, PR at II-14; Chinese Respondents' Postconference Brief, Responses to Staff Questions at 3. Swedish Respondents contend that the qualification processes that it undergoes for its customers is more rigorous than Petitioner claims, ranging from three months to two years, and that customers do not want to expend the time and expense to qualify suppliers if there is already an approved source. Swedish Respondents' Postconference Brief, Responses to Staff Questions at 31 & exhibit 1. ThyssenKrupp states that the qualification process takes 12 to 18 months. ThyssenKrupp's Postconference Brief, Responses to Staff Questions at 2.

<sup>114</sup> Swedish Respondents' Postconference Brief at 3; CDW's Postconference Brief at 2-3.

<sup>115</sup> CR/PR at Figure V-1.

<sup>116</sup> CR at V-1, PR at V-1.

<sup>117</sup> CR/PR at Table VI-2.

<sup>118</sup> CR at V-6, PR at V-4.

<sup>119</sup> 19 U.S.C. § 1677(7)(C)(i).

Cumulated subject imports held a substantial presence in the U.S. market throughout the POI. Cumulated subject imports increased from 55,507 short tons in 2010 to 74,215 short tons in 2011 and reached 76,006 short tons in 2012.<sup>120</sup> As explained above, apparent U.S. consumption increased overall by \*\*\* percent from 2010 to 2012.<sup>121</sup> The volume of cumulated subject imports rose faster, increasing by 36.9 percent during this period.<sup>122</sup>

The market share (by quantity) of cumulated subject imports increased from \*\*\* percent in 2010 to \*\*\* percent in 2011 and \*\*\* percent in 2012.<sup>123</sup> This gain in market share came at the expense of the domestic industry. The domestic industry's market share decreased from \*\*\* percent in 2010 to \*\*\* percent in 2011 and \*\*\* percent in 2012.<sup>124</sup> The market share held by nonsubject imports increased from \*\*\* percent in 2010 to \*\*\* percent in 2011, before declining slightly to \*\*\* percent in 2012.<sup>125</sup>

Cumulated subject imports of NOES were also significant relative to domestic production. The ratio of cumulated subject imports to domestic production increased from \*\*\* percent in 2010 to \*\*\* percent in 2011 and \*\*\* percent in 2012.<sup>126</sup>

For purposes of these preliminary determinations, we find that the cumulated volume of subject imports is significant both in absolute terms and relative to consumption and production in the United States.

#### **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.<sup>127</sup>

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<sup>120</sup> CR/PR at Table IV-3. Cumulated subject imports were 41,812 short tons in interim 2012 and 26,481 short tons in interim 2013.

<sup>121</sup> CR/PR at Table C-1. Apparent U.S. consumption in interim 2013 was \*\*\* percent lower than in interim 2012. *Id.*

<sup>122</sup> CR/PR at Table C-1. The volume of cumulated subject imports in interim 2013 was 36.7 percent lower than in interim 2012. *Id.*

<sup>123</sup> CR/PR at Table IV-6. Cumulated subject imports held \*\*\* percent of U.S. market share in interim 2012 and \*\*\* percent of market share in interim 2013. *Id.*

<sup>124</sup> CR/PR at Table IV-6. The domestic industry's market share was \*\*\* percent in interim 2012 and \*\*\* percent in interim 2013. *Id.*

<sup>125</sup> CR/PR at Table IV-6. Nonsubject imports held \*\*\* percent of U.S. market share in interim 2012 and \*\*\* percent of market share in interim 2013. *Id.*

<sup>126</sup> CR/PR at Table IV-7. The ratio was \*\*\* percent in interim 2012 and \*\*\* percent in interim 2013. *Id.*

<sup>127</sup> 19 U.S.C. § 1677(7)(C)(ii).

As discussed in section VI.B.3 above, the record in these preliminary phase investigations indicates that there is a moderate-to-high degree of substitutability between domestically produced NOES and NOES imported from subject countries and that price is at least a moderately important factor in purchasing decisions.<sup>128</sup>

The Commission collected quarterly pricing data on eight NOES products.<sup>129</sup> One U.S. producer and 17 importers provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products and all quarters.<sup>130</sup>

The pricing data show underselling by cumulated subject imports in 218 of 296 quarterly price comparisons.<sup>131</sup> The margins of underselling ranged from \*\*\* percent, with the average margin being \*\*\* percent.<sup>132</sup> Given the frequency of underselling and the magnitude of the underselling margins, we find the price underselling to be significant for purposes of these preliminary determinations.

Prices for U.S.-produced NOES generally increased from 2010 to 2011, before declining in 2012 and interim 2013.<sup>133</sup> Prices for four out of the eight pricing products were lower in the second quarter of 2013 than they were at the start of the POI.<sup>134</sup> Pricing data for the subject imports were more varied, both in terms of price changes between the first and last quarters of the period, and with respect to when the highest or lowest values were observed.<sup>135</sup>

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<sup>128</sup> CR/PR at Tables II-4 and II-5.

<sup>129</sup> The pricing products were as follows: Product 1 -- M-19, 0.45-0.50mm thickness, fully processed, maximum core loss 2.90W/kg (1.5t; 50 Hz), 600mm or more wide, coated; Product 2 -- M-22, 0.45-0.50mm thickness, fully processed, maximum core loss 3.10W/kg (1.5t; 50 Hz), 600mm or more wide, coated; Product 3 -- M-22, 0.60-0.65mm thickness, fully processed, maximum core loss 2.65W/kg (1.5t; 50 Hz), less than 600mm wide, coated; Product 4 -- M-36, 0.45-0.50mm thickness, fully processed, maximum core loss 3.50W/kg (1.5t; 50 Hz), 600mm or more wide, coated; Product 5 -- M-36, 0.60-0.65mm thickness, fully processed, maximum core loss 4.10W/kg (1.5t; 50 Hz), 600mm or more wide, coated, welded; Product 6 -- M-36, 0.45-0.50mm thickness, fully processed, maximum core loss 3.50W/kg (1.5t; 50 Hz), less than 600mm wide, coated; Product 7 -- M-43, 0.60-0.65mm thickness, fully processed, maximum core loss 4.35W/kg (1.5t; 50 Hz), 600mm or more wide, coated; and Product 8 -- M-45, 0.60-0.65mm thickness, fully processed, maximum core loss 4.80W/kg (1.5t; 50 Hz), 600mm or more wide, coated. CR at V-9, PR at V-5 – V-6.

<sup>130</sup> CR at V-9, PR at V-6. Reported pricing products represented \*\*\* percent of U.S. shipments of U.S.-produced products, \*\*\* percent of shipments of subject imports from China, \*\*\* percent of shipments of subject imports from Germany, \*\*\* percent of shipments of subject imports from Japan, \*\*\* percent of shipments of subject imports from Korea, \*\*\* percent of shipments of subject imports from Sweden, and \*\*\* percent of shipments of subject imports from Taiwan in 2012. CR at V-9-10, PR at V-6.

<sup>131</sup> CR/PR at Table V-12.

<sup>132</sup> CR/PR at Table V-12. Petitioner stated that its customers had told it that subject imports were underselling its prices by approximately 25 percent and that it responded by lowering prices in 2013. CR at V-46, PR at 8;Tr. at 32 (Peterson).

<sup>133</sup> CR/PR at Tables V-3-V-10.

<sup>134</sup> CR/PR at Tables V-3 to V-10 (prices were lower at the end of the POI than at the start for products one, three, five, and eight, while prices were higher for products two, four, six, and seven).

<sup>135</sup> CR/PR at Tables V-3 to V-10.

The record in the preliminary phase of these investigations contains evidence that subject imports prevented price increases for the domestic product, which otherwise would have occurred, to a significant degree. Over the POI, the domestic industry's ratio of COGS to net sales was high and increased irregularly from \*\*\* percent in 2010 to \*\*\* percent in 2012; it was \*\*\* percent in interim 2012 and \*\*\* percent in interim 2013.<sup>136</sup> These data support a finding that the domestic producers were unable to raise their prices sufficiently to cover rising costs in light of significant competition from the lower priced subject imports.

There is further support for our finding of price suppression in the record information on lost sales and lost revenue experienced by the domestic industry. Petitioner made \*\*\* lost sales allegations totaling \$\*\*\* and involving \*\*\* short tons of NOES and \*\*\* lost revenue allegations totaling \$\*\*\* and involving \*\*\* short tons of NOES.<sup>137</sup> \*\*\* purchaser explicitly agreed with \*\*\* lost sales allegations involving at least \$\*\*\*, and \*\*\* purchasers agreed with \*\*\* of the lost revenue allegations totaling at least \$\*\*\*.<sup>138</sup> There were also numerous allegations that purchasers did not formally confirm, but nevertheless suggest that the domestic industry lost sales due to low-priced subject imports.<sup>139</sup>

For purposes of these preliminary determinations, we find the price underselling by the subject imports to be significant and also find evidence that the substantial volume of subject imports has prevented price increases, which otherwise would have occurred, to a significant degree.

#### **E. Impact of the Subject Imports<sup>140</sup>**

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

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<sup>136</sup> CR/PR at Table C-1. Unit COGS rose from \$\*\*\* in 2010 to \$\*\*\* in 2011, and \$\*\*\* in 2012; it was \$\*\*\* in interim 2012 and \$\*\*\* in interim 2013.<sup>136</sup>

<sup>137</sup> CR at V-47, PR at V-9.

<sup>138</sup> CR/PR at Tables V-13, V-14.

<sup>139</sup> Although purchaser \*\*\*. CR/PR at Table V-14. \*\*\*. CR/PR at Table V-14. We intend to seek more information for a number of the lost sale and lost revenue allegations in any final phase of these investigations, and we encourage the market participants to submit documentation of their transactions that support their claims.

<sup>140</sup> In its notice initiating the antidumping duty investigations, Commerce estimated antidumping duty margins of 244.54 percent to 407.52 for imports of NOES from China, 73.74 percent to 98.84 percent for imports of NOES from Germany, 88.63 percent to 204.79 percent for imports of NOES from Japan, 16.00 percent to 68.82 percent for imports of NOES from Korea, 62.17 percent to 126.72 percent for imports of NOES from Sweden, and 52.23 percent to 101.51 percent for imports of NOES from Taiwan. CR at I-6, PR at I-4-5.

“within the context of the business cycle and conditions of competition that are distinctive to the affected industry.”

The record of the preliminary phase of these investigations indicates that the domestic industry’s performance declined over the POI for virtually all factors. After increasing from \*\*\* short tons in 2010 to \*\*\* short tons in 2011, the domestic industry’s production fell to \*\*\* short tons in 2012, a \*\*\* percent decline from 2010 to 2012, and was lower in interim 2013 (\*\*\* short tons) than in interim 2012 (\*\*\* short tons).<sup>141</sup> Capacity was a constant \*\*\* short tons from 2010 to 2012 and was \*\*\* short tons during the interim periods. Accordingly, the domestic industry’s rate of capacity utilization increased from \*\*\* percent in 2010 to \*\*\* percent in 2011, but then fell to \*\*\* percent in 2012, an overall decline of \*\*\* percentage points, and was lower (\*\*\* percent) in interim 2013 than in interim 2012 (\*\*\* percent).<sup>142</sup>

From 2010 to 2012, as apparent U.S. consumption of NOES increased by \*\*\* percent, the domestic industry’s U.S. shipments of NOES increased by only \*\*\* percent from \*\*\* short tons in 2010 to \*\*\* short tons in 2012.<sup>143</sup> The domestic industry’s share of apparent U.S. consumption steadily decreased from \*\*\* percent in 2010 to \*\*\* percent in 2011 and \*\*\* percent in 2012, an overall decline of \*\*\* percentage points, although it was higher in interim 2013 (\*\*\* percent) than in interim 2012 (\*\*\* percent).<sup>144</sup>

The number of production workers, hours worked, and wages paid increased from 2010 to 2011, before declining in 2012. These indicators were lower in interim 2013 than in interim 2012.<sup>145</sup>

The large majority of financial indicators showed poor or declining overall trends over the period. Sales revenues increased from \$\*\*\* in 2010 to \$\*\*\* in 2011, before declining to \$\*\*\* in 2012, and were lower in interim 2013 \$(\*\*\*) than in interim 2012 \$(\*\*\*).<sup>146</sup> The domestic industry’s operating income improved slightly from a \*\*\* in 2010 to a \*\*\* in 2011, before falling to a \*\*\*, and was lower in interim 2013 (\*\*\*) than in interim 2012 (\*\*\*)<sup>147</sup> The domestic industry’s operating margins followed a similar pattern of improving from \*\*\* percent

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<sup>141</sup> CR/PR at Tables III-2 & C-1.

<sup>142</sup> CR/PR at Tables III-2 & C-1.

<sup>143</sup> CR/PR at Tables III-4 & C-1. Apparent U.S. consumption was \*\*\* percent lower in interim 2013 than in interim 2012, and U.S. producers’ U.S. shipments of NOES were \*\*\* percent lower during this period. U.S. producers’ end-of-period inventories declined 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-5 & C-1.

<sup>144</sup> CR/PR at Tables IV-6 & C-1.

<sup>145</sup> 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-6.

<sup>146</sup> CR/PR at Table VI-1.

<sup>147</sup> CR/PR at Table VI-1.

in 2010 to \*\*\* percent in 2011, before declining to \*\*\* percent in 2012, and was lower in interim 2013 (\*\*\* percent) than in interim 2012 (\*\*\* percent).<sup>148</sup>

As discussed above, we have found the volume of cumulated subject imports and the market share of those imports to have been significant over the POI, that these imports significantly undersold the domestic like product, and that there is evidence of significant price suppression by the subject imports. The domestic industry's operating income and market share declined from 2010 to 2012, despite an increase in demand and unused capacity over that period.<sup>149</sup> Virtually all of the domestic industry's economic indicators were lower in interim 2013 than in interim 2012. Consequently, we find, for purposes of the preliminary phase of these investigations, that there is a reasonable indication that the significant volume of low-priced subject imports had a significant impact on the domestic industry.<sup>150</sup>

We have also considered the role of other factors in our assessment of the impact of the subject imports. As discussed above, nonsubject imports did not have a significant presence in the U.S. market throughout the POI.<sup>151</sup> Accordingly, we do not find the relatively small volume of nonsubject imports to be a cause of the difficulties experienced by the domestic industry.<sup>152</sup>

Respondent parties argue that the domestic industry's condition is caused by factors other than subject imports, including volume and price pressures due to competition between NOES and domestically produced CRML, the decline in demand for NOES in the U.S. market since July 2012, and the limited number of domestic NOES suppliers.<sup>153</sup> There is limited

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<sup>148</sup> CR/PR at Table VI-1. The domestic industry's capital expenditures declined from \$\*\*\* in 2010 to \$\*\*\* in 2012 and were lower in interim 2013 (\$\*\*\*) than in interim 2012 (\$\*\*\*). CR/PR at Table VI-4.

<sup>149</sup> The domestic industry's operating income fell by \*\*\* percent, and its market share fell by \*\*\* percentage points from 2010 to 2012, while apparent U.S. consumption of NOES increased by \*\*\* percent during this period. CR/PR at Table C-1.

<sup>150</sup> Respondents argue that competition between the domestic like product and subject imports is attenuated because certain subject producers provide specialized product or focus on longstanding customer relationships. They thus assert that any difficulties the domestic industry is experiencing cannot be caused by subject imports. *E.g.*, Japanese Respondents' Postconference Brief at 5-23, ThyssenKrupp's Postconference Brief at 3-11, CDW's Postconference Brief at 1-5; Chinese Respondents' Postconference Brief at 5-6; Swedish Respondents' Postconference Brief at 17-24; Taiwanese Respondent's Postconference Brief at 2-3. In any final phase of these investigations we will issue purchasers' questionnaires, the data from which will permit us to evaluate respondents' argument more meaningfully than is possible on the current record.

<sup>151</sup> As discussed earlier, the market share held by nonsubject imports 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.

<sup>152</sup> Based on the record evidence in the preliminary phase of these investigations, Commissioner Pinkert finds that price competitive, nonsubject imports were not a significant factor in the U.S. market for NOES during the period of investigation. CR/PR at Table C-1. Nonsubject imports' share of the U.S. market was \*\*\* percent in 2010, \*\*\* percent in 2011, \*\*\* percent in 2012, \*\*\* percent in interim 2012, and \*\*\* percent in interim 2013. *Id.*

<sup>153</sup> *E.g.*, Japanese Respondents' Postconference Brief at 5-23, ThyssenKrupp's Postconference Brief at 3-11, CDW's Postconference Brief at 1-5; Chinese Respondents' Postconference Brief at 5-6; (Continued...)

information in the record of these preliminary phase investigations to permit us to assess the impact of these alleged other factors. Based on the record before us, 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 to examine those factors and their effect on the domestic industry in any final phase investigations.

For purposes of these preliminary determinations, we conclude that the cumulated subject imports have had a significant adverse impact on the domestic industry.

## **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 NOES from China, Germany, Japan, Korea, Sweden, and Taiwan that are allegedly sold in the United States at less than fair value and allegedly subsidized subject imports of GOES from China, Korea, and Taiwan.

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(...Continued)

Swedish Respondents' Postconference Brief at 17-24; Taiwanese Respondent's Postconference Brief at 2-3.

## 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 AK Steel Corp., West Chester, Ohio, on September 30, 2013, alleging that an industry in the United States is materially injured and threatened with material injury by reason of subsidized imports of nonoriented electrical steel (“NOES”) <sup>1</sup> from China, Korea, and Taiwan and less than-fair-value (“LTFV”) imports from China, Germany, Japan, Korea, Sweden and Taiwan. The following tabulation provides information relating to the background of these investigations.<sup>2 3</sup>

Effective date	Action
September 30, 2013	Petition filed with Commerce and the Commission; institution of Commission investigations (78 FR 62660, October 22, 2013)
November 6, 2013	Commission’s conference
November 14, 2013	Commerce’s notice of initiation of countervailing duty investigations (78 FR 68412, November 14, 2013)
November 18, 2013	Commerce’s notice of initiation of antidumping investigations (78 FR 69041, November 18, 2013)
December 2, 2013	Commission’s vote
December 2, 2013	Commission’s determination
December 9, 2013	Commission’s views

### 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*

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<sup>1</sup> See the section entitled “The Subject Merchandise” in *Part I* of this report for a complete description of the merchandise subject to these investigations.

<sup>2</sup> Pertinent *Federal Register* notices are referenced in app. A, and may be found at the Commission’s website ([www.usitc.gov](http://www.usitc.gov)).

<sup>3</sup> A list of witnesses that appeared at the conference is presented in app. B of this report.

*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 programs, dumping margins, domestic like product, and the domestic industry. *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. firms. *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

NOES is typically used in the production of large and small motors, generators, lighting ballasts, and ignition coils. The Commission received U.S. producer questionnaires from two firms, AK Steel and Nucor, with AK Steel accounting for the vast majority (\*\*\*) percent) of NOES production in the United States in 2012. Leading producers of NOES outside the United States include Baoshan Iron & Steel Co., Ltd. ("Baosteel") and Angang Steel Company Limited ("Angang") of China; ArcelorMittal Eisenhüttenstadt GmbH ("ArcelorMittal Germany"), C.D. Walzholz KG ("CDW"), and ThyssenKrupp Steel Europe AG ("ThyssenKrupp") of Germany; JFE Steel Corporation ("JFE Steel") and Nippon Steel & Sumitomo Metal Corporation ("Nippon Steel") of Japan; Pohang Iron and Steel Company ("POSCO") of Korea; Surahammars Bruks AB ("Surahammars") of Sweden; and China Steel Corporation ("China Steel") of Taiwan. The leading U.S. importers of NOES include: Bao America (China); CDW America and ThyssenKrupp Europe (Germany); Kanematsu (Japan); POSCO America (Korea); Cogent Power (Sweden); and Metallia (Taiwan).

