Small Diameter Graphite Electrodes from China

Investigation No. 731-TA-1143 (Review)

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U.S. International Trade Commission

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Note.—Information that would reveal confidential operations of individual concerns may not be published and therefore has been deleted.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

UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation No. 731-TA-1143 (Review)

SMALL DIAMETER GRAPHITE ELECTRODES FROM CHINA

DETERMINATION

On the basis of the record¹ developed in the subject five-year review, the United States International Trade Commission (Commission) determines, pursuant to section 751(c) of the Tariff Act of 1930 (19 U.S.C. § 1675(c)), that revocation of the antidumping duty order on small diameter graphite electrodes from China would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.²

BACKGROUND

The Commission instituted this review on January 2, 2014 (79 F.R. 145) and determined on April 7, 2014 that it would conduct an expedited review (79 F.R. 22531, April 22, 2014).

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

² Commissioner Rhonda K. Schmidtlein not participating.

Views of the Commission

Based on the record in this five-year review, we determine under section 751(c) of the Tariff Act of 1930, as amended ("the Tariff Act"), that revocation of the antidumping duty order on small diameter graphite electrodes ("SDGE") from China would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.¹

I. Background

Original Investigation: On January 17, 2008, SGL Carbon LLC ("SGL") and Superior Graphite Company ("Superior") filed an antidumping petition regarding SDGE from China. On February 19, 2009, the Commission issued its determination that the domestic industry was materially injured by reason of imports of SDGE from China that Commerce had determined were sold at less-than-fair value.² On February 26, 2009, Commerce published an antidumping duty order.³

Current Review: On February 3, 2014, GrafTech International Ltd. ("GrafTech"), SGL, and Superior submitted a joint response to the Commission's notice instituting this review. On April 7, 2014, the Commission found each domestic producer's response to be adequate. It further determined that the domestic interested party group response to the notice of institution was adequate because these domestic producers accounted for a substantial portion of domestic SDGE production in 2013. The Commission did not receive a response to the notice of institution from any respondent interested party. Consequently, it determined that the respondent interested party group response was inadequate. In the absence of any circumstances warranting a full review, the Commission unanimously determined to conduct an expedited review of the order.⁴

¹ Commissioner Schmidtlein did not participate in this review.

² Small Diameter Graphite Electrodes from China, Inv. No. 731-TA-1143 (Final), USITC Pub. 4062 (Feb. 2009).

³ 74 Fed. Reg. 8669, 8775 (Feb. 26, 2009).

⁴ Explanation of Commission Determination on Adequacy in *Small Diameter Graphite Electrodes* from China, Inv. No. 731-TA-1143 (Review), EDIS Doc. No. 531769.

II. Domestic Like Product and Industry

A. Domestic Like Product

In making its determination under section 751(c) of the Tariff Act, the Commission defines the "domestic like product" and the "industry." The Tariff Act defines "domestic like product" as "a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation under this subtitle." The Commission's practice in five-year reviews is to examine the domestic like product definition from the original investigation and consider whether the record indicates any reason to revisit the prior findings.⁷

Commerce has defined the imported merchandise within the scope of the order under review as follows:

(A)II SDGEs of any length, whether or not finished, of a kind used in furnaces, with a nominal or actual diameter of 400 millimeters (16 inches) or less, and whether or not attached to a graphite pin joining system or any other type of joining system or hardware. The merchandise covered by the order also includes graphite pin joining systems for SDGEs, of any length, whether or not finished, of a kind used in furnaces, and whether or not the graphite pin joining system is attached to, sold with, or sold separately from, the SDGE. SDGEs and graphite pin joining systems for SDGEs are most commonly used in primary melting, ladle metallurgy, and specialty furnace applications in industries including foundries, smelters, and steel refining operations. SDGEs and graphite pin joining