Apparent U.S. consumption of NOES totaled approximately \*\*\* short tons \*\*\* in 2012. U.S. producers' U.S. shipments of NOES 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 76,006 short tons (\$90.7 million) in 2012 and accounted for \*\*\* percent of apparent U.S. consumption by quantity and \*\*\* percent by value. U.S. imports from nonsubject sources totaled 6,242 short tons (\$8.1 million) in 2012 and accounted for \*\*\* percent of apparent U.S. consumption by quantity and \*\*\* percent by value.

## SUMMARY DATA AND DATA SOURCES

A summary of data collected in these investigations is presented in appendix C, table C-1. Except as noted, U.S. industry data are based on questionnaire responses of two firms that accounted for all of the U.S. production of NOES during 2012 and U.S. import data are based on the official Commerce statistics and questionnaire responses from 25 companies, representing 87.4 percent of total subject imports (76.2 percent of imports from China, 108.5 percent of imports from Germany, 71.8 percent of imports from Japan, 99.3 percent of imports from

Korea, 99.2 percent of imports from Sweden, and 90.1 percent of imports from Taiwan) in 2012.<sup>4</sup>

## PREVIOUS AND RELATED INVESTIGATIONS

NOES, as defined in the scope of these investigations, has not been the subject of any prior countervailing or antidumping duty investigations in the United States; however, the Commission has conducted prior investigations on cold-rolled steel products containing up to 2.25 percent silicon.<sup>5</sup>

## NATURE AND EXTENT OF ALLEGED SUBSIDIES AND SALES AT LTFV

### Alleged subsidies

On November 14, 2013, Commerce published a notice in the *Federal Register* of the initiation of its countervailing duty investigation on NOES from China, Korea, and Taiwan. Based on Commerce's review of the petitions, Commerce found that there was sufficient information to initiate a CVD investigation on 30 alleged programs in China, 17 alleged programs in Korea, and 6 alleged programs in Taiwan.<sup>6</sup>

### Alleged sales at LTFV

On November 18, 2013, Commerce published a notice in the *Federal Register* of the initiation of its antidumping duty investigations on NOES from China, Germany, Korea, Japan, Sweden and Taiwan.<sup>7</sup> Commerce has initiated antidumping duty investigations based on estimated dumping margins of 244.54 percent to 407.52 percent for NOES from China, 73.74 percent to 98.84 percent for NOES from Germany, 88.63 percent to 204.79 percent for NOES

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<sup>4</sup> Coverage was calculated based on official Commerce import statistics (subheadings 7225.19.00 7226.19.10, and 7226.19.90 of the Harmonized Tariff Schedule of the United States (HTSUS) compared to the quantity of imports, in short tons, reported in questionnaire data in 2012. Official Commerce statistics may contain products that are excluded by the scope of these investigations —silicon electrical steel containing 0.6 percent or more, but less than 1.25 percent of silicon.

<sup>5</sup> *Certain Cold-Rolled Steel Products from Argentina, Brazil, Japan, Russia, South Africa, and Thailand, Inv. Nos. 701-TA-393 and 731-TA-829-830, 833-834, 836, and 838 (Final)*, USITC Publication 3283, March, 2000. *Certain Cold-Rolled Steel Products from Australia, India, Japan, Sweden, and Thailand, Inv. Nos. 731-TA-965, 971-972, 979, and 981 (Final)*, USITC Publication 3536, September 2002.

<sup>6</sup> *Non-oriented Electrical Steel from The People's Republic of China, the Republic of Korea, and Taiwan: Initiation of Countervailing Duty Investigations*, 78 FR 68412, November 14, 2013.

<sup>7</sup> *Non-oriented Electrical Steel from The People's Republic of China, Germany, Japan, the Republic of Korea, Sweden and Taiwan: Initiation of Antidumping Investigations*, 78 FR 69041, November 18, 2013.

from Japan, 16.00 percent to 68.82 percent for NOES from Korea, 62.17 percent to 126.72 percent for NOES from Sweden, and 52.23 percent to 101.51 percent for NOES from Taiwan.

## THE SUBJECT MERCHANDISE

### Commerce's scope<sup>8</sup>

Commerce has defined the scope of these investigations as follows:<sup>9</sup>

*The merchandise subject to these investigations consists of non-oriented electrical steel (NOES), which includes cold-rolled, flat-rolled, alloy steel products, whether or not in coils, regardless of width, having an actual thickness of 0.20 mm or more, in which the core loss is substantially equal in any direction of magnetization in the plane of the material. The term "substantially equal" in the prior sentence means that the cross grain direction of core loss is no more than 1.5 times the straight grain direction (i.e., the rolling direction) of core loss. NOES has a magnetic permeability that does not exceed 1.65 Tesla when tested at a field of 800 A/m (equivalent to 10 Oersteds) along (i.e., parallel to) the rolling direction of the sheet (i.e., B800 value). NOES contains by weight at least 1.25 percent of silicon but less than 3.5 percent of silicon, not more than 0.08 percent of carbon, and not more than 1.5 percent of aluminum.*

*NOES is subject to these investigations whether it is fully processed (fully annealed to develop final magnetic properties) or semi-processed (finished to final thickness and physical form but not fully annealed to develop final magnetic properties); whether or not it is coated (e.g., with enamel, varnish, natural oxide surface, chemically treated or phosphate surface, or other non-metallic materials). Fully processed NOES is typically made to the requirements of ASTM specification A 677, JIS specification C 2552, and/or IEC specification 60404-8-4. Semi-processed NOES is typically made to the requirements of ASTM specification A 683. However,*

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<sup>8</sup> On November 22, 2013, Petitioner (AK Steel) requested that Commerce revise the scope language to define more precisely the intended scope of the investigations to cover subject imports of NOES and to avoid covering cold-rolled motor lamination electrical steel. *Petition Amendment To Clarify the Proposed Scope Definition*, November 22, 2013.

<sup>9</sup> *Non-oriented Electrical Steel from The People's Republic of China, the Republic of Korea, and Taiwan: Initiation of Countervailing Duty Investigations*, 78 FR 68412, November 14, 2013. *Non-oriented Electrical Steel from The People's Republic of China, Germany, Japan, the Republic of Korea, Sweden and Taiwan: Initiation of Antidumping Investigations*, 78 FR 69041, November 18, 2013.

*the scope of these investigations is not limited to merchandise meeting the specifications noted above.*

*NOES is sometimes referred to as cold-rolled non-oriented electrical steel (CRNO), non-grain oriented (NGO), non-oriented (NO), or cold-rolled non-grain oriented (CRNGO). These terms are interchangeable.*

### **Tariff treatment**

Based upon the scope set forth by the Department of Commerce, information available to the Commission indicates that the products subject to the petitions are classifiable in subheadings 7225.19.00 7226.19.10, and 7226.19.90 of the Harmonized Tariff Schedule of the United States (HTS). Certain products subject to these petitions may also be imported under statistical reporting numbers 7225.50.8085, 7225.99.0090, 7226.92.5000, 7226.92.7050, 7226.92.8050, and 7226.99.0180.<sup>10</sup> Although HTSUS subheadings are provided for convenience and customs purposes, the written description of the scope is dispositive.

### **THE PRODUCT**

The product covered by these investigations, NOES, is a flat-rolled, alloy steel product that is used to manufacture laminations that are assembled in stacks to produce magnetic cores for alternating-current electrical apparatus. NOES has desirable magnetic properties that are similar in all directions (nonoriented), in contrast to grain-oriented electrical steel (GOES), which has superior magnetic properties in the lengthwise direction of the sheet, but less favorable properties in other directions. Thus, NOES is used primarily to produce laminations for which the direction of the magnetic flux in the apparatus is constantly changing, such as for rotating machinery such as motors and generators, whereas GOES is used primarily in static equipment, such as transformers, for which the laminations can be produced in such a way as to take advantage of the favorable directionality of the steel. NOES is also used in small static apparatus, such as small, low voltage transformers and lighting ballasts, if the higher cost of GOES cannot be justified by potential savings in improved energy efficiency.

NOES is sold in either sheet or strip form, either in coils or in straight lengths. Two types of NOES are produced: fully processed NOES, which is final-annealed by the producer; and semi-processed NOES, which, although it is annealed by the producer, must be annealed once again by the consumer after being punched or otherwise formed into laminations in order to achieve its potential magnetic properties.<sup>11</sup> Both domestic and imported NOES are produced in

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<sup>10</sup> For each of these HTS provisions, the general or normal trade relations rate of duty is free.

<sup>11</sup> The processes of flattening, punching or shearing NOES into individual laminations introduces strains within the steel that are harmful to magnetic properties. Annealing of the laminations removes the strains and achieves the potential magnetic properties.

compliance with specifications issued by ASTM International (“ASTM”),<sup>12</sup> or proprietary or international specifications.<sup>13</sup>

As defined by the scope, NOES is produced of steel that is alloyed with 1.25 percent or more of silicon, with aluminum usually added in lesser amounts. Both silicon and aluminum increase the electrical resistivity of steel, resulting in lower loss of energy in finished motors or apparatus produced using NOES.

### **Manufacturing processes<sup>14</sup>**

The production of NOES begins with the melting of steel in either an electric-arc furnace or a basic oxygen furnace.<sup>15</sup> Molten steel is transferred in a ladle where other procedures such as argon-oxygen refining, ladle metallurgy treatment, and vacuum degassing may be employed. These steps refine the chemistry of the steel by reducing undesirable contaminants. Alloys including silicon and aluminum are added. The steel is then continuously cast into slabs, which are rolled on a continuous hot strip mill to produce hot-rolled coils. All subsequent processing is done on continuous processing lines for which the coils are uncoiled, passed through the processing lines and recoiled after processing. The first step of coil processing is annealing and cleaning. Next, coils are rolled to ordered thickness on a cold-rolling mill.<sup>16</sup> Next, coils are annealed for the final time on a continuous annealing line using a controlled, decarburizing atmosphere and provided with a tightly adherent surface oxide that serves to prevent laminations from sticking to one another and to increase electrical resistance between laminations. Fully processed NOES is usually provided with an applied coating, called “coreplate,” to further increase electrical resistance between laminations. Finally, coils may be slit to ordered width.

According to petitioner, subject foreign producers in China, Germany, Japan, Korea, Sweden, and Taiwan generally use similar processes to produce NOES.<sup>17</sup> AK Steel, the petitioner, uses the same melting, casting, and hot rolling equipment that is used to produce NOES to produce other products, including stainless steel, grain-oriented electrical steel and carbon steel. AK Steel’s coil processing equipment for NOES is separate from its facilities for other products and is used exclusively for NOES.<sup>18</sup>

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<sup>12</sup> Specification ASTM A 677 covers fully processed types of NOES and ASTM A 683 covers semiprocessed types. Both specify properties for NOES of the commonly produced thicknesses of 0.0185 inches and 0.025 inches. A 677 also specifies properties for 0.014 inch thick material.

<sup>13</sup> International standards are very similar to ASTM standards. Conference transcript, p. 71 (Schoen).

<sup>14</sup> The description of the manufacturing process for NOES is based on testimony at the Staff Conference. Conference transcript, pp. 21-22 (Petersen).

<sup>15</sup> Petitioner AK Steel produces NOES in an electric-arc furnace, whereas some of the producers in subject countries use basic oxygen furnaces.

<sup>16</sup> In some cases, to produce very thin product, coils may be cold rolled to an intermediate thickness, annealed and cold-rolled to the ordered thickness.

<sup>17</sup> Conference transcript, p. 22. (Petersen)

<sup>18</sup> Conference transcript, p. 18. (Petersen).

\*\*\*.<sup>19</sup> NOES is not normally temper rolled.

### Description of CRML

Cold-rolled magnetic lamination quality steel (“CRML”) is a steel sheet product that, like NOES, is used to produce laminations for electrical apparatus.<sup>20</sup> Like NOES, CRML is non-oriented, that is, it has similar magnetic properties in all directions. CRML was developed as an improved quality of cold-rolled steel to offer a lower-cost alternative to NOES for magnetic laminations. The market for CRML is much larger than that for NOES.<sup>21</sup> CRML is produced by producers of cold-rolled steel sheet, using the same equipment used to produce that product.

NOES and CRML both are produced from steel containing significant amounts of silicon, which increases the electrical resistivity of the steel and results in lower energy losses in magnetic laminations. NOES contains over 1.25 percent silicon and generally about 2 percent silicon, depending upon grade. CRML containing less than 1.25 percent silicon is excluded from the scope of these investigations. The magnetic properties of CRML are developed as a result of heavy temper mill extension rolling at the producing mill followed by decarburizing anneal of the stamped laminations by the customer. NOES, in contrast, is not temper rolled after its final annealing process at the mill. Laminations produced of CRML, like those produced of semi-processed NOES, are annealed by the customer in order to develop their potential magnetic properties. Fully processed NOES is usually coated with an insulating coating at the producing mill after annealing, and laminations are used as stamped, not annealed after stamping.

CRML is produced from steel that has been refined to a low carbon content, through vacuum or other processing, followed by continuous casting, hot rolling, pickling, cold rolling, annealing, and temper rolling.<sup>22</sup> The annealing step is commonly performed on coils in batch annealing furnaces rather than by uncoiling the strip and passing it through a continuous furnace as is done for NOES, although continuous annealing may be used by some producers. For temper rolling after annealing, high extensions are used (in comparison to relatively low extensions used for conventional cold-rolled steel sheet.)<sup>23</sup>

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<sup>19</sup> Staff phone notes with \*\*\*, November 14, 2013.

<sup>20</sup> CRML was earlier named “cold-rolled motor lamination sheet”, but was renamed by ASTM as “cold-rolled magnetic lamination quality steel”, to reflect more general applications. The acronym “CRML” is used generally to refer to either motor lamination sheet or magnetic lamination sheet and there is no intended distinction between the two. U.S. Steel “Facts and Figures, U.S. Steel Cold Rolled Magnetic Lamination Quality Steel”, p. 9.

<sup>21</sup> According to Japanese respondents, CRML consumption is orders of magnitude over NOES consumption. Japanese respondents’ postconference brief, p. 9. According to estimates by \*\*\*. Japanese respondents’ postconference brief, Exhibit 5, p. 6.

<sup>22</sup> ASTM A 726 Paragraph 5.2. See also, U.S. Steel “Facts and Figures, U.S. Steel Cold Rolled Magnetic Lamination Quality Steel”, p. 9.

<sup>23</sup> ASTM A 726 Paragraph 5.2.1. “Special emphasis may be placed on high extensions (2 to 10 %) during the temper roll after annealing.” See also, Japanese respondents’ Exhibit 5, \*\*\* See also, U.S.

(continued...)

## DOMESTIC LIKE PRODUCT ISSUES

The Commission's decision regarding the appropriate domestic product(s) 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 these factors is discussed below.

The petitioner argues that the domestic like product should be defined as co-extensive with the scope of the investigations and that the domestic like product include all NOES in the proposed scope of the investigations.<sup>24</sup> Respondents China Steel and Baosteel argue that the domestic like product in these investigations should include both NOES and CRML.<sup>25</sup>

### Physical Characteristics and Uses

Petitioner argues that NOES and CRML have different chemistries, noting that the scope of the investigations defines semiprocessed and fully processed NOES to have a minimum silicon content of 1.25 percent, while the ASTM specification for fully processed CRML limits the silicon content to a maximum of 1 percent and the ASTM specification for semiprocessed CRML does not indicate either a minimum or maximum silicon content. Petitioner also contends that because silicon is the primary driver of the magnetic properties of iron silicon alloy steel, NOES achieves superior magnetic properties and has far lower core losses than CRML.<sup>26</sup>

China Steel maintains that while NOES achieves its magnetic properties primarily by means of higher silicon content, CRML is able to achieve similar properties by means of normal cold-rolling with revised chemistry followed by final annealing by the customer.<sup>27</sup> According to testimony at the staff conference, post-annealing, CRML can provide equivalent maximum core loss values to NOES for each of the eight pricing products specified by the Commission.<sup>28</sup>

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*(...continued)*

Steel "Facts and Figures, U.S. Steel Cold Rolled Magnetic Lamination Quality Steel", p. 10, "CR lamination steel is produced with temper mill extensions of as much as ten times the extensions applied to regular cold rolled sheet."

<sup>24</sup> Petitioner's postconference brief, p. 3. Petitioner also argues that there is a clear dividing line between NOES and grain-oriented electrical steel ("GOES"). Petitioner's postconference brief, pp. 6-7. However, no parties have argued that the domestic like product should include GOES. For the purposes of these preliminary investigations, Japanese respondents agree to accept the like product definition proposed by the Petitioner, but argue that the Commission will need to examine domestic like product issues concerning the competitive relationship between NOES and CRML in any final phase of these investigations. Japanese respondents' postconference brief, p.2.

<sup>25</sup> China Steel's postconference brief, p. 3. Baoshan's postconference brief, p. 1.

<sup>26</sup> Maximum core loss is a measure of the amount of current that is wasted, as heat, when the electrical current passes through the steel. Petitioner's postconference brief, pp. 7-8.

<sup>27</sup> China Steel's postconference brief, p. 5.

<sup>28</sup> Conference transcript, pp. 94-95 (Weinstein).

Baosteel argues that NOES and CRML are both cold rolled steel products that in previous cases have been considered part of the same like product.<sup>29</sup>

Petitioner maintains that because there are different modes of production for NOES and CRML, each have substantially different surfaces.<sup>30</sup> With regard to testing protocols, Petitioner argues that ASTM requires that NOES be much more extensively tested and certified than CRML, which results in a significantly higher cost-of-compliance and quality assurance.<sup>31</sup>

### **Interchangeability**

Petitioner contends that because CRML is less efficient than NOES, CRML could only serve as a substitute for NOES in low voltage, low efficiency motors where high efficiency is not required.<sup>32</sup> Respondents China Steel and Baosteel argue that CRML is interchangeable with NOES for a broad range of applications.<sup>33</sup>

### **Channels of distribution**

Petitioner contends that because of their different physical characteristics and prices, CRML and NOES are generally sold in distinct market segments. Petitioner argues that substantially all of AK Steel's NOES production and virtually all, if not all, of the subject imports are fully processed NOES. In contrast, petitioner submits that CRML is typically not sold fully processed.<sup>34</sup> China Steel and Baosteel contend that both NOES and CRML are sold through similar channels of distribution—by steel manufacturers to end users and, in some cases, to distributors.<sup>35</sup>

### **Customer and producer perceptions**

Petitioner argues that because of their different physical characteristics, uses, and production processes, producers and customers perceive NOES and CRML as distinct

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<sup>29</sup> Baoshan's postconference brief, p. 1.

<sup>30</sup> Petitioner notes that all NOES, whether fully processed or semiprocessed, has a smooth surface finish and a thin, tightly adherent surface oxide which has sufficient insulating abilities and that NOES is commonly applied with an additional coating for higher levels of insulating ability. Petitioner notes that ASTM for CRML dictates a roughened surface texture achieved by rolling on mills that have been roughened by mechanical, chemical, or electrical means and adds that that CRML does not have either a natural or applied insulation coatings. Petitioner's postconference brief, p. 8.

<sup>31</sup> Petitioner's postconference brief, p. 9.

<sup>32</sup> Petitioner's postconference brief, p. 10.

<sup>33</sup> China Steel's postconference brief, p. 5. Baoshan's postconference brief, p. 2.

<sup>34</sup> Petitioner argues that CRML's semiprocessed sheet cannot be substituted for fully processed NOES. Petitioner's postconference brief, p. 10.

<sup>35</sup> China Steel's postconference brief, p. 6. Baoshan's postconference brief, p. 2.

products.<sup>36</sup> Respondents China Steel and Baosteel contend that customer and producer perceptions of CRML and NOES are similar.<sup>37</sup>

### **Common manufacturing facilities and production employees**

Petitioner argues that NOES and CRML are produced in different facilities with distinct production processes and equipment, maintaining that CRML is produced using traditional routing for carbon steel, with a batch annealing process, while NOES is produced using a continuous annealing process.<sup>38</sup> Petitioner also contends that the finishing steps in the production process for NOES and CRML differ as well. For NOES, the final step consists of continuous annealing in a controlled atmosphere and the application of an applied insulation coating, while for CRML, the final step is to cold reduce and flatten the steel and not to advance its magnetic properties resulting in an uncoated rough surface texture unlike the smooth coated surface of NOES.<sup>39</sup>

China Steel argues that there is nothing on the record to suggest that semiprocessed NOES and CRML could not be produced on the same production equipment and that the only significant difference would appear to be the silicon content of each.<sup>40</sup> Baosteel argues that while there are unique qualities in the production of NOES, both NOES and CRML are cold rolled products.<sup>41</sup>

### **Price**

Petitioner argues that there are significant differences in price between NOES and CRML because the production process for NOES is more complex and expensive than the production process for CRML and the magnetic and physical properties of NOES are superior to those of CRML. Petitioner contends that prices of NOES tend to be at least 50 percent higher than prices for CRML.<sup>42</sup> China Steel argues that, when compared at the point of sale, CRML is considerably lower priced than fully processed NOES and that, even after factoring in the additional costs of annealing, CRML can be an attractive, lower-price alternative to both fully processed and semiprocessed NOES for those applications that do not require an insulation coating.<sup>43</sup> Baosteel adds that price drives the overlap in competition between NOES and CRML.<sup>44</sup>

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<sup>36</sup> Petitioner's postconference brief, pp. 10-11.

<sup>37</sup> China Steel's postconference brief, p. 6.

<sup>38</sup> AK Steel does not produce CRML. ArcelorMittal, Nucor, and U.S. Steel all produce CRML, but only Nucor produces both CRML and the NOES as defined in the scope of these investigations.

<sup>39</sup> ASTM specifications reflect different production processes for NOES and CRML. Petitioner's postconference brief, pp. 11-12.

<sup>40</sup> China Steel's postconference brief, p. 7.

<sup>41</sup> Baoshan's postconference brief, p. 2.

<sup>42</sup> Petitioner's postconference brief, p. 12.

<sup>43</sup> China Steel's postconference brief, p. 7.

<sup>44</sup> Baoshan's postconference brief, p. 2.

## DOMESTIC INDUSTRY

Petitioner argues that AK Steel comprises the entirety of the domestic industry, because it is the only U.S. producer of NOES.<sup>45</sup> China Steel argues that the domestic like product in these investigations should include both CRML and NOES; therefore, it argues that the domestic industry should include not only AK Steel, but also domestic producers of CRML, including U.S. Steel, ArcelorMittal, and Nucor.<sup>46</sup>

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<sup>45</sup> Petitioner's postconference brief, p. 14. Subsequent to the filing of the postconference briefs, Nucor provide a questionnaire response indicated that it produces NOES. AK Steel's production of NOES accounted for \*\*\* percent of total U.S. production in 2012.

<sup>46</sup> China Steel's postconference brief, p. 3.

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

### **U.S. MARKET CHARACTERISTICS**

NOES is primarily used to make electric motors and generators, and is likely a substantial cost of those products. Parties differ over to what extent NOES competes with grain-oriented electrical steel (GOES) and cold-rolled motor lamination (CRML), with petitioners describing little overlap and respondents describing substantial overlap. Petitioners describe NOES demand as generally following wider economic trends. On the other hand, respondents stated that NOES demand has been hurt by competition with CRML, even as many importers also described new, higher-grade requirements for NOES in some downstream products.

### **U.S. MARKET SEGMENTS**

As discussed in *Part I*, NOES can be sold in fully processed or semiprocessed form, depending on whether the purchaser performs the final annealing (of semiprocessed NOES) or the producer does (of fully processed NOES). Currently, all imports of NOES are fully processed; however, petitioner stated that if duties were placed only on fully processed NOES, importers could evade the duties with imports of semiprocessed NOES.<sup>1</sup> Petitioner stated that semiprocessed NOES accounts for approximately \*\*\* percent of its sales of NOES, and added that prices for semiprocessed NOES follow the same trends as for fully processed NOES, at approximately \*\*\* percent the price level.<sup>2</sup>

### **CHANNELS OF DISTRIBUTION**

As discussed in *Part I*, before being incorporated into a motor or transformer, NOES is stamped into laminations and assembled into cores. AK Steel does not have laminating and stamping capability, so either the end user performs this function, or AK Steel sells NOES to a laminator/stamper, which in turn sells to an ultimate end user. AK Steel estimated that approximately 20 percent of its shipments are to laminators and stampers.<sup>3</sup> AK Steel also described NOES distributors as serving the portion of the market that wants quick delivery without holding their own inventory.<sup>4</sup>

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<sup>1</sup> Conference transcript, pp. 22-23 (Petersen).

<sup>2</sup> Petitioner's postconference brief, response to staff questions, pp. 6-7.

<sup>3</sup> Conference transcript, p. 53 (Pfeiffer).

<sup>4</sup> Conference transcript, p. 63 (Konstantinidis).

U.S. producers and importers<sup>5</sup> of \*\*\* NOES sold \*\*\* while importers of \*\*\* NOES sold mainly to end users, and importers of \*\*\* NOES sold mainly to distributors, as shown in table II-1.<sup>6</sup>

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

\* \* \* \* \*

### Geographic distribution

U.S. producer \*\*\* reported selling NOES to most regions in the United States while \*\*\* reported selling \*\*\* (table II-2). Importers reported selling to most U.S. regions, but not as often to the western United States as to the eastern United States. At the conference, German and Swedish respondents described their NOES as focused on a few specific customers in specific regions, and not present in all U.S. geographic regions.<sup>7</sup>

For U.S. producer AK Steel, \*\*\* percent of sales were within 100 miles of their production facility, \*\*\* percent were between 101 and 1,000 miles, and \*\*\* percent were over 1,000 miles. For U.S. producer Nucor, \*\*\* percent were between 101 and 1,000 miles, and \*\*\* percent were over 1,000 miles. Weighting importers' responses by their shipments, importers sold 39.1 percent of their NOES within 100 miles of their U.S. point of shipment, 48.6 percent between 101 and 1,000 miles, and 12.3 percent over 1,000 miles. Importers showed some variation in response by country. The majority of \*\*\* material was shipped less than 100 miles; the majority of \*\*\* material was shipped between 100 and 1,000 miles; and the majority of \*\*\* material was shipped over 1,000 miles.

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

\* \* \* \* \*

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<sup>5</sup> \*\*\*.

<sup>6</sup> \*\*\*.

<sup>7</sup> Conference transcript p. 102 (LaFrankie), p. 106 (McPhie), and p. 115 (Kaufman). See also Walzholz' and CDW's postconference brief, pp. 4-5, and ThyssenKrupp's postconference brief, p. 11.

## SUPPLY AND DEMAND CONSIDERATIONS

### U.S. supply

#### **Domestic production**

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

#### ***Industry capacity***

Petitioner described itself as able to produce NOES in all sizes and grades.<sup>8</sup> Domestic capacity \*\*\* from 2010 to 2012, as capacity utilization was always \*\*\* or less. This relatively low level of capacity utilization suggests that U.S. producers may have substantial capacity to increase production of NOES in response to an increase in prices.

#### ***Alternative markets***

U.S. producers' exports as a percentage of total shipments were approximately \*\*\* percent in 2010, but decreased to under \*\*\* percent in 2012 as U.S. producers' export shipments declined. These levels indicate that U.S. producers may have a some ability to shift shipments between the U.S. market and other markets in response to price changes.

#### ***Inventory levels***

U.S. producers' inventories as a percent of shipments ranged from approximately \*\*\* to \*\*\* percent over 2010-12, but had risen to nearly \*\*\* percent in January-June 2013. These inventory levels suggest that U.S. producers may have some ability to respond to changes in demand with changes in the quantity shipped from inventories.

#### ***Production alternatives***

U.S. producer \*\*\* stated that it could switch production from NOES to \*\*\* while \*\*\* stated that it could switch production from NOES to \*\*\*.

#### ***Supply constraints***

One importer stated that purchasers need imported NOES in the U.S. market in case of supply issues with the U.S. producer of NOES, and another stated that AK Steel had placed

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<sup>8</sup> Conference transcript, p. 24 (Pfeiffer).

purchasers on allocation several times over the last ten years.<sup>9</sup> \*\*\* stated that it had not had any difficulty supplying NOES since January 1, 2010. It added that \*\*\*.<sup>10</sup> \*\*\* indicated that it had experienced difficulty supplying NOES, \*\*\*.<sup>11</sup>

### **Subject imports from China**

Based on available information, producers of NOES from China have the ability to respond to changes in demand with moderate-to-large changes in the quantity of shipments of NOES to the U.S. market. Responsiveness of supply for Chinese producers of NOES is constrained by high levels of reported capacity utilization. However, the volume of Chinese producers' shipments of NOES to third-country markets was larger than total U.S. NOES consumption in 2012.

### ***Industry capacity***

Petitioner described Chinese producers as having substantial and large excess capacity, and as adding more capacity, including for high-grade NOES.<sup>12</sup> Chinese producers reported unchanged capacity over 2010-12, with capacity utilization ranging from approximately \*\*\* to \*\*\* percent.

### ***Alternative markets***

Chinese producers shipped \*\*\* percent or more of their NOES to their home market, but exports to non-U.S. markets were larger than U.S. consumption of NOES in 2012.

### ***Inventory levels***

Chinese producers' inventories ranged from approximately \*\*\* to \*\*\* percent of their shipments over 2010 to 2012.

### ***Production alternatives***

Chinese producers \*\*\*.

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<sup>9</sup> Conference transcript, p. 92 (Azeyanagi) and p. 97-99 (Weinstein).

<sup>10</sup> \*\*\*.

<sup>11</sup> See \*\*\*.

<sup>12</sup> Conference transcript, p. 43 (Jones), and petitioner's postconference brief, p. 38.

### ***Supply constraints***

\*\*\* stated that it had to decline or reduce customer orders since 2010 due to supply allocations and the availability of capacity for high-grade NOES. No other importers of Chinese NOES reported difficulties in supplying NOES.

### ***Subject imports from Germany***

Based on available information, producers of NOES from Germany have the ability to respond to changes in demand with moderate-to-large changes in the quantity of shipments of NOES to the U.S. market. Responsiveness of supply for German producers of NOES is constrained by high levels of reported capacity utilization. However, the volume of German producers' shipments of NOES to third-country markets was over \*\*\* percent of total U.S. NOES consumption in 2012.

### ***Industry capacity***

German producers stated that the uncoated and other NOES that they sell in the United States are not produced by U.S. NOES producers.<sup>13</sup> German producers reported capacity that ranged from over \*\*\* thousand tons to over \*\*\* thousand tons over 2010-12. They also reported capacity utilization levels of at least \*\*\* percent over the same period.

### ***Alternative markets***

German producer ThyssenKrupp stated that it had been exporting NOES to the United States for a specific customer that stopped U.S. production of its downstream product using NOES in 2012. It indicated that it has since reduced its U.S. exports and has no plans to divert them to other U.S. purchasers.<sup>14</sup> Nearly \*\*\* percent of German producers' shipments in 2012 were to their home market. However, German producers exported approximately \*\*\* percent of their total shipments to third-country markets over 2010 to 2012. Such exports were over \*\*\* thousand tons in 2012, down from levels in 2010 and 2011.

### ***Inventory levels***

German producers' inventory levels were approximately \*\*\* percent of shipments over 2010 to 2012.

### ***Production alternatives***

German producer \*\*\* stated that it could produce \*\*\* on the same equipment it uses to produce NOES.

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<sup>13</sup> Conference transcript, pp. 102 (LaFrankie) and 106 (McPhie).

<sup>14</sup> Conference transcript, p. 103 (LaFrankie).

### ***Supply constraints***

No importers of German NOES reported difficulties in supplying NOES.

### **Subject imports from Japan**

Based on available information, producers of NOES from Japan have the ability to respond to changes in demand with large changes in the quantity of shipments of NOES to the U.S. market. The main contributing factors to the large degree of responsiveness of supply are the availability of unused capacity, the demonstrated ability to increase capacity, and the existence of large alternate markets.

### ***Industry capacity***

Japanese producers' reported capacity rose from over \*\*\* thousand tons in 2010 to over \*\*\* thousand tons in 2012. During the same period, capacity utilization dropped from over \*\*\* percent to under \*\*\* percent.

### ***Alternative markets***

At the conference, JFE described itself as focused on the Asian, and specifically Chinese, markets for NOES.<sup>15</sup> Exports to non-U.S. markets were over \*\*\* thousand tons in 2012 and almost \*\*\* thousand tons in 2011.

### ***Inventory levels***

Inventory levels were over \*\*\* percent of shipments in 2010 and 2011, and then declined to under \*\*\* percent in 2012.

### ***Production alternatives***

\*\*\* stated that \*\*\* could produce \*\*\* on the same product lines on which they produced NOES.

### ***Supply constraints***

No importers of Japanese NOES reported difficulties in supplying NOES.

### **Subject imports from Korea**

Based on available information, the Korean NOES producer has the ability to respond to changes in demand with moderate-to-large changes in the quantity of shipments of NOES to the U.S. market. Responsiveness of supply for the Korean producer of NOES is constrained by

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<sup>15</sup> Conference transcript, p. 159 (Azeyanagi).

\*\*\*. However, the volume of the Korean producer's \*\*\*, and represented a large share of Korean producers' total shipments.

### ***Industry capacity***

At the conference, petitioner described Korean producers as upgrading their NOES production facilities with the encouragement of the Korean government.<sup>16</sup> The Korean producer reported that its capacity was \*\*\* at over \*\*\* thousand tons, with capacity utilization at over \*\*\* percent in January-June 2013, but otherwise always over \*\*\* percent over 2010-12.

### ***Alternative markets***

Exports to non-U.S. markets were never less than \*\*\* thousand tons over 2010-12, and represented almost \*\*\* percent or more of the Korean producer's shipments over the same period.

### ***Inventory levels***

Inventories were \*\*\* percent of shipments or less over 2010-12.

### ***Production alternatives***

\*\*\*.

### ***Supply constraints***

\*\*\* stated that it had experienced some difficulty in making timely shipments since 2010. No other importers of Korean NOES reported difficulties in supplying NOES.

### ***Subject imports from Sweden***

Based on available information, producers of NOES from Sweden have the ability to respond to changes in demand with large changes in the quantity of shipments of NOES to the U.S. market. The main contributing factors to this degree of responsiveness of supply are \*\*\*.

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<sup>16</sup> Conference transcript, p. 44 (Jones).

### ***Industry capacity***

Swedish capacity was \*\*\* over 2010-2012 and fell in January-June 2013 from January-June 2012. Capacity utilization, however, fell from almost \*\*\* percent in 2011 to under \*\*\* percent in 2012.

### ***Alternative markets***

At the conference, Cogent Power described U.S. imports from Sweden as almost the same for 20 years, and concluded that those exports did not indicate that Swedish NOES production was export-oriented in a way that would lead to greater exports to the United States.<sup>17</sup> Exports to non-U.S. markets were a little over \*\*\* thousand tons in 2012, representing over \*\*\* of Swedish producers' shipments.

### ***Inventory levels***

Inventories rose from under \*\*\* percent of shipments in 2010 to over \*\*\* percent in 2012.

### ***Production alternatives***

\*\*\* stated that it could produce \*\*\* on the same equipment it uses to produce NOES.

### ***Supply constraints***

No importers of Swedish NOES reported difficulties in supplying NOES.

### ***Subject imports from Taiwan***

Based on available information, producers of NOES from Taiwan have the ability to respond to changes in demand with moderate-to-large changes in the quantity of shipments of NOES to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the \*\*\* and the existence of alternate markets.

### ***Industry capacity***

At the conference, petitioner described Taiwan producer China Steel as having begun capacity expansions at its NOES production facility.<sup>18</sup> \*\*\* reported \*\*\* capacity over 2010 to 2012, \*\*\*. \*\*\* also reported capacity utilization that ranged between \*\*\* and \*\*\* percent over 2010-12.

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<sup>17</sup> Conference transcript, pp. 158-59 (Harper).

<sup>18</sup> Conference transcript, p. 46 (Jones).

### ***Alternative markets***

\*\*\* exports to third-country markets were nearly \*\*\* thousand tons in 2012, nearly \*\*\* of its shipments.

### ***Inventory levels***

Inventories as a percent of shipments ranged between approximately \*\*\* and \*\*\* percent over 2010-12

### ***Production alternatives***

\*\*\*.

### ***Supply constraints***

No importers of Taiwan NOES reported difficulties in supplying NOES.

### ***Nonsubject imports***

Imports of NOES from nonsubject countries were less than \*\*\* percent of U.S. NOES consumption over 2010-12. The largest sources of nonsubject imports during 2010-12 were France and Australia. See *Part VII* for more information on nonsubject imports.

### ***Factors Affecting Supply***

Most producers and importers had not observed any changes in the product range, mix, or marketing of NOES since January 1, 2010, although a few reported producing higher grade NOES in response to demand. \*\*\* and 20 importers indicated that there had not been any changes. \*\*\* stated that there had been changes, citing thinner gauge requirements and worldwide overcapacity. Five importers also described changes in product range, citing supplier responses to increased demand for electric vehicle motors and higher-grade NOES requirements at end users, elaborating that higher-grade meant thinner gauges and/or higher silicon content.

Petitioners noted that in July 2013, Brazil imposed antidumping duties on NOES from China, Korea, and Taiwan. They stated that Brazil's imports of NOES from those countries before the duties were higher than all U.S. NOES imports.<sup>19</sup> Importer Metallia stated that some Brazilian purchasers now cannot find alternative sources of NOES and are continuing to purchase NOES from those countries.<sup>20</sup> Petitioner also described several large NOES production facilities being built by foreign-owned NOES producers in India and Vietnam, and forecast that

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<sup>19</sup> Conference transcript, p. 11 (Dorn).

<sup>20</sup> Conference transcript, p. 126 (Weinstein).

production from these facilities would place competitive pressure on existing subject-country producers.<sup>21</sup>

### **U.S. demand**

Based on available information, the overall demand for NOES is likely to experience moderate changes in response to changes in price. NOES likely represents a somewhat to very substantial cost share of downstream products, but there are substitute products, though their range may be limited.

### **End uses**

U.S. demand for NOES depends on the demand for U.S.-produced downstream products. U.S. producers reported end uses as electric motors, low-voltage transformers,<sup>22</sup> and generators, but did not know the share of the costs of the final products accounted for by NOES. Importers reported the same end uses, as well as reporting slit coils of NOES as an end use. Many importers also did not know the share of the costs of the final products accounted for by NOES, but others estimated 20-84 percent of the costs of a motor, 80 percent of the cost of a transformer, and 20 percent of the cost of a generator. In response to lost sales and lost revenue allegations (see *Part V*), several NOES purchasers stated that increased NOES costs could make their products uncompetitive, implying that NOES' costs are an important portion of their overall costs.

### **Business cycles**

Most producers and importers did not report distinctive business cycles nor changing business cycles for NOES. Those that did see distinctive cycles often described increased demand for higher grade NOES or purchasers moving their production offshore.

\*\*\* and 18 of 24 importers indicated that the NOES market was not subject to any distinct business cycles or conditions of competition. However, \*\*\* stated that demand is seasonal, lower in the winter and higher in the spring and the summer. Six importers also described distinct business cycles or conditions of competition in the NOES market. Among those six importers, \*\*\* cited competition based on quality factors such as core loss. \*\*\* described increased capacity in China. \*\*\* indicated that its customers that participate in the agricultural market have seasonal demand, and that demand from the energy segment is influenced by the prices of natural gas and coal. \*\*\* characterized U.S. NOES customers as

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<sup>21</sup> Conference transcript, p. 47 (Jones), and petitioner's postconference brief, pp. 45-46.

<sup>22</sup> Petitioner stated that new Department of Energy efficiency requirements for small transformers will go into effect in January 2016, and that these requirements will effectively eliminate NOES from that demand segment. Petitioner described this segment as not a "major part" of its business. Conference transcript, pp. 26 and 51 (Pfeiffer).

“pushing the envelope” for increased efficiency more than customers in Europe and Asia, resulting in U.S. demand being particularly strong for higher-grade NOES.

\*\*\* and 15 importers indicated that there had not been any changes in the business cycles or conditions of competition for NOES since January 1, 2010. Five importers indicated that there had been changes, describing “aggressive pricing” of product from Asia; increased competition on quality, such as lower core loss; increased U.S. electric vehicle production; and decreased demand from purchasers offshoring production due to the high U.S. cost of NOES.

### Apparent consumption

Apparent U.S. consumption of NOES increased over \*\*\* percent from 2010 to 2011, then fell almost \*\*\* percent from 2011 to 2012, and was more than \*\*\* percent lower in January-June 2013 than January-June 2012.

### Demand trends

U.S. producers described \*\*\* U.S. demand for NOES since 2010, while importers were split on whether U.S. demand was increasing or fluctuating (table II-3). Petitioner described NOES demand as following general U.S. economic growth as well as trends in certain specific end use markets such as large motors for mining equipment and locomotives.<sup>23</sup>

**Table II-3**

**NOES: Firms’ responses regarding U.S. demand, by number of responding firms**

\* \* \* \* \*

U.S. producer \*\*\* indicated that U.S. demand had decreased since January 1, 2010 due to lower demand from the mining, locomotive, and industrial segments. It attributed lower demand from those segments to macroeconomic conditions. U.S. producer \*\*\* stated that NOES demand had fluctuated with no clear trend. At the conference, AK Steel placed emphasis on lower demand from the mining segment (in which NOES is used in motors in mining equipment) as a driver for lower NOES demand, and forecast no improvement in this area.<sup>24</sup> In its postconference brief, petitioner \*\*\*.<sup>25</sup>

Among importers, those describing increased U.S. demand attributed the increase to recovery from the recession in 2009 and to new production of electric vehicles. Chinese producer Baosteel indicated that it anticipates higher U.S. demand for NOES, especially for lower core loss, thinner gauge NOES.<sup>26</sup> Those describing decreased demand attributed the decrease to weakness in the broader economy. At the staff conference, Metallia also described

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<sup>23</sup> Petitioner’s postconference brief, responses to staff questions, p. 6.

<sup>24</sup> Conference transcript, p. 42 (Jones).

<sup>25</sup> Petitioner’s postconference brief, responses to questions, pp. 6-7, and staff interview with \*\*\*.

<sup>26</sup> CISA’s postconference brief, exhibit 1.

a U.S. producer exiting the U.S. industry in 2004, in part because downstream customers were moving production to Asia and Mexico.<sup>27</sup> Similarly, China Steel named \*\*\* as downstream producers that had exited the U.S. market and opened plants in China and/or Mexico. It continued that, with copper and aluminum prices the same globally, many NOES users compete based on the cost of steel.<sup>28</sup> CDW stated that lower natural gas prices had led to reduced demand from the non-gas electrical energy applications in which NOES is used, as well as making it more cost effective to anneal CRML.<sup>29</sup> (See *Part V* for more information on natural gas prices).

\*\*\* indicated that foreign demand had been decreasing since 2010 due to decreased demand from Europe and China. \*\*\* added that demand in Asian countries had diminished as infrastructure projects were finished. However, a plurality of importers described foreign demand for NOES as increasing, citing the electrification of developing economies, steady growth in demand from Asia, new production of electric vehicles, and recovery from the recent economic downturn. At the conference, Metallia noted that an important element of global demand for NOES is compressors for refrigerators, and as refrigerator use has expanded in the developing world, so has the use of NOES.<sup>30</sup>

### **Substitute products**

Substitutes for NOES are likely limited, depending on how substitutable NOES and CRML are. \*\*\* and 17 importers reported that there were no substitutes. Six importers did name substitutes. Three named CRML as a substitute in laminations, transformers, and motors, with \*\*\* noting that CRML could substitute for semiprocessed NOES but not fully processed NOES. Two named GOES and one named thin-gauge NOES as a substitute in motors and transformers. \*\*\* described CRML as a substitute for NOES at up to the highest NOES grades, and stated that some of its purchasers had told it that they switch from NOES to CRML if NOES prices rise. \*\*\* continued that for some high-grade NOES applications, GOES may be a substitute.

Three of the importers that named substitutes stated that changes in the price of substitutes had not affected the price of NOES. \*\*\* noted that thin-gauge NOES (of less than 0.2 mm) is used for enhanced machine performance, and is much more expensive than NOES. However, two importers that named GOES as a substitute, and one that named CRML as a substitute, stated that changes in substitute prices had affected NOES prices. Among these, \*\*\* elaborated that, as GOES prices increased, some GOES users switch to NOES.

In the conference and in their briefs, parties presented different views of how much CRML can substitute for NOES. Petitioner described NOES and CRML as made using different production methods, having different surfaces, and used in different applications. Metallia described CRML as a lower-cost substitute for many grades of NOES.<sup>31</sup> While it was reluctant to

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<sup>27</sup> Conference transcript, p. 97 (Weinstein).

<sup>28</sup> China Steel's Postconference brief, p. 2.

<sup>29</sup> Conference transcript, p. 105 (McPhie).

<sup>30</sup> Conference transcript, p. 135 (Weinstein).

<sup>31</sup> Conference transcript, pp. 95-97 (Weinstein).

make an exact estimate due to lack of documentation, it stated that CRML could have taken between 15 and 30 percent of the U.S. market for NOES.<sup>32</sup> China Steel indicated that CRML began competing with NOES approximately 15 years ago, and the competition has “accelerated” more recently.<sup>33</sup> See *Part I* for more on NOES and CRML.

## **SUBSTITUTABILITY ISSUES**

The degree of substitution between domestic and imported NOES depends upon such factors as relative prices, quality, and conditions of sale. Producers and importers disagreed on how interchangeable U.S. and subject NOES are. Some importers listed particular subject imports that they stated were available in limited quantities from U.S. producers, but a small majority of responding importers usually indicated that U.S. and imported NOES were at least frequently interchangeable. There is at least some overlap in purchasers between U.S. producers and importers. Based on these and other available data, staff believes that there is moderate-to-high degree of substitutability between domestically-produced NOES and NOES imported from subject sources.

### **Lead times**

NOES is primarily produced to order. Among U.S. producers, \*\*\* reported that \*\*\* percent of its 2012 sales of NOES were produced-to-order, with a lead time of \*\*\*. \*\*\*. \*\*\* reported that \*\*\* percent of its sales were produced-to-order, with a lead time of 42 days.

Among importers, 74.4 percent of all importers’ 2012 sales were produced to order, with 25.6 percent from the importers’ U.S. inventory. Importers of NOES from most countries had most of their sales produced to order, except importers of NOES from Sweden, which had the majority of their sales from U.S. inventory. Most importers reported lead times of 90-180 days for product produced-to-order. At the conference, Metallia stated that product from Taiwan has a lead time of five months.<sup>34</sup>

### **Purchasers**

Petitioner described purchasers as either end users in motors and generators (and to a lesser extent, low voltage transformers) or as lamination stampers or service centers, which process and/or distribute product to the same end use sectors.<sup>35</sup>

Producers and importers were asked to name their 10 largest customers in 2012. \*\*\* included \*\*\*. \*\*\* included \*\*\*. All of these firms except \*\*\* were also named by at least one importer. Importers also named other firms not listed by producers.

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<sup>32</sup> Conference transcript, pp. 147-148 (Weinstein), 149 (Mendoza).

<sup>33</sup> China Steel’s postconference brief, p. 2.

<sup>34</sup> Conference transcript, p. 98 (Weinstein).

<sup>35</sup> Conference transcript, p. 51 (Pfeiffer).

Petitioner described qualification of NOES at purchasers as usually taking “a matter of weeks.”<sup>36</sup> Metallia described qualification for NOES as “rigorous” and involving testing the NOES in the purchaser’s application.<sup>37</sup> Baosteel, ThyssenKrupp Europe, and ThyssenKrupp North America described qualification as taking a year to a year-and-a-half.<sup>38</sup>

### **Comparison of U.S.-produced and imported product**

Petitioner described NOES as competing in the U.S. market on the basis of price, with sales sometimes lost over price differences of “pennies per pound.” It stated that most NOES sold in the U.S. market is warranted to meet ASTM specifications, and so is highly interchangeable among sources.<sup>39</sup> On the other hand, importers often described their products as not substitutable for products from AK Steel.

In order to determine whether U.S.-produced NOES can generally be used in the same applications as imports from China, Germany, Japan, Korea, Sweden, and Taiwan, U.S. producers and importers were asked whether the products can “always,” “frequently,” “sometimes,” or “never” be used interchangeably. As shown in table II-4, producers described NOES from various sources as \*\*\* interchangeable, while importers were more likely to describe NOES from various sources as “frequently” or “sometimes” interchangeable.

**Table II-4**

**NOES: Perceived interchangeability between NOES produced in the United States and in other countries, by country pair**

\* \* \* \* \*

In additional comments, importers often described products that they imported from subject sources, and that they stated that U.S. producers did not produce. For example, \*\*\* stated that grades lower than JIS50A470 and those higher than M15 were not available, or were available only in limited quantities, from U.S. producers. \*\*\* described similar issues. \*\*\* noted that some customers request NOES from specific Japanese mills. (\*\*\* also stated that some customers request product from specific mills, but did not indicate from which countries]). \*\*\* stated that it has developed some of its NOES to meet the specifications of purchaser \*\*\*. \*\*\* described other NOES not commercially competitive with \*\*\* product for this purchaser.<sup>40</sup> \*\*\* stated that its \*\*\* NOES is DFARS compliant<sup>41</sup> and designed to be used by

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<sup>36</sup> Conference transcript, pp. 23-24 (Pfeiffer).

<sup>37</sup> Conference transcript, p. 156 (Weinstein).

<sup>38</sup> CISA’s postconference brief, exhibit 1, and ThyssenKrupp’s postconference brief, answer to staff question 4.

<sup>39</sup> Conference transcript, pp. 23-24 (Pfeiffer).

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

the customer without further processing, limiting its competition with other NOES. \*\*\* stated that, because the electric vehicle motor was developed in Japan, the NOES that the motor uses was also developed by Japanese producer \*\*\* to particular specifications, and is not interchangeable with other NOES. Additionally, \*\*\* stated that Chinese NOES often has a performance equivalent to Japanese or Korean NOES, but that customers may prequalify the Chinese material.

Producers and importers were also asked to assess how often differences other than price were significant in sales of NOES from the United States, subject, or nonsubject countries. As seen in table II-5, producers described NOES from different sources as \*\*\* different in factors other than price, while importers expressed mixed assessments of how often differences other than price were significant, but rarely described such differences as “never” significant.

**Table II-5**

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

\* \* \* \* \*

In additional comments, \*\*\* stated that, for some types of NOES, product from the United States and combinations involving product from all subject countries are preferred. For example, it cited U.S. and Chinese 35 mm NOES as having “very good” core loss and high permeability in the direction of rolling. \*\*\* stated that foreign ability to produce NOES products not produced by the U.S. producer was a reason why factors other than price could be significant in sales of NOES. \*\*\* stated that U.S. producers are often “very reluctant” to produce lower grades of NOES. \*\*\* stated that its imported NOES’ (from \*\*\*) service, short lead times, and consistent quality make it a preferred product for purchasers. Other importers reiterated their comments on interchangeability.

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(...continued)

<sup>41</sup> DFARS stands for Defense Federal Acquisition Regulation Supplement, regulations for Department of Defense purchasing. See <https://www.federalregister.gov/defense-federal-acquisition-regulation-supplement-dfars->.



## **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 the all of U.S. production of NOES during 2012.

### **U.S. PRODUCERS**

The Commission received U.S. producer questionnaires from two firms, AK Steel and Nucor.<sup>1</sup> These two firms are believed to represent all of U.S. production of NOES. AK Steel, which accounted for \*\*\* percent of U.S. production of NOES in 2012, is a wholly-owned subsidiary of AK Steel Holding Corporation and is publicly traded on the New York Stock Exchange.

AK Steel is a leading producer of NOES.<sup>2</sup> To produce NOES, AK Steel utilizes its electric arc furnace at its facility in Butler, Indiana to melt and cast cold-rolled or hot-rolled steel with the desired chemistries. The finishing of the production processes for all of AK Steel's NOES takes place at its facility in Zanesville, Ohio, whether it is a semiprocessed or fully processed product.<sup>3</sup> AK Steel sells NOES in both wide coil and slit form. During the period, roughly \*\*\* percent of AK Steel's shipments were in wide coils.<sup>4</sup> Nucor reported producing NOES at its facilities in Crawfordsville, IN.

Table III-1 lists U.S. producers of NOES, positions on the petition, their production locations, and shares of total production in 2012.

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<sup>1</sup> Two firms, ArcelorMittal and U.S. Steel, reported that they have not produced NOES since January 1, 2010. Neither AK Steel nor Nucor are related to firms that are engaged in importing NOES from subject countries into the United States. Neither firm is related to firms that are engaged in exporting NOES from the subject countries to the United States nor are they related to any firms, either domestic or foreign, that are engaged in the production of NOES.

<sup>2</sup> Conference transcript, p. 17 (Peterson).

<sup>3</sup> AK Steel's Butler, IN facility produces a finished GOES product, but it does not produce a semiprocessed or fully processed NOES product. Conference transcript, pp. 17-18 (Peterson).

<sup>4</sup> Petitioner's postconference brief, Answer to staff questions, p. 9.

**Table III-1**

**NOES: U.S. producers of NOES, their positions on the petition, production locations, production, and shares of reported production, 2012**

<b>Firm</b>	<b>Position on orders</b>	<b>U.S. production locations</b>	<b>Share of production (percent)</b>
AK Steel	Petitioner	Butler, PA and Zanesville, OH	***
Nucor	***	Crawfordsville, IN	***
Total			100.0

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

When asked to indicate whether their firm has experienced any changes in relation to the production of NOES since January 1, 2010, AK Steel reported \*\*\*. Nucor reported that \*\*\*. When asked to describe the constraints that set limits on the their firm’s production of NOES and its ability to shift production capacity between products, AK Steel and Nucor indicated \*\*\*.

AK Steel reported the production of GOES, while Nucor reported the production of \*\*\* using the same equipment, machinery, and workers used in the production of NOES. Data concerning U.S. producers’ overall capacity and production data with regard to these products are presented in table III-2.<sup>5</sup>

**Table III-2**

**NOES: U.S. producers’ overall capacity and production of products on the same equipment as NOES, 2010-12, January-June 2012, and January-June 2013**

\* \* \* \* \*

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<sup>5</sup> AK Steel reported that \*\*\* percent of its overall production was accounted for by GOES and the remaining \*\*\* percent was accounted for by NOES in 2012. Nucor reported that \*\*\* percent of its overall production was accounted for by \*\*\* and the remaining \*\*\* percent was accounted for by NOES in 2012.

## U.S. PRODUCTION, CAPACITY, AND CAPACITY UTILIZATION

Table III-3 presents U.S. producers' production, capacity, and capacity utilization. U.S. production capacity \*\*\* throughout the period. Production of NOES reported by U.S. firms increased by \*\*\* percent between 2010 and 2011, but decreased by \*\*\* between 2011 and 2012. Capacity utilization decreased by \*\*\* percentage points between 2010 and 2012 and was \*\*\* percent lower in interim 2013 compared to interim 2012.

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

\* \* \* \* \*

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

Table III-4 presents U.S. producers' U.S. shipments, export shipments, and total shipments. U.S. shipments of NOES increased by \*\*\* percent between 2010 and 2011, but decreased by \*\*\* percent between 2011 and 2012 and were \*\*\* percent lower in interim 2013 compared to interim 2012. Export shipments, which accounted for \*\*\* percent of total shipments in 2012, decreased by \*\*\* percent between 2010 and 2012 and were \*\*\* percent lower in interim 2013 compared to interim 2012.<sup>6</sup> U.S. firms were asked to report separately, their U.S. shipments of semiprocessed and fully processed NOES in 2012. AK Steel reported that \*\*\* percent of its 2012 U.S. commercial shipments consisted of fully processed NOES and \*\*\* percent consisted of semiprocessed NOES. Nucor reported that \*\*\* percent of its 2012 U.S. commercial shipments consisted of fully processed NOES and \*\*\* percent of its 2012 U.S. commercial shipments consisted of semiprocessed NOES.

**Table III-4**  
**NOES: U.S. producers' U.S. shipments, exports shipments, and total shipments, 2010-2012, January-June 2012, and January-June 2013**

\* \* \* \* \*

## U.S. PRODUCERS' INVENTORIES

Table III-5 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 over the period examined. U.S. producers' inventories decreased between 2010 and 2012 and were higher in

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<sup>6</sup> Principal export markets identified include \*\*\*.

interim 2013 compared to interim 2012. Ratios of inventory to U.S. production ranged from \*\*\* percent to \*\*\* percent over the period.<sup>7</sup>

**Table III-5**

**NOES: U.S. producers' inventories, 2010-2012, January-June 2012, and January-June 2013**

\* \* \* \* \*

### **U.S. PRODUCERS' IMPORTS AND PURCHASES**

No U.S. producers reported imports or purchases of NOES during the period examined.

### **U.S. EMPLOYMENT, WAGES, AND PRODUCTIVITY**

Table III-6 shows U.S. producers' employment-related data during the period examined.<sup>8</sup> As detailed in table III-6, the number U.S. production and related workers ("PRWs") increased irregularly between 2010 and 2012, but was lower in interim 2013 than in interim 2012. In March 2012, AK Steel reported the ratification of a three-year labor agreement with the UAW covering about 185 hourly production and maintenance workers at its Zanesville, Ohio facility and a four-year labor agreement covering about 1,250 hourly production and maintenance employees at its Butler, Pennsylvania facility.

**Table III-6**

**NOES: Average number of production and related workers, hours worked, wages paid to such employees, hourly wages, productivity, and unit labor costs, 2010-2012, January-June 2012, and January-June 2013**

\* \* \* \* \*

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<sup>7</sup> Nucor reported that \*\*\*.

<sup>8</sup> "UAW members ratify early labor agreement for Butler Works," [http://www.aksteel.com/news/press\\_release.aspx?doc\\_id=919](http://www.aksteel.com/news/press_release.aspx?doc_id=919), and "UAW members ratify early labor agreement for Zanesville Works," [http://www.aksteel.com/news/press\\_release.aspx?doc\\_id=897&year=2012](http://www.aksteel.com/news/press_release.aspx?doc_id=897&year=2012), retrieved November 6, 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 NOES.<sup>1</sup> Usable questionnaire responses were received from 25 companies,<sup>2</sup> representing 87.4 percent of total subject imports (76.2 percent of imports from China, 108.5 percent of imports from Germany, 71.8 percent of imports from Japan, 99.3 percent of imports from Korea, 99.2 percent of imports from Sweden, and 90.1 percent of imports from Taiwan) in 2012.<sup>3</sup>

Table IV-1 lists all responding U.S. importers of NOES, their headquarters, the countries they import from, and their shares of subject U.S. imports in 2012. \*\*\* reported entering and withdrawing NOES from bonded warehouses. \*\*\* importing NOES under the Temporary Importation Under Bond program.<sup>4</sup>

**Table IV-1  
NOES: U.S. importers, headquarters, source of imports, share of imports, 2012**

Firm	Headquarters	Source(s) of imports	Share of subject imports (percent)
Angang America	East Brunswick, NJ	***	***
Aperam	New Providence, NJ	***	***
ArcelorMittal America	Chicago, IL	***	***
Baosteel America	Montvale, NJ	***	***
CDW America	Cleveland, OH	***	***
Cogent Power	Burlington, ON	***	***
Daewoo America	Teaneck, NJ	***	***
Felchar Manufacturing	Binghampton, NY	***	***
JFE Shoji America	Long Beach, CA	***	***
Kanematsu America	New York, NY	***	***

Table continued on next page.

<sup>1</sup> The Commission issued questionnaires to those firms that, based on a review of data provided by U.S. Customs and Border Protection (“Customs”), may have accounted for more than \*\*\* percent of total imports under HTS subheadings 7225.19.00, 7226.19.10, and 7226.19.90.

<sup>2</sup> The following firms reported that they had not imported NOES from any country at any time since January 1, 2010: \*\*\*.

<sup>3</sup> Coverage was calculated based on official Commerce import statistics compared to the quantity of imports, in short tons, reported in questionnaire data in 2012 (14.1 million short tons for China, 9.6 million short tons for Germany, 18.5 million short tons for Japan, 7.3 million short tons for Korea, 9.4 million short tons for Sweden, and 17.1 million short tons for Taiwan).

<sup>4</sup> \*\*\*. Email from \*\*\*, November 11, 2013. \*\*\*. Email from \*\*\*, November 14, 2013.

**Table IV-1—Continued**  
**NOES: U.S. importers, headquarters, source of imports, share of imports, 2012**

Magcor	Dover, DE	***	***
Marubeni-Itochu America	New York, NY	***	***
Marubeni-Itochu Canada	Burnaby, BC	***	***
Metal One America	Smyrna, TN	***	***
Metallia	Fort Lee, NJ	***	***
Mitsui	New York, NY	***	***
National Material	Arnold, PA	***	***
POSCO America	Fort Lee, NJ	***	***
SteelSummit	New York, NY	***	***
Sujani	Bernardsville, NJ	***	***
Sumitomo America	Rosemont, IL	***	***
Tempel Steel	Park Ridge, IL	***	***
ThyssenKrupp Europe	Duisburg, Germany	***	***
ThyssenKrupp North America	Southfield, MI	***	***
Voestalpine	Houston, TX	***	***
Total			100.0

<sup>1</sup>\*\*\* submitted an importer questionnaire; however, in later correspondence with staff, the firm indicated that it was not the importer of record for “most” of the material that is sold. On the basis of that statement, staff has not used \*\*\* import data in order to avoid double counting. See email from \*\*\*, November 7, 2013.

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

Of the responding U.S. importers, a number of firms reported being related to firms that are engaged in the production of NOES or being related to firms engaged in importing or exporting NOES. A list of these firms is presented in table IV-2.

**Table IV-2**  
**NOES: Related U.S. importers**

\* \* \* \* \*

**U.S. IMPORTS**

Table IV-3 presents data for U.S. imports of NOES. U.S. imports of NOES from subject sources accounted for at least 91.2 percent of total U.S. imports over the period. In 2012, Japan was the largest subject source of U.S. imports of NOES, followed by Taiwan and China. Import volume trends among the countries varied between 2010 and 2012. Between 2010 and 2012, the volume of imports of NOES from China, Sweden, and Taiwan increased, while the volume of

imports of NOES from Germany and Japan decreased.<sup>5</sup> Overall, the quantity of imports from subject sources increased by 36.9 percent between 2010 and 2012, but was 36.7 percent lower in interim 2013 compared to interim 2012.

U.S. imports of NOES from nonsubject sources accounted for between 4.2 percent and 8.8 percent of total U.S. imports over the period. France and Australia were the two largest nonsubject sources of U.S. imports of NOES in 2012, accounting for the vast majority of nonsubject imports.

**Table IV-3**  
**NOES: U.S. imports, by source, 2010-12, January-June 2012, and January-June 2013**

Item	Calendar year			January-June	
	2010	2011	2012	2012	2013
	<b>Quantity (short tons)</b>				
China	8,275	16,401	14,071	7,394	8,217
Germany	10,831	14,385	9,568	5,852	3,795
Japan	20,124	22,747	18,540	11,323	6,915
Korea	5,267	6,880	7,331	4,062	1,357
Sweden	4,235	8,599	9,359	4,979	3,559
Taiwan	6,776	5,203	17,136	8,201	2,637
Subtotal, subject	55,507	74,215	76,006	41,812	26,481
All others	3,559	7,151	6,242	2,956	1,168
Total U.S. imports	59,066	81,366	82,248	44,768	27,648
	<b>Value (1,000 dollars)<sup>1</sup></b>				
China	7,642	19,702	15,400	8,508	7,912
Germany	12,372	19,492	11,224	6,944	4,163
Japan	22,816	29,889	23,625	14,517	8,535
Korea	5,526	7,605	6,830	3,941	1,311
Sweden	6,595	14,467	15,394	8,359	5,283
Taiwan	7,929	6,459	18,231	8,945	2,485
Subtotal, subject	62,879	97,615	90,704	51,213	29,688
All others	4,640	11,485	8,066	4,003	1,621
Total U.S. imports	67,520	109,101	98,770	55,216	31,309

Table continued on next page.

<sup>5</sup> Between 2010 and 2012, U.S. imports of NOES from: China increased by 70.1 percent; Sweden increased by 121.0 percent; and Taiwan increased by 152.9 percent. Between 2010 and 2012, U.S. imports of NOES from: Germany and Japan decreased by 11.7 percent and 7.9 percent, respectively.

**Table IV-3--Continued**

**NOES: U.S. imports, by source, 2010-12, January-June 2012, and January-June 2013**

Item	Calendar year			January-June	
	2010	2011	2012	2012	2013
	<b>Unit value (per short ton)</b>				
China	\$924	\$1,201	\$1,094	\$1,151	\$963
Germany	1,142	1,355	1,173	1,186	1,097
Japan	1,134	1,314	1,274	1,282	1,234
Korea	1,049	1,105	932	970	966
Sweden	1,557	1,682	1,645	1,679	1,484
Taiwan	1,170	1,242	1,064	1,091	942
Average, subject	1,133	1,315	1,193	1,225	1,121
All others	1,304	1,606	1,292	1,354	1,388
Average, total imports	1,143	1,341	1,201	1,233	1,132
	<b>Share of quantity (percent)</b>				
China	14.0	20.2	17.1	16.5	29.7
Germany	18.3	17.7	11.6	13.1	13.7
Japan	34.1	28.0	22.5	25.3	25.0
Korea	8.9	8.5	8.9	9.1	4.9
Sweden	7.2	10.6	11.4	11.1	12.9
Taiwan	11.5	6.4	20.8	18.3	9.5
Subtotal, subject	94.0	91.2	92.4	93.4	95.8
All others	6.0	8.8	7.6	6.6	4.2
Total U.S. imports	100.0	100.0	100.0	100.0	100.0
	<b>Share of value (percent)</b>				
China	11.3	18.1	15.6	15.4	25.3
Germany	18.3	17.9	11.4	12.6	13.3
Japan	33.8	27.4	23.9	26.3	27.3
Korea	8.2	7.0	6.9	7.1	4.2
Sweden	9.8	13.3	15.6	15.1	16.9
Taiwan	11.7	5.9	18.5	16.2	7.9
Subtotal, subject	93.1	89.5	91.8	92.8	94.8
All others	6.9	10.5	8.2	7.2	5.2
Total U.S. imports	100.0	100.0	100.0	100.0	100.0

<sup>1</sup> Landed, duty-paid.

Note.—Because of rounding, figures may not add to the totals shown.

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

## NEGLIGENCE

The statute requires that an investigation be terminated without an injury determination if imports of the subject merchandise are found to be negligible.<sup>6</sup> 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.<sup>7</sup> Imports from each subject country and its share of total imports are presented in table IV-4.

**Table IV-4**  
**NOES: U.S. imports and shares of total imports, by sources, August 2012-July 2013**

<b>Country</b>	<b>Imports (short tons)</b>	<b>Share of total imports (percent)</b>
China	14,162	22.4
Germany	7,470	11.8
Japan	14,056	22.2
Korea	3,542	5.6
Sweden	7,362	11.6
Taiwan	12,863	20.3
Subtotal (subject)	59,455	93.9
All others (nonsubject)	3,875	6.1
Total	63,330	100.0

Source: Compiled from official Commerce Statistics, HTS numbers 7225.19.00, 7226.19.10, and 7226.19.90

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<sup>6</sup> 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)).

<sup>7</sup> Section 771 (24) of the Act (19 U.S.C § 1677(24)).

## 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. Issues concerning fungibility, geographical markets, and channels of distribution are addressed in Part II of this report.

Petitioner argues that imports from all subject sources should be cumulated because the record indicates more than a reasonable overlap in competition and satisfies the statutory requirement mandating cumulation in the Commission's evaluation of material injury and the Commission's evaluation of threat of material injury.<sup>8</sup> Respondents from China, Germany, Japan, and Sweden argue that for the purposes of the Commission's threat analysis, imports from China, Germany, Japan, and Sweden should be decumulated.<sup>9</sup>

Official Commerce statistics show that the majority of U.S. imports of NOES from China, Korea, and Taiwan entered the United States through New Orleans; the majority of U.S. imports from NOES from Germany entered the United States through Philadelphia, PA; Cleveland, OH; and Savannah, GA; and the majority of U.S. imports of NOES from Japan and Sweden entered through New Orleans, LA and Houston-Galveston, TX. Official Commerce statistics also indicate that imports of NOES from Germany, Japan, and Sweden were entered every month during the period of investigation; imports of NOES from China and Taiwan entered the United States in every month but one and imports of NOES from Korea entered the United States in 36 of the 42 months.<sup>10</sup>

## APPARENT U.S. CONSUMPTION

Table IV-5 presents data on apparent U.S. consumption for NOES over the period examined. As detailed in table IV-5, apparent U.S. consumption, by quantity, increased by \*\*\* percent between 2010 and 2011, before decreasing \*\*\* between 2011 and 2012. Apparent U.S. consumption was \*\*\* percent lower in interim 2013 than in interim 2012. U.S. producers' U.S. shipment levels were \*\*\*, increasing \*\*\* percent between 2010 and 2011 and decreasing \*\*\* between 2011 and 2012. U.S. producers' U.S. shipments were \*\*\* percent lower in interim 2013 than in interim 2012.

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<sup>8</sup> Petitioner's postconference brief, p. 19 and 34.

<sup>9</sup> Baoshan's postconference brief, p. 7. ThyssenKrupp's postconference brief, p. 1. Conference transcript, p. 102 (LaFrankie) and p. 106 (McPhie); Japanese respondents' postconference brief, p. 42; Conference transcript, p. 116 (Kaufmann).

<sup>10</sup> Official Commerce statistics, HTS subheadings 7225.19.00, 7226.19.10, and 7226.19.90.

Table IV-5

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

Item	Calendar year			January-June	
	2010	2011	2012	2012	2013
	<b>Quantity (short tons)</b>				
U.S. producers' shipments	***	***	***	***	***
U.S. imports from-- China	8,275	16,401	14,071	7,394	8,217
Germany	10,831	14,385	9,568	5,852	3,795
Japan	20,124	22,747	18,540	11,323	6,915
Korea	5,267	6,880	7,331	4,062	1,357
Sweden	4,235	8,599	9,359	4,979	3,559
Taiwan	6,776	5,203	17,136	8,201	2,637
Subtotal, subject sources	55,507	74,215	76,006	41,812	26,481
All other sources	3,559	7,151	6,242	2,956	1,168
Total imports	59,066	81,366	82,248	44,768	27,648
Apparent consumption	***	***	***	***	***
	<b>Value (\$1,000)</b>				
U.S. producers' shipments	***	***	***	***	***
U.S. imports from-- China	7,642	19,702	15,400	8,508	7,912
Germany	12,372	19,492	11,224	6,944	4,163
Japan	22,816	29,889	23,625	14,517	8,535
Korea	5,526	7,605	6,830	3,941	1,311
Sweden	6,595	14,467	15,394	8,359	5,283
Taiwan	7,929	6,459	18,231	8,945	2,485
Subtotal, subject sources	62,879	97,615	90,704	51,213	29,688
All other sources	4,640	11,485	8,066	4,003	1,621
Total imports	67,520	109,101	98,770	55,216	31,309
Apparent consumption	***	***	***	***	***

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

### U.S. MARKET SHARES

U.S. market share data are presented in table IV-6. As detailed below, U.S. producers' market share, by quantity, decreased by \*\*\* percentage points between 2010 and 2012 and was \*\*\* percentage points higher in interim 2013 than in interim 2012.

**Table IV-6**  
**NOES: Apparent U.S. consumption and market shares, 2010-12, January-June 2012, and January-June 2013**

\* \* \* \* \*

**RATIO OF IMPORTS TO U.S. PRODUCTION**

Table IV-7 presents data on the ratio of U.S. imports to U.S. production. As detailed below, the ratio of imports to U.S. production increased from \*\*\* percent in 2010 to \*\*\* percent in 2012. The ratio was \*\*\* percent in interim 2013 compared with \*\*\* percent in interim 2012.

**Table IV-7**  
**NOES: 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
	<b>Quantity (short tons)</b>				
U.S. production	***	***	***	***	***
U.S. imports from:					
China	8,275	16,401	14,071	7,394	8,217
Germany	10,831	14,385	9,568	5,852	3,795
Japan	20,124	22,747	18,540	11,323	6,915
Korea	5,267	6,880	7,331	4,062	1,357
Sweden	4,235	8,599	9,359	4,979	3,559
Taiwan	6,776	5,203	17,136	8,201	2,637
Subject sources	55,507	74,215	76,006	41,812	26,481
All others	3,559	7,151	6,242	2,956	1,168
Total imports	59,066	81,366	82,248	44,768	27,648
	<b>Ratio of imports to production (percent)</b>				
U.S. imports from:					
China	***	***	***	***	***
Germany	***	***	***	***	***
Japan	***	***	***	***	***
Korea	***	***	***	***	***
Sweden	***	***	***	***	***
Taiwan	***	***	***	***	***
Subject sources	***	***	***	***	***
All others	***	***	***	***	***
Total	***	***	***	***	***

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

## PART V: PRICING DATA

### FACTORS AFFECTING PRICES

#### Raw material costs

Raw materials represented between \*\*\* and \*\*\* percent of the costs of goods sold for NOES over 2010 to 2012, making raw material costs a \*\*\* factor in the price of NOES.

For U.S. producers, the primary input costs used in manufacturing NOES are for scrap steel, ferrosilicon, \*\*\*, and electricity.<sup>1</sup> Scrap steel is currently a much larger cost component than ferrosilicon. For integrated producers of NOES, such as some subject-country producers, iron ore and coking coal would likely be the principal raw material inputs. \*\*\*.

\*\*\* described the prices of raw materials used to produce NOES as fluctuating from year to year. However, \*\*\* added that prices for raw materials have generally increased over the last three years, and expected those prices to continue to increase into 2014. Importers generally described iron ore, coking coal, and/or hot-rolled band as the primary raw materials for NOES, with some importers adding that prices for these materials had fallen in recent years. Several other importers described raw material prices as affected by other industrial sectors' (including those in China) demand for the same raw materials. \*\*\* stated that AK Steel had insulated itself from fluctuations in NOES' raw material prices because it owns captive supplies of those raw materials. \*\*\* stated that raw materials prices had had little effect on the price of NOES. On the other hand, Japanese respondents stated that NOES prices had been following raw material trends.<sup>2</sup>

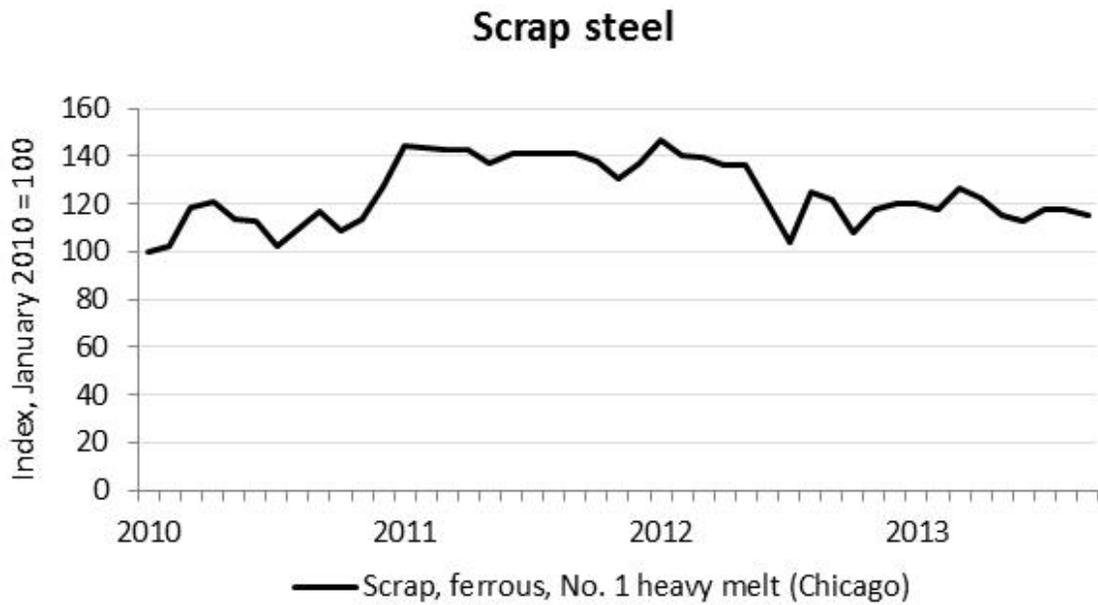
Price trends for scrap steel, ferrosilicon, electricity, and natural gas are shown in figure V-1. Prices for scrap steel and ferrosilicon rose in late 2010 or early 2011, and while down somewhat from early 2011, remain 15 to 20 percent above January 2010 levels. Natural gas prices fell from early 2010 to early 2012, but have risen since then. Natural gas prices remain nearly 40 percent below January 2010 levels. Aside from seasonal fluctuations, the industrial price of electricity generally remained at the same level since January 2010.

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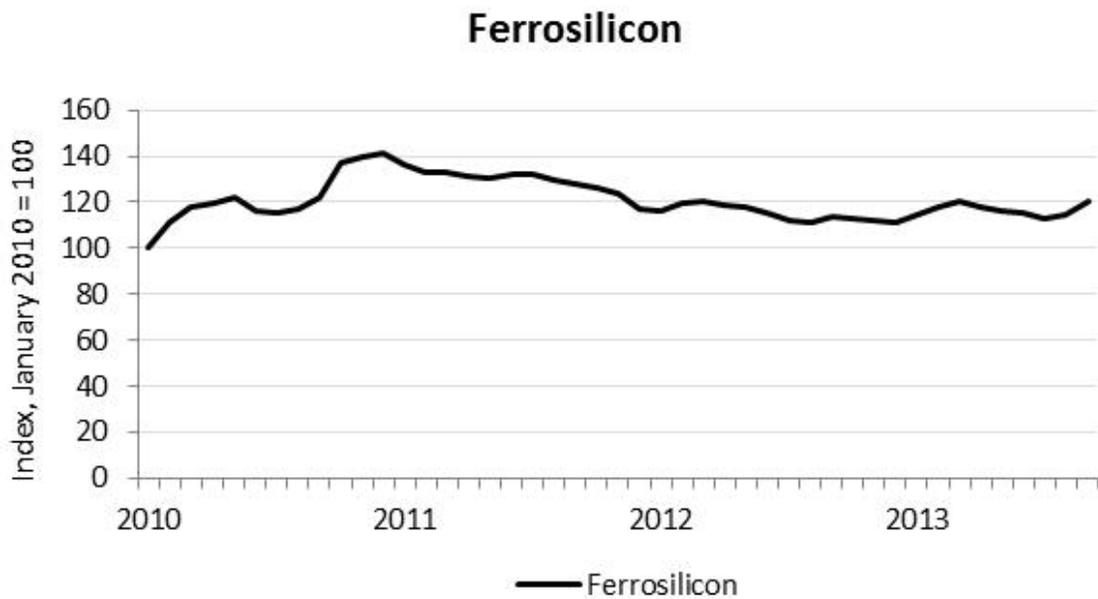
<sup>1</sup> Conference transcript, p. 62 (Petersen), and and petitioner's postconference brief, answers to staff questions, pp. 8-9.

<sup>2</sup> Japanese respondents' postconference brief, p. 25.

**Figure V-1**  
**NOES: Price trends of inputs, January 2010 to September 2013**



Source: American Metal Market and staff calculations.

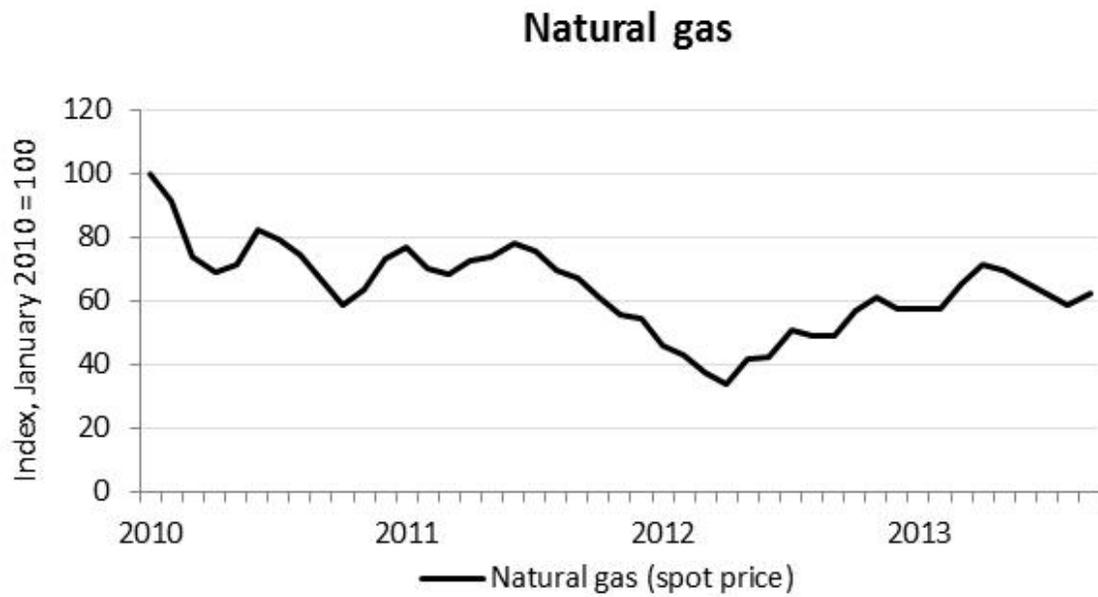


Source: American Metal Market and staff calculations.

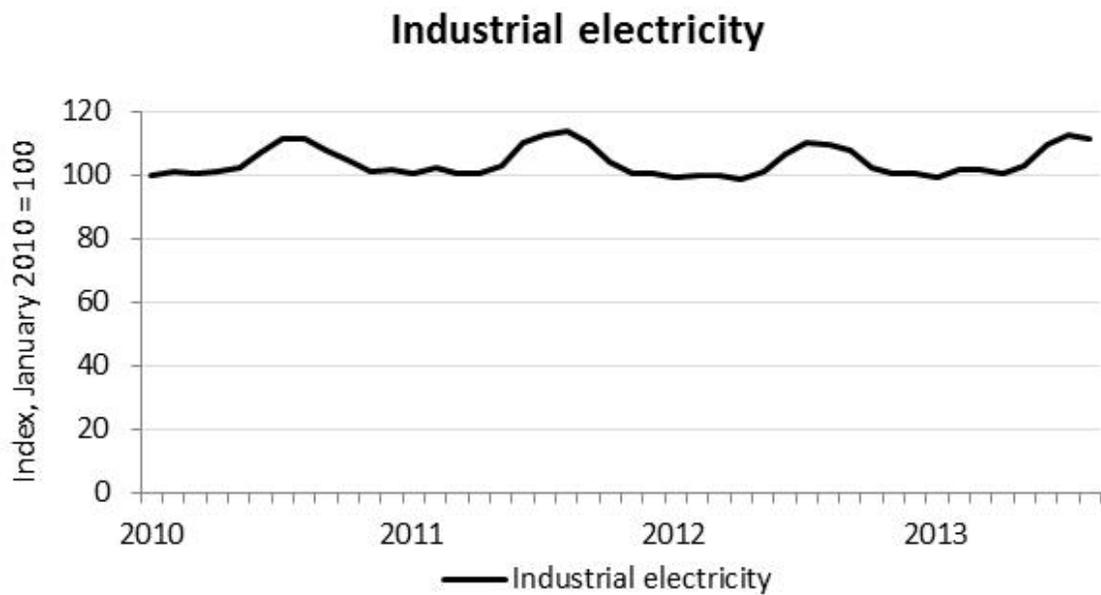
Figure continued on next page.

Figure V-1—Continued.

NOES: Price trends of inputs, January 2010 to September 2013



Source: NYMEX and staff calculations.



Source: Energy Information Administration and staff calculations.

## U.S. inland transportation costs

\*\*\* and 19 importers reported that they typically arrange transportation of NOES to their customers' locations, while \*\*\* and 2 importers reported that their purchasers arrange transportation. U.S. producers reported that their U.S. inland transportation costs ranged from 0 (\*\*\*)<sup>3</sup> to 10 percent (\*\*\*). Importers reported costs of 3 to 8 percent, with importers \*\*\* among those reporting 3 percent and \*\*\* among those reporting 7-8 percent.

## PRICING PRACTICES

### Pricing methods

U.S. producers and importers<sup>4</sup> reported using transaction-by-transaction negotiations and contracts for their sales of NOES, as presented in table V-1.

**Table V-1**

**NOES: U.S. producers' and importers' reported price-setting methods, by number of responding firms<sup>1</sup>**

Method	U.S. producers	Importers
Transaction-by-transaction	***	12
Contract	***	18
Set price list	***	1
Other	***	0

<sup>1</sup> 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. Five importers reported both transaction-by-transaction negotiations and contracts.

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

\*\*\*<sup>5 6</sup>

U.S. producers and importers reported selling the majority of their NOES under short-term contracts (up to an including 12 months). As shown in table V-2, U.S. producers and importers reported their 2012 U.S. commercial shipments of NOES by type of sale.<sup>7</sup>

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<sup>3</sup> Staff interview with \*\*\*.

<sup>4</sup> \*\*\*.

<sup>5</sup> Email from \*\*\* November 7, 2013, and petitioner's postconference brief, answers to staff questions, pp. 8-9.

<sup>6</sup> \*\*\* indicated that it \*\*\*. Baosteel, ThyssenKrupp Europe, and ThyssenKrupp North America indicated that they did not use surcharges. CISA's postconference brief, exhibit 1, and ThyssenKrupp's postconference brief, answer to staff question 6.

\*\*\* reported that \*\*\* short-term contracts were usually for \*\*\*. Nine importers reported short term-contracts of 90 days, and seven additional importers reported short-term contracts of 30-180 days. Only \*\*\* reported long-term contract durations of several years.

For U.S. producers of NOES, short-term contracts \*\*\* price renegotiation and \*\*\* meet-or-release provisions. \*\*\*. For importers of subject-country NOES, short-term contracts generally did not allow price renegotiation (\*\*\*), fixed either price and quantity (\*\*\* importers) or only price (\*\*\* importers), and did not have meet-or-release provisions (\*\*\* importers, versus \*\*\* that did). The \*\*\* importers with long-term contracts described such contracts as \*\*\* price renegotiation, \*\*\* meet-or-release provisions, and fixing \*\*\*.

**Table V-2**

**NOES: U.S. producers' and importers' shares of U.S. commercial shipments by type of sale, 2012**

\* \* \* \* \*

**Sales terms and discounts**

\*\*\* and three importers typically quote prices on an f.o.b. basis, while 19 importers quote prices on a delivered basis. Twenty-three importers \*\*\* do not offer discounts for their sales of NOES. However, \*\*\* reported offering quantity discounts and annual volume discounts. \*\*\* and 15 importers reported sales terms of net 30 days, 6 importers reported sales terms of net 60 days, and two importers reported other terms.

**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 NOES products shipped to unrelated U.S. customers during January 2010 to June 2013.<sup>8</sup>

**Product 1-- M-19, 0.45-0.50 mm thickness, fully processed, maximum core loss 2.90 W/kg (1.5T; 50 Hz), 600 mm or more wide, coated.**

(...continued)

<sup>7</sup> As can be seen in the table, the average for all importers was \*\*\* percent of 2012 commercial shipments under short-term contracts, and importers of NOES from all subject countries except Sweden had at least \*\*\* percent under short-term contracts. Importers of Swedish NOES reported \*\*\* percent under long-term contracts, \*\*\* percent short-term contracts, and the balance as spot sales. However, \*\*\* reported that its average contract duration for long-term sales was \*\*\*.

<sup>8</sup> Importer Metallia and Taiwan producer China Steel stated that all the pricing products compete with CRML products. China Steel provided a list of what it described as competing CRML products in its postconference brief. Conference transcript, pp. 95 and 132 (Weinstein), and China Steel's postconference brief, exhibit 2.

**Product 2.**-- M-22, 0.45-0.50 mm thickness, fully processed, maximum core loss 3.10 W/kg (1.5T; 50 Hz), 600 mm or more wide, coated.

**Product 3.**-- M-22, 0.60-0.65 mm thickness, fully processed, maximum core loss 3.65 W/kg (1.5T; 50 Hz), less than 600 mm wide, coated.

**Product 4.**-- M-36, 0.45-0.50 mm thickness, fully processed, maximum core loss 3.50 W/kg (1.5T; 50 Hz), 600 mm or more wide, coated.

**Product 5.**— M-36, 0.60-0.65 mm thickness, fully processed, maximum core loss 4.10 W/kg (1.5T; 50 Hz), 600 mm or more wide, coated.

**Product 6.**— M-36, 0.45-0.50 mm thickness, fully processed, maximum core loss 3.50 W/kg (1.5T; 50 Hz), less than 600 mm wide, coated.

**Product 7.**— M-43, 0.60-0.65 mm thickness, fully processed, maximum core loss 4.35 W/kg (1.5T; 50 Hz), 600 mm or more wide, coated.

**Product 8.**— M-45, 0.60-0.65 mm thickness, fully processed, maximum core loss 4.80 W/kg (1.5T; 50 Hz), 600 mm or more wide, coated.

One U.S. producer and 17 importers provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters.<sup>9</sup> Pricing data reported by these firms accounted for approximately \*\*\* percent of U.S. producers' shipments of NOES in 2012, \*\*\* percent of U.S. shipments of subject imports from China in 2012, \*\*\* percent of U.S. shipments of subject imports from Germany in 2012,<sup>10</sup> \*\*\* percent of U.S. shipments of subject imports from Japan in 2012, \*\*\* percent of U.S. shipments of subject imports from Korea in 2012, \*\*\* percent of U.S. shipments of subject imports from Sweden in 2012, and \*\*\* percent of U.S. shipments of subject imports from Taiwan in 2012.

Price data for products 1-8 are presented in tables V-3 to V-10 and figure V-2.

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<sup>9</sup> Several importers likely supplied value data in thousands of dollars. Staff contacted these firms and corrected their value data upon confirmation. Two firms, \*\*\*, did not reply to staff inquiries. Staff adjusted their value data by a factor of 1,000. Additionally, \*\*\* submitted \*\*\*. See email from \*\*\*, November 7, 2013. Additionally, staff has removed one quarter of data from \*\*\* in which it reported a quantity of 1,000 tons and a value of \$0, and one quarter of data each from \*\*\*. See emails from \*\*\*, November 8, 2013.

<sup>10</sup> ThyssenKrupp Europe and ThyssenKrupp North America stated that their pricing data are "distorted" because they sell uncoated NOES in master coils rather than slit, resulting in a lower price product. ThyssenKrupp's postconference brief, p. 14.

**Table V-3**

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

\* \* \* \* \*

**Table V-4**

**NOES: Weighted-average f.o.b. prices and quantities of domestic and imported product 2<sup>1</sup> and margins of underselling/(overselling), by quarters, January 2010-June 2013**

\* \* \* \* \*

**Table V-5**

**NOES: Weighted-average f.o.b. prices and quantities of domestic and imported product 3<sup>1</sup> and margins of underselling/(overselling), by quarters, January 2010-June 2013**

\* \* \* \* \*

**Table V-6**

**NOES: Weighted-average f.o.b. prices and quantities of domestic and imported product 4<sup>1</sup> and margins of underselling/(overselling), by quarters, January 2010-June 2013**

\* \* \* \* \*

**Table V-7**

**NOES: Weighted-average f.o.b. prices and quantities of domestic and imported product 5<sup>1</sup> and margins of underselling/(overselling), by quarters, January 2010-June 2013**

\* \* \* \* \*

**Table V-8**

**NOES: Weighted-average f.o.b. prices and quantities of domestic and imported product 6<sup>1</sup> and margins of underselling/(overselling), by quarters, January 2010-June 2013**

\* \* \* \* \*

**Table V-9**

**NOES: Weighted-average f.o.b. prices and quantities of domestic and imported product 7<sup>1</sup> and margins of underselling/(overselling), by quarters, January 2010-June 2013**

\* \* \* \* \*

**Table V-10**

**NOES: Weighted-average f.o.b. prices and quantities of domestic and imported product 8<sup>1</sup> and margins of underselling/(overselling), by quarters, January 2010-June 2013**

\* \* \* \* \*

**Figure V-2**

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

\* \* \* \* \*

### Price trends

Prices for NOES pricing products showed mixed trends during January 2010 to June 2013. Table V-11 summarizes the price trends, by country and by product. As shown in the table, domestic price changes ranged from a decrease of 28.0 percent to an increase of 10.8 percent during January 2012 to June 2013, while import price changes ranged from a decrease of 43.9 percent to an increase of 47.1 percent.

**Table V-11**

**NOES: Summary of weighted-average f.o.b. prices for products 1-8 from the United States and subject countries**

\* \* \* \* \*

### Price comparisons

As shown in table V-12, prices for NOES imported from subject countries were below those for U.S.-produced product in 218 of 296 instances; margins of underselling ranged from 0.2 to 49.4 percent. In the remaining 78 instances, prices for NOES from subject countries were between 0.2 to 68.9 percent above prices for the domestic product.

**Table V-12**

**NOES: 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	47	2.6 to 42.7	24.3	1	3.1 to 3.1	3.1
Germany	50	3.2 to 40.1	18.4	11	1.1 to 17.5	5.8
Japan	45	0.6 to 23.1	9.2	26	0.4 to 28.3	11.9
Korea	16	14.7 to 49.4	28.0	1	15.3 to 15.3	15.3
Sweden	34	0.2 to 38.5	12.6	34	0.2 to 68.9	18.3
Taiwan	26	2.3 to 30.5	17.2	5	2.7 to 23.6	9.5
Total	218	0.2 to 49.4	17.4	78	0.2 to 68.9	13.6

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

At the conference, petitioner stated that its customers had told it that subject imports were underselling its prices by approximately 25 percent. It added that it responded by lowering prices in 2013.<sup>11</sup>

## LOST SALES AND LOST REVENUE

The Commission requested U.S. producers of NOES to report any instances of lost sales or revenue they experienced due to competition from imports of NOES from subject countries since January 2010. Of the two responding U.S. producers, \*\*\* reported that \*\*\* had to either reduce prices or roll back announced price increases.<sup>12</sup> The \*\*\* lost sales allegations totaled \$\*\*\* and involved \*\*\* short tons of NOES, and the \*\*\* lost revenue allegations totaled \$\*\*\* and involved \*\*\* short tons of NOES.<sup>13</sup> Staff attempted to contact all named purchasers and a summary of the information obtained follows in the descriptions below and in tables V-13 and V-14.<sup>14</sup>

Purchasers named in the lost sales and lost revenue allegations also were asked whether they shifted their purchases of NOES from U.S. producers to suppliers of NOES from China, Germany, Japan, Korea, Sweden, and Taiwan since January 2010. In addition, they were asked whether U.S. producers reduced their prices in order to compete with suppliers of NOES from those countries.<sup>15</sup>

Two of the six responding purchasers (including \*\*\*) reported that they had shifted purchases of NOES from U.S. producers to subject imports since January 2010; one of these purchasers (\*\*\*) reported that price was the reason for the shift. \*\*\* described the volume of sales that it shifted due to price as \*\*\*. \*\*\* stated that it had shifted purchases, but the shift was due to \*\*\*, and not due to price. \*\*\* did not indicate whether it had shifted purchases or not, but did state that it has \*\*\*. It continued that \*\*\*.

However, four purchasers (including \*\*\*) stated that they had not shifted. \*\*\* stated that it had been purchasing \*\*\*. \*\*\* referenced its extensive comments, summarized below.

Three purchasers (\*\*\*) reported that U.S. producers had reduced their prices in order to compete with the prices of subject imports. \*\*\* indicated that U.S. producers reduced their \*\*\* in 2013. (\*\*\*) indicated that they did not know). However, two purchasers (including \*\*\*)

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<sup>11</sup> Conference transcript, p. 32 (Petersen).

<sup>12</sup> \*\*\*.

<sup>13</sup> In several instances, volumes were supplied for three allegations together. In these cases, staff has divided the volumes and values equally among the three allegations.

<sup>14</sup> In these tables, prices are presented in short tons. In faxes to purchasers, however, prices were presented in hundredweight, a more commonly-used measure in the industry. Additionally, several of the allegations involved \*\*\*. See email from \*\*\*, and petition, exhibit I-12.

<sup>15</sup> \*\*\* did not respond to these questions.

reported that U.S. producers had not reduced their prices. \*\*\* elaborated that \*\*. \*\*\* added that \*\*.

### Purchaser comments

\*\*\*<sup>16</sup> \*\*\*

**Table V-13**  
**NOES: U.S. producers' lost sales allegations**

\* \* \* \* \*

**Table V-14**  
**NOES: U.S. producers' lost revenue allegations**

\* \* \* \* \*

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<sup>16</sup> \*\*\*

## PART VI: FINANCIAL EXPERIENCE OF U.S. FIRMS

### BACKGROUND

AK Steel and Nucor provided useable financial data on their operations producing NOES. AK Steel is the petitioner and both firms produced this product in the United States in 2012.<sup>1</sup> Both firms appear to sell NOES to manufacturers of electrical motors and generators in the infrastructure and manufacturing markets.<sup>2</sup> There is a distinction between AK Steel and Nucor insofar as <sup>3</sup>. For both firms, sales of NOES represents only a <sup>3</sup> fraction of the overall business.<sup>3</sup>

### OPERATIONS ON NOES

Income-and-loss data for the two reporting U.S. firms on NOES are presented in table VI-1, and are briefly summarized here. Generally speaking, sales quantity declined irregularly from 2010 to 2012 and was lower in January-June 2013 than in January-June 2012. Sales value rose <sup>3</sup> irregularly during the full yearly periods but like sales quantity was <sup>3</sup> in interim 2013 than in interim 2012.<sup>4</sup> Total cost of goods sold (“COGS”) <sup>3</sup> irregularly between the yearly periods and was <sup>3</sup> interim 2013 than in interim 2012. Total selling, general and administrative (“SG&A”) expenses <sup>3</sup> from 2010 to 2012 and were <sup>3</sup> in January-June 2013 than in January-June 2012. The combined operating loss increased from 2010 to 2012 and was <sup>3</sup> higher in January-June 2013 compared with the period one year earlier.<sup>5</sup> Income-and-loss data are presented separately for the two U.S. firms in table VI-2.

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<sup>1</sup> <sup>3</sup>. Both firms reported data in each period during 2010-June 2013. <sup>3</sup>. AK Steel provided a <sup>3</sup>.

<sup>2</sup> AK Steel, 2012 Annual Report and Form 10-K, p. 32. Much of the discussion on this page of the 10-K regarding the electrical steel market is relevant only to GOES, which is used in power transmission and distribution transformers, and is outside the scope of these investigations.

<sup>3</sup> AK Steel’s operations on NOES constitute <sup>3</sup> firm’s overall operations. NOES is included in the segment producing and selling stainless steel products and electrical steel products. The latter category consists of grades of GOES and NOES, which are both produced as hot-rolled steel sheet at the AK Steel’s plant at Butler, Pennsylvania and finished at its plant in Zanesville, Ohio. AK Steel’s total sales were \$5,933.7 million and its operating loss was \$128.1 million in 2012. NOES’ operations represent <sup>3</sup> percent of total sales and <sup>3</sup> percent of the firm’s overall operating loss. Sales of NOES accounted for about <sup>3</sup> percent, by quantity, of sales of the firm’s shipments of stainless and electrical steels (segment reporting that includes NOES). AK Steel’s 2012 Annual Report and Form 10-K, pp. 15 and 17.

Likewise, NOES constitutes <sup>3</sup>.

<sup>4</sup> AK Steel’s postconference brief indicates that “<sup>3</sup>.” Petitioner’s postconference brief, p. 30.

<sup>5</sup> In AK Steel’s discussion of 2012 financial results, it stated that “The challenging domestic and global economic conditions that the Company, and much of the steel industry, have faced since the beginning of the global recession in 2008 continued in 2012 and had a negative impact on the Company’s financial performance. . . The Company also continued to experience a decline in electrical steel pricing during

*(continued...)*

**Table VI-1**

**NOES: Results of operations of U.S. firms, 2010-12, January-June 2012, and January-June 2013**

\* \* \* \* \*

**Table VI-2**

**NOES: Results of operations of U.S. firms, by firm, 2010-12, January-June 2012, and January-June 2013**

\* \* \* \* \*

### **Net sales**

As may be seen from tables VI-1 and VI-2, total sales increased from 2010 to a high in 2011 based on greater volume and average unit value of sales. Total sales declined from 2011 to 2012 as both volume and average unit values were lower. Total net sales were lower in January-June 2013 versus the comparable period in 2012 for the same reason.<sup>6</sup> As depicted in table VI-2, AK Steel \*\*\*.<sup>7</sup> Both firms' total net sales include U.S. commercial shipments and exports.<sup>8</sup> Exports \*\*\*. The share of exports in total shipments \*\*\*. AK Steel's shipments of semiprocessed NOES accounted for \*\*\* of its total shipments in 2012; Nucor's shipments of semiprocessed NOES accounted for \*\*\* of its total shipments in that year.<sup>9</sup>

### **Costs/expenses**

Total COGS on a value basis and as a ratio to sales \*\*\* between 2010 and 2012. While total COGS were \*\*\* in January-June 2013 than in January-June 2012, the ratio of COGS to sales \*\*\*. As shown in table VI-2, the ratio of COGS to sales \*\*\* between 2010 and 2012. While the ratio was \*\*\*. The average unit value of COGS \*\*\* between the full yearly periods and was \*\*\*

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*(...continued)*

the year, particularly with regard to international sales, as a result of the weak global economic conditions and increased global production capacity." AK Steel's 2012 Annual Report and Form 10-K, p 16. AK Steel noted that net sales to customers outside the United States also were lower in 2012 compared to 2011. The firm also stated that a majority of revenue from sales outside the United States is associated with electrical and stainless steel products. Ibid. p. 18.

<sup>6</sup> See note 4, earlier in this section of the report.

<sup>7</sup> In response to a question from staff, Nucor stated "\*\*\*\*". E-mail to Commission staff from \*\*\*, November 18, 2013.

<sup>8</sup> Nucor exported to \*\*\* and AK Steel exported to \*\*\*.

<sup>9</sup> Calculated from the questionnaire responses of \*\*\*\*.

in interim 2013 than in interim 2012. The cost components of COGS \*\*\*.<sup>10</sup> On the other hand, \*\*\*.<sup>11</sup>

Total SG&A expenses declined \*\*\* between 2010 and 2012 and were lower in January-June 2013 versus the comparable period in 2012. The dollar value of SG&A expenses is \*\*\* , as depicted in table VI-2.

### Profitability

As shown in table VI-1, total operating \*\*\*. As shown in table VI-2, \*\*\*.<sup>12</sup> Net income before taxes and cash flows followed the trends of operating income or (loss). Only \*\*\*.<sup>13</sup>

### Variance analysis

A variance analysis for the operations of AK Steel and Nucor on NOES is presented in table VI-3.<sup>14</sup> The information for this variance analysis is derived from table VI-1. This indicates that the \*\*\*.

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<sup>10</sup> All things being equal, given the \*\*\*.

<sup>11</sup> Changes in average unit values of sales and raw material costs generally tracked each other between 2010 and 2012 and between the interim periods. The year-to-year difference in the change of these two values indicates whether the metal spread widened or narrowed (“widened” indicates sales unit values rose more, or fell less, than the average unit value of raw material costs, whereas “narrowed” indicates the opposite). The metal spread \*\*\*.

<sup>12</sup> In its postconference brief, AK Steel reported that \*\*\*. Petitioner’s postconference brief, answers to questions from Commission staff, p. 7.

<sup>13</sup> A portion of \*\*\*. See e-mail to Commission staff from \*\*\* , November 19, 2013. AK Steel has a defined benefit pension and medical benefits plan; it “provides noncontributory pension and various healthcare and life insurance benefits to a significant portion of its employees and retirees.” The pension plan is not fully funded. The contribution amounts are presented and discussed in the firm’s 2012 Form 10-K on pages 59-64. In addition, AK Steel recognized “pension corridor charges” in its annual report (\$268.1 million and \$157.3 million in 2011 and 2012, respectively). These are accrued noncash charges, which reflect unrecognized actuarial net gains or losses that exceed 10% of the larger of projected benefit obligations or plan assets. For a discussion of this, see AK Steel’s 2012 Form 10-K, p. 7. The pension corridor charge was \*\*\*. E-mail to Commission staff from \*\*\* , November 19, 2013.

Nucor makes contributions to a profit sharing and retirement savings plan (termed a “defined contribution” plan). The firm also has a medical plan covering certain eligible early retirees. See Nucor’s 2012 Annual Report, p. 62.

<sup>14</sup> 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

(continued...)

**Table VI-3**  
**NOES: Variance analysis on the operations of U.S. firms, 2010-12, January-June 2012, and January-June 2013**

\* \* \* \* \*

**CAPITAL EXPENDITURES AND RESEARCH AND DEVELOPMENT EXPENSES**

Table VI-4 presents capital expenditures and research and development (“R&D”) expenses made by AK Steel and Nucor. AK Steel reported that these generally consisted of a new highly-efficient electric arc furnace, a new ladle metallurgy furnace, and several upgrades of processing equipment at its plants in Butler, Pennsylvania, and Zanesville, Ohio.<sup>15</sup> Nucor reported \*\*\*.<sup>16</sup>

**Table VI-4**  
**NOES: Capital expenditures and research and development expenses of U.S. firms, 2010-12, January-June 2012, and January-June 2013**

\* \* \* \* \*

**ASSETS AND RETURN ON INVESTMENT**

Table VI-5 presents data on the total assets and its return on investment (“ROI”) for the two reporting U.S. firms.<sup>17</sup> ROI is a ratio that is calculated by dividing operating income or (loss) by total assets. ROI followed the trend in operating income or loss, shown earlier in table VI-1.

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(...continued)

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 volume variance is the sum of the volume components of the net sales, COGS, and SG&A expense variances. The overall volume component of the variance analysis is generally small.

<sup>15</sup> Conference transcript, p. 66 (Schoen).

<sup>16</sup> In an e-mail to Commission staff \*\*\*. E-mail to Commission staff from \*\*\*, November 15, 2013.

<sup>17</sup> At the conference staff asked AK Steel to define “adequate return.” This question referred to \*\*\*. AK Steel defined it as \*\*\*. Petitioner’s postconference brief, answers to questions from Commission staff, p. 7. By way of illustration of the firm’s cost of capital, in November 2012 AK Steel issued \$350 million aggregate principal amount of 8.750% senior secured notes due December 2018; in the same month it issued \$150 million of 5.0% senior unsecured notes due December 2019. Both issuances were used to repay outstanding borrowings under the firm’s credit facility. The firm has a credit facility of \$1.1 billion at a nominal interest rate of 2.3 percent, which expires in 2016. See AK Steel’s annual report, pp. 57. It may be noted that Nucor’s notes due in 2018 have an interest rate of approximately 5.85%. Nucor also has an unsecured credit facility for up to \$1.50 billion in revolving loans based on the credit rating of the firm’s senior unsecured debt. See Nucor’s 2012 Annual Report, p. 57.

**Table VI-5**  
**NOES: U.S. firms' total assets and return on investment, 2010-12, January-June 2012, and January-June 2013**

\* \* \* \* \*

### **CAPITAL AND INVESTMENT**

The Commission requested U.S. producers of NOES to describe any actual or potential negative effects of imports of NOES from China, Germany, Japan, Korea, Sweden, and/or Taiwan on their firms' growth, investment, ability to raise capital, development and production efforts, or the scale of capital investments. The responses of AK Steel and Nucor are shown below.

#### **Actual negative effects**

AK Steel: "\*\*\*\*."

Nucor: "\*\*\*\*."

#### **Anticipated negative effects**

AK Steel: "\*\*\*\*." This comment was made with respect to each of the subject countries.

Nucor: "\*\*\*\*." This comment was made with respect to each of the subject countries.



## 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<sup>1</sup>--*

- (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,*

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<sup>1</sup> 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).<sup>2</sup>*

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.

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<sup>2</sup> Section 771(7)(F)(iii) of the Act (19 U.S.C. § 1677(7)(F)(iii)) further provides that, in antidumping investigations, ". . . the Commission shall consider whether dumping in the markets of foreign countries (as evidenced by dumping findings or antidumping remedies in other 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

Table VII-1 presents data provided by Baosteel and Angang, two producers of NOES in China.<sup>3</sup> Chinese exports of NOES to the United States, all of which consisted of fully processed NOES, accounted for \*\*\* percent of U.S. imports of NOES from China in 2012.<sup>4</sup> Chinese production capacity \*\*\* between 2010 and 2012 but \*\*\*. Chinese producers' home market shipments accounted for the vast majority (\*\*\*) percent of their total shipments in 2012.

Exports of NOES from China to the United States, which accounted for no more than \*\*\* of its total shipments over the period, decreased between 2010 and 2012 and were higher in interim 2013 than in interim 2012. Exports to markets other than the United States accounted for between \*\*\* and \*\*\* percent of total shipments over the period.<sup>5</sup> Baosteel and Angang reported that \*\*\* and \*\*\* percent of their respective total sales in the most recent fiscal year were represented by sales of NOES. \*\*\* reported maintaining inventories of NOES in the United States since 2010.

**Table VII-1**  
**NOES: Data for producers in China, 2010-2012, January-June 2012, and January-June 2013**

\* \* \* \* \*

## THE INDUSTRY IN GERMANY

Tables VII-2 present data provided by ArcelorMittal Germany,<sup>6</sup> CDW,<sup>7</sup> and ThyssenKrupp,<sup>8</sup> three producers of NOES in Germany. These firms' exports to the United States, all of which consisted of fully processed NOES, accounted for \*\*\* percent of U.S. imports of NOES from Germany in 2012. Exports of NOES to the United States accounted for no greater than \*\*\* percent of German producers' reported total shipments.<sup>9</sup> Based on testimony

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<sup>3</sup> Baosteel is related to Baosteel America Inc., an importer of NOES in the United States. CISA believes that \*\*\*. CISA's postconference brief, p. 6. Angang is related to Angang America, an importer of NOES in the United States. Angang \*\*\*.

<sup>4</sup> CISA argues that official import data with regard to China are inaccurate, citing \*\*\*. According to official import statistics, imports from China increased by 70.1 percent between 2010 and 2012; \*\*\* over the same period.

<sup>5</sup> Principal export markets identified included: \*\*\*.

<sup>6</sup> ArcelorMittal Germany is related to NOES producers ArcelorMittal Frýdek-Místek (Czech Republic) and ArcelorMittal Mediteranee (France) as well as ArcelorMittal America, an importer of NOES in the United States. ArcelorMittal Germany reported \*\*\*.

<sup>7</sup> CDW is related to CDW Services, an importer of NOES in the United States.

<sup>8</sup> ThyssenKrupp is related to ThyssenKrupp Electrical Steel India Private Limited, a producer of NOES in India, and ThyssenKrupp Steel North America, an importer of NOES in the United States.

<sup>9</sup> Virtually all (other than a few sample test shipments) of ThyssenKrupp's exports of NOES to the U.S. consist of master coils, which are not slit. ThyssenKrupp's postconference brief, Answers to staff questions, p. 3.

presented at the staff conference, exports of NOES from Germany to the United States are projected to decrease due of specific developments in customer relationships.<sup>10</sup> German producers cite EU countries as their principal export markets.<sup>11</sup> ArcelorMittal Germany, CDW and ThyssenKrupp reported that \*\*\* percent, \*\*\* percent and \*\*\* percent of their respective total sales in the most recent fiscal year were represented by sales of NOES.

When asked to describe changes in relation to the production of NOES, ThyssenKrupp reported \*\*\*. When asked to describe the constraints that set limits on the firm’s production capacity, ArcelorMittal Germany reported that \*\*\*; CDW reported \*\*\*; and ThyssenKrupp cited the \*\*\*. ThyssenKrupp also noted that production capacity of NOES is limited by \*\*\*.

When asked if their firms have the ability to switch production between NOES and other products using the same equipment and labor, ArcelorMittal Germany reported that \*\*\*. ThyssenKrupp indicated that it has conducted test runs for certain cold-rolled products at its NOES facility, ensuring that it will be able utilization unused NOES capacity in the future.<sup>12</sup> In its questionnaire response, \*\*\*. Although it does not currently do so, \*\*\* using the same equipment and machinery used to produce NOES.

When asked to identify what other products are made on the same equipment and machinery used in the production of NOES, \*\*\*. Table VII-3 provides overall capacity and production data with regard to these products.

**Table VII-2**  
**NOES: Data for producers in Germany, 2010-2012, January-June 2012, and January-June 2013**

\* \* \* \* \*

**Table VII-3**  
**NOES: German producers’ overall capacity and production of products on the same equipment as NOES, 2010-12, January-June 2012, and January-June 2013**

\* \* \* \* \*

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<sup>10</sup> ThyssenKrupp’s largest U.S. customer for NOES shifted much of its stamping operations from the United States to Germany in 2012. As a result, ThyssenKrupp halted all of its U.S. exports of NOES to this customer and has redirected these shipments to the German market. Conference transcript, p. 103 (LaFrankie) and ThyssenKrupp’s postconference brief, p. 12. CDW’s projected exports in 2013 and 2014 are lower because a major customer that accounted for over half of its U.S. sales (\*\*\*), completed a major product using a specialized product manufactured by CDW in 2012 and does not plan to begin another one. Conference transcript, pp. 107-108 (McPhie) and CDW’s postconference brief, p. 6.

<sup>11</sup> ThyssenKrupp’s postconference brief, p. 17.

<sup>12</sup> Conference transcript, p. 104 (LaFrankie) and ThyssenKrupp’s postconference brief, p. 15.

## THE INDUSTRY IN JAPAN

Table VII-4 presents data provided by Metal One,<sup>13</sup> JFE,<sup>14</sup> and Nippon Steel,<sup>15</sup> three producers/exporters of NOES in Japan. These firms' exports to the United States, all of which consisted of fully processed NOES, accounted for \*\*\* percent of U.S. imports of NOES from Japan in 2012. Exports of NOES from Japan accounted for no greater than \*\*\* percent of total shipments over the period. Exports of NOES from Japan increased between 2010 and 2012, but were lower in interim 2013 than in interim 2012. Exports to markets other than the United States accounted for the between \*\*\* and \*\*\* over the period, with principal export markets being identified as \*\*\*. JFE and Nippon Steel reported that \*\*\* percent and their respective total sales in the most recent fiscal year were represented by sales of NOES.

When asked to describe changes in relation to the production of NOES, JFE reported that \*\*\* and Nippon Steel reported the \*\*\*.<sup>16</sup> Nippon Steel added that \*\*\*. When asked to describe the constraints that set limits on the firm's production capacity, JFE reported that \*\*\*. Nippon Steel added that \*\*\*.

When asked if their firms have the ability to switch production between NOES and other products using the same equipment and labor, JFE identified \*\*\* and Nippon Steel indicated \*\*\*.

When asked to identify what other products are made on the same equipment and machinery used in the production of NOES, Nippon Steel reported \*\*\* and JFE reported \*\*\*.<sup>17</sup> Table VII-5 provides Japanese producers' overall capacity and production data with regard to products that use the same equipment and machinery used to produce NOES.

**Table VII-4**  
**NOES: Data for producers in Japan, 2010-2012, January-June 2012, and January-June 2013**

\* \* \* \* \*

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<sup>13</sup> Metal One is related to Metal One America, an importer of NOES in the United States. Metal One reported \*\*\*.

<sup>14</sup> JFE is related to JFE Shoji America, an importer of NOES in the United States. JFE has reportedly entered into a technical assistance arrangement with JSW Steel to produce NOES in India by late 2014. Conference transcript, p. 47 (Jones).

<sup>15</sup> Nippon Steel is related to Sumitomo America, an importer of NOES in the United States. Nippon Steel is related to China Steel Sumikin-Vietnam Joint Stock Company, a joint venture with China Steel of Taiwan, which will produce NOES in Vietnam. Conference transcript, p. 47-48 (Jones).

<sup>16</sup> Nippon Steel reported \*\*\*.

<sup>17</sup> Based on the scope of these investigations, NOES is defined as having a thickness of 0.20 mm or more and containing by weight at least 1.25 percent of silicon and less than 3.5 percent of silicon.

**Table VII-5**

**NOES: Japanese producers' overall capacity and production of products on the same equipment as NOES, 2010-12, January-June 2012, and January-June 2013**

\* \* \* \* \*

**THE INDUSTRY IN KOREA**

Table VII-6 presents data provided by POSCO, the sole producer of NOES in Korea.<sup>18</sup> POSCO's exports to the United States, all of which consisted of fully processed NOES, accounted for \*\*\* percent of U.S. imports of NOES from Korea in 2012. POSCO's exports to the United States, which accounted for no greater than \*\*\* percent of total shipments, decreased between 2010 and 2012 and were lower in interim 2013 than in interim 2012. POSCO cited South Asia and China as its principal export markets. POSCO reported that \*\*\* percent and their respective total sales in the most recent fiscal year were represented by sales of NOES.

When asked to describe the constraints that set limits on the firm's production capacity, POSCO reported that \*\*\*.

POSCO reported \*\*\* using the same equipment and machinery used in the production of NOES. Table VII-7 provides POSCO's overall capacity and production data with regard to products that use the same equipment and machinery used to produce NOES.

**Table VII-6**

**NOES: Data for producers in Korea, 2010-2012, January-June 2012, and January-June 2013**

\* \* \* \* \*

**Table VII-7**

**NOES: Korean producer's overall capacity and production of products on the same equipment as NOES, 2010-12, January-June 2012, and January-June 2013**

\* \* \* \* \*

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<sup>18</sup> The Commission also received a foreign producer questionnaire from Hyundai; however, \*\*\*. POSCO is related to POSCO America and Daewoo America, two importers of NOES in the United States. POSCO is reportedly nearing completion of a NOES facility in India. Conference transcript, p. 47 (Jones).

## THE INDUSTRY IN SWEDEN

Table VII-8 presents data provided by Surahammars, the sole producer of NOES in Sweden.<sup>19</sup> Surahammars' exports to the United States, all of which consisted of fully processed NOES, accounted for \*\*\* percent of U.S. imports of NOES from Sweden in 2012. Surahammars' exports to the United States, which accounted for between \*\*\* percent and \*\*\* percent over the period, increased between 2010 and 2012, but were lower in interim 2013 than in interim 2012. Cogent Power, the firm responsible for handling Surahammars' imports into the United States, supplies slit products (including blanks), as opposed to wide coils, dedicated for the end customer's use.<sup>20</sup> Exports to markets other than the United States, identified principally as \*\*\*, accounted for between \*\*\* percent and \*\*\* percent of the firm's total shipments. Surahammars reported that \*\*\* percent of its total sales in the most recent fiscal year were represented by sales of NOES.

When asked to describe changes in relation to the production of NOES, Surahammars reported \*\*\*.<sup>21</sup> When asked to describe the constraints that set limits on the firm's production capacity, Surahammars reported \*\*\*. When asked if their firms have the ability to switch production between NOES and other products using the same equipment and labor, Surahammars reported that it \*\*\*.

Surahammars reported \*\*\* using the same equipment and machinery used in the production of NOES. Table VII-9 provides Surahammars overall capacity and production data with regard to products that use the same equipment and machinery used to produce NOES.

**Table VII-8**  
**NOES: Data for producer in Sweden, 2010-2012, January-June 2012, and January-June 2013**

\* \* \* \* \*

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<sup>19</sup> Cogent's postconference brief, p. 2.

<sup>20</sup> A small percentage of NOES from Sweden was sold, without Surahammars or Cogent's knowledge, into the U.S. market in coil form. These shipments accounted for \*\*\* percent of Surahammars' U.S. shipment of NOES during the period. Surahammars noted that this is not a normal channel for U.S. sales of Swedish NOES. Surahammars and Cogent have reportedly taken steps to ensure that such shipments will not occur in the future. Cogent's postconference brief, pp.3-5

<sup>21</sup> According to testimony at the staff conference, Surahammars has reduced its workforce and with it, production capacity. Conference transcript, pp. 112-113 (Harper). As detailed in table VII-8, Surahammars' reported production capacity was lower in interim 2013 than in interim 2012 and is projected to be \*\*\*.

**Table VII-9**

**NOES: Swedish producer's overall capacity and production of products on the same equipment as NOES, 2010-12, January-June 2012, and January-June 2013**

\* \* \* \* \*

### THE INDUSTRY IN TAIWAN

Table VII-10 presents data provided by China Steel, the sole producer of NOES in Taiwan.<sup>22</sup> China Steel's exports to the United States, all of which consisted of fully processed NOES, accounted for \*\*\* percent of U.S. imports of NOES from Taiwan in 2012. China Steel's exports to the United States, which accounted for between \*\*\* percent and \*\*\* percent over the period, increased between 2010 and 2012, but were lower in interim 2013 than in interim 2012.<sup>23</sup> Exports to markets other than the United States, particularly to China and South Asian countries, accounted for the majority of China Steel's total shipments. China Steel reported that \*\*\* percent of its total sales in the most recent fiscal year were represented by sales of NOES.

When asked to identify any anticipated changes in relation to the production of NOES, China Steel reported \*\*\*. China Steel noted that the \*\*\*. When asked to identify the constraints that set limits on the firm's production capacity, China Steel reported \*\*\*.

**Table VII-10**

**NOES: Data for producers in Taiwan, 2010-2012, January-June 2012, and January-June 2013**

\* \* \* \* \*

### U.S. INVENTORIES OF IMPORTED MERCHANDISE

Table VII-11 presents data on U.S. importers' reported end-of-period inventories of NOES.<sup>24</sup>

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<sup>22</sup> Conference transcript, p. 94 (Weinstein). China Steel is related to China Steel Sumikin-Vietnam Joint Stock Company, a joint venture with Nippon Steel, which will produce NOES in Vietnam. China Steel is also reportedly building a NOES facility in India. Conference transcript, pp. 47-48 (Jones). The Commission also received a questionnaire response from Leicong; \*\*\*.

<sup>23</sup> All of China Steel's exports to the United States consisted of NOES in coil, not slit form. China Steel's postconference brief, p. 2.

<sup>24</sup> Firms that imported NOES from \*\*\* reported no end-of-period inventories; therefore, those countries do not appear in table VII-10.

**Table VII-11**  
**NOES: U.S. importers' inventories, 2010-2012, January-June 2012, and January-June 2013**

\* \* \* \* \*

### **U.S. IMPORTERS' OUTSTANDING ORDERS**

The Commission requested importers to indicate whether they imported or arranged for the importation of NOES from China, Germany, Japan, Korea, Sweden, and Taiwan after June 30, 2013. Table VII-12 presents these data.

**Table VII-12**  
**NOES: Arranged imports, July 2013-June 2014**

\* \* \* \* \*

### **ANTIDUMPING OR COUNTERVAILING DUTY ORDERS IN THIRD-COUNTRY MARKETS**

On July 17, 2013, Brazil's Foreign Trade Chamber, Camex, imposed antidumping duties on imports of NOES From China, Taiwan, and Korea. The duties range from between \$175.94 to \$432.95 per ton on imports from China; from \$132.50 to \$231.40 per ton on imports from Korea; and from \$198.34 to \$567.16 per ton on imports from Taiwan.<sup>25</sup>

### **INFORMATION ON NONSUBJECT COUNTRIES**

In assessing whether the domestic industry is materially injured or threatened with material injury "by reason of subject imports," the legislative history states "that the Commission must examine all relevant evidence, including any known factors, other than the dumped or subsidized imports, that may be injuring the domestic industry, and that the Commission must examine those other factors (including non-subject imports) 'to ensure that it is not attributing injury from other sources to the subject imports.'"<sup>26</sup>

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<sup>25</sup> "Brazil trade body sets anti-dumping penalties on GNO steel imports," <http://in.reuters.com/article/2013/07/17/snippet-idINL1NOFNODG20130717>, retrieved November 5, 2013. Brazilian authorities defined NOES as having between 0.6 percent and 6.0 percent of silicon. Baoshan's postconference brief, p. 4.

<sup>26</sup> *Mittal Steel Point Lisas Ltd. v. United States*, Slip Op. 2007-1552 at 17 (Fed. Cir. Sept. 18, 2008), quoting from Statement of Administrative Action on Uruguay Round Agreements Act, H.R. Rep. 103-316, Vol. I at 851-52; see also *Bratsk Aluminum Smelter v. United States*, 444 F.3d 1369 (Fed. Cir. 2006).

According to official Commerce import statistics, U.S. imports of NOES from nonsubject sources accounted for between 4.2 and 8.8 percent of total U.S. imports with France and Australia being the two largest nonsubject sources of NOES over the period.<sup>27</sup> In addition, firms responding to the Commission's U.S. importers questionnaire identified NOES producers in other nonsubject countries including Austria (Voestalpine AG), Brazil (Aperam S.A.), and Russia (Novolipetsk). As noted earlier, a number of NOES producers in subject countries (POSCO of Korea, JFE of Japan, and China Steel of Japan) are building or are planning on expanding NOES capacity in India and Vietnam.<sup>28</sup>

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<sup>27</sup> NOES producers in these countries include Blue Scope Steel (Australia) and ArcelorMittal Mediteranee (France).

<sup>28</sup> Conference transcript, pp. 47-48 (Jones).

**APPENDIX A**

***FEDERAL REGISTER NOTICES***



The Commission makes available notices relevant to its investigations and reviews on its website, [www.usitc.gov](http://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 62660 October 22, 2013	<i>Non-Oriented Electrical Steel From China, Germany, Japan, Korea, Sweden, and Taiwan: Institution of Antidumping and Countervailing Duty Investigations and Scheduling of Preliminary Phase Investigations</i>	<a href="http://www.gpo.gov/fdsys/pkg/FR-2013-10-22/html/2013-24337.htm">http://www.gpo.gov/fdsys/pkg/FR-2013-10-22/html/2013-24337.htm</a>
78 FR 68412, November 14, 2013	<i>Non-Oriented Electrical Steel From the People's Republic of China, the Republic of Korea, and Taiwan: Initiation of Countervailing Duty Investigations</i>	<a href="http://www.gpo.gov/fdsys/pkg/FR-2013-11-14/html/2013-27316.htm">http://www.gpo.gov/fdsys/pkg/FR-2013-11-14/html/2013-27316.htm</a>
78 FR 69041, November 18, 2013	<i>Non-Oriented Electrical Steel From the People's Republic of China, Germany, Japan, the Republic of Korea, Sweden and Taiwan: Initiation of Antidumping Duty Investigations</i>	<a href="http://www.gpo.gov/fdsys/pkg/FR-2013-11-18/html/2013-27304.htm">http://www.gpo.gov/fdsys/pkg/FR-2013-11-18/html/2013-27304.htm</a>



**APPENDIX B**  
**CONFERENCE WITNESSES**



## CALENDAR OF PUBLIC PRELIMINARY CONFERENCE

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

**Subject:** Non-Oriented Electrical Steel from China, Germany, Japan, Korea, Sweden, and Taiwan  
**Inv. Nos.:** 701-TA-506-508 and 731-TA-1238-1243 (Preliminary)  
**Date and Time:** November 6, 2013 - 9:30 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:**

Petitioner (**Joseph W. Dorn**, King & Spalding)  
Respondents (**James P. Durling**, Curtis, Mallet-Prevost, Colt and Mosle LLP)

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

King & Spalding  
Washington, DC  
on behalf of

AK Steel Corporation

**Eric Petersen**, Vice President of Sales and Customer Service, AK Steel Corporation  
**Geoff Pfeiffer**, General Manager of Specialty Steel Sales, AK Steel Corporation  
**Steve Konstantinidis**, Products Manager of Electrical Steel, AK Steel Corporation  
**Jerry Schoen**, Principal Engineer, Product Development & Applications Engineering, AK Steel Corporation  
**Jeffrey Zackerman**, Assistant General Counsel, Commercial Affairs, AK Steel Corporation

**Joseph W. Dorn** )  
**Stephen A. Jones** ) – OF COUNSEL  
**Brian E. McGill** )

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

Morris Manning & Martin LLP  
Washington, DC  
on behalf of

China Steel Corporation (“CSC”)

**Jonathan Weinstein**, Vice President Sales, Metallia U.S.A., LLC

**Julie C. Mendoza** )  
 ) – OF COUNSEL  
**R. Will Planert** )

Curtis, Mallet-Prevost, Colt & Mosle LLP  
Washington, DC  
on behalf of

JFE Steel Corporation (“JFE”)  
Nippon Steel & Sumitomo Metal Corporation (“NSSMC”)

**Hiroyuki Azeyanagi**, Staff Manager, JFE Steel Corporation

**Daniel L. Porter** )  
**James P. Durling** ) – OF COUNSEL  
**Matthew P. McCullough** )

Dentons US LLP  
Washington, DC  
on behalf of

China Iron and Steel Association (“CISA”)

**Mark Lunn** ) – OF COUNSEL

Steptoe & Johnson LLP  
Washington, DC  
on behalf of

Cogent Power Inc.  
Surahammars Bruks AB

**Ron Harper**, President, Cogent Power

**Joel Kaufman** )  
 ) – OF COUNSEL  
**Alice A. Kipel** )

Hughes Hubbard & Reed LLP  
Washington, DC  
on behalf of

ThyssenKrupp Steel Europe AG  
ThyssenKrupp Steel North America Inc.

**Robert L. LaFrankie** ) – OF COUNSEL

Squire Sanders (US) LLP  
Washington, DC  
on behalf of

C.D. Wälzholz KG (“Wälzholz”)

**Iain R. McPhie** ) – OF COUNSEL

**REBUTTAL/CLOSING REMARKS:**

Petitioner (**Joseph W. Dorn**, King & Spalding)  
Respondents (**Matthew P. McCullough**, Curtis, Mallet-Prevost, Colt and Mosle LLP )



**APPENDIX C**  
**SUMMARY DATA**



Table C-1

NOES: Summary data concerning the U.S. market, 2010-12, January to June 2012, and January to June 2013

(Quantity=short tons; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per short ton; Period changes=percent—exceptions noted)

	Report data					Period changes			
	2010	Calendar year 2011	2012	January to June 2012	2013	2010-12	Calendar year 2010-11	2011-12	Jan-June 2012-13
U.S. consumption quantity:									
Amount.....	***	***	***	***	***	***	***	***	***
Producers' share (1).....	***	***	***	***	***	***	***	***	***
Importers' share (1):									
China.....	***	***	***	***	***	***	***	***	***
Germany.....	***	***	***	***	***	***	***	***	***
Japan.....	***	***	***	***	***	***	***	***	***
Korea.....	***	***	***	***	***	***	***	***	***
Sweden.....	***	***	***	***	***	***	***	***	***
Taiwan.....	***	***	***	***	***	***	***	***	***
Subtotal, subject.....	***	***	***	***	***	***	***	***	***
All other sources, nonsubject.....	***	***	***	***	***	***	***	***	***
Total imports.....	***	***	***	***	***	***	***	***	***
U.S. consumption value:									
Amount.....	***	***	***	***	***	***	***	***	***
Producers' share (1).....	***	***	***	***	***	***	***	***	***
Importers' share (1):									
China.....	***	***	***	***	***	***	***	***	***
Germany.....	***	***	***	***	***	***	***	***	***
Japan.....	***	***	***	***	***	***	***	***	***
Korea.....	***	***	***	***	***	***	***	***	***
Sweden.....	***	***	***	***	***	***	***	***	***
Taiwan.....	***	***	***	***	***	***	***	***	***
Subtotal, subject.....	***	***	***	***	***	***	***	***	***
All other sources, nonsubject.....	***	***	***	***	***	***	***	***	***
Total imports.....	***	***	***	***	***	***	***	***	***
U.S. importers' U.S. imports from:									
China:									
Quantity.....	8,275	16,401	14,071	7,394	8,217	70.1	98.2	(14.2)	11.1
Value.....	7,642	19,702	15,400	8,508	7,912	101.5	157.8	(21.8)	(7.0)
Unit value.....	924	1,201	1,094	1,151	963	18.5	30.1	(8.9)	(16.3)
Ending inventory quantity.....	0	0	0	0	0	(2)	(2)	(2)	(2)
Germany:									
Quantity.....	10,831	14,385	9,568	5,852	3,795	(11.7)	32.8	(33.5)	(35.2)
Value.....	12,372	19,492	11,224	6,944	4,163	(9.3)	57.6	(42.4)	(40.0)
Unit value.....	1,142	1,355	1,173	1,186	1,097	2.7	18.6	(13.4)	(7.5)
Ending inventory quantity.....	***	***	***	***	***	***	***	***	***
Japan:									
Quantity.....	20,124	22,747	18,540	11,323	6,915	(7.9)	13.0	(18.5)	(38.9)
Value.....	22,816	29,889	23,625	14,517	8,535	3.5	31.0	(21.0)	(41.2)
Unit value.....	1,134	1,314	1,274	1,282	1,234	12.4	15.9	(3.0)	(3.7)
Ending inventory quantity.....	1,390	1,982	2,403	1,462	2,258	72.9	42.6	21.2	54.4
Korea:									
Quantity.....	5,267	6,880	7,331	4,062	1,357	39.2	30.6	6.6	(66.6)
Value.....	5,526	7,605	6,830	3,941	1,311	23.6	37.6	(10.2)	(66.7)
Unit value.....	1,049	1,105	932	970	966	(11.2)	5.3	(15.7)	(0.5)
Ending inventory quantity.....	***	***	***	***	***	***	***	***	***
Sweden:									
Quantity.....	4,235	8,599	9,359	4,979	3,559	121.0	103.1	8.8	(28.5)
Value.....	6,595	14,467	15,394	8,359	5,283	133.4	119.4	6.4	(36.8)
Unit value.....	1,557	1,682	1,645	1,679	1,484	5.6	8.0	(2.2)	(11.6)
Ending inventory quantity.....	***	***	***	***	***	***	***	***	***
Taiwan:									
Quantity.....	6,776	5,203	17,136	8,201	2,637	152.9	(23.2)	229.4	(67.8)
Value.....	7,929	6,459	18,231	8,945	2,485	129.9	(18.5)	182.2	(72.2)
Unit value.....	1,170	1,242	1,064	1,091	942	(9.1)	6.1	(14.3)	(13.6)
Ending inventory quantity.....	0	0	0	0	0	(2)	(2)	(2)	(2)
Subtotal, subject sources:									
Quantity.....	55,507	74,215	76,006	41,812	26,481	36.9	33.7	2.4	(36.7)
Value.....	62,879	97,615	90,704	51,213	29,688	44.3	55.2	(7.1)	(42.0)
Unit value.....	1,133	1,315	1,193	1,225	1,121	5.3	16.1	(9.3)	(8.5)
Ending inventory quantity.....	3,255	6,941	7,189	6,758	5,981	120.9	113.2	3.6	(11.5)
All other sources:									
Quantity.....	3,559	7,151	6,242	2,956	1,168	75.4	100.9	(12.7)	(60.5)
Value.....	4,640	11,485	8,066	4,003	1,621	73.8	147.5	(29.8)	(59.5)
Unit value.....	1,304	1,606	1,292	1,354	1,388	(0.9)	23.2	(19.5)	2.5
Ending inventory quantity.....	0	0	0	0	0	(2)	(2)	(2)	(2)
Total imports:									
Quantity.....	59,066	81,366	82,248	44,768	27,648	39.2	37.8	1.1	(38.2)
Value.....	67,520	109,101	98,770	55,216	31,309	46.3	61.6	(9.5)	(43.3)
Unit value.....	1,143	1,341	1,201	1,233	1,132	5.1	17.3	(10.4)	(8.2)
Ending inventory quantity.....	3,255	6,941	7,189	6,758	5,981	120.9	113.2	3.6	(11.5)

Table continued on next page.

Table C-1 continued

NOES: Summary data concerning the U.S. market, 2010-12, January to June 2012, and January to June 2013

(Quantity=short tons; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per short ton; Period changes=percent—exceptions noted)

	Report data					Period changes			
	2010	Calendar year 2011	2012	January to June 2012	January to June 2013	2010-12	Calendar year 2010-11	2011-12	Jan-June 2012-13
U.S. producers:									
Average capacity quantity.....	***	***	***	***	***	***	***	***	***
Production quantity.....	***	***	***	***	***	***	***	***	***
Capacity utilization (1).....	***	***	***	***	***	***	***	***	***
U.S. shipments:									
Quantity.....	***	***	***	***	***	***	***	***	***
Value.....	***	***	***	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	***	***	***	***
Export shipments:									
Quantity.....	***	***	***	***	***	***	***	***	***
Value.....	***	***	***	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	***	***	***	***
Ending inventory quantity.....	***	***	***	***	***	***	***	***	***
Inventories/total shipments (1).....	***	***	***	***	***	***	***	***	***
Production workers.....	***	***	***	***	***	***	***	***	***
Hours worked (1,000s).....	***	***	***	***	***	***	***	***	***
Wages paid (\$1,000).....	***	***	***	***	***	***	***	***	***
Productivity (short tons per 1,000 hours).....	***	***	***	***	***	***	***	***	***
Unit labor costs.....	***	***	***	***	***	***	***	***	***
Net Sales:									
Quantity.....	***	***	***	***	***	***	***	***	***
Value.....	***	***	***	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	***	***	***	***
Cost of goods sold (COGS).....	***	***	***	***	***	***	***	***	***
Gross profit of (loss).....	***	***	***	***	***	***	***	***	***
SG&A expenses.....	***	***	***	***	***	***	***	***	***
Operating income or (loss).....	***	***	***	***	***	***	***	***	***
Capital expenditures.....	***	***	***	***	***	***	***	***	***
Unit COGS.....	***	***	***	***	***	***	***	***	***
Unit SG&A expenses.....	***	***	***	***	***	***	***	***	***
Unit operating income or (loss).....	***	***	***	***	***	***	***	***	***
COGS/sales (fn1).....	***	***	***	***	***	***	***	***	***
Operating income or (loss)/sales (fn1).....	***	***	***	***	***	***	***	***	***

Notes:

- (1)—Report data are in percent and period changes are in percentage points.
- (2)—Undefined.

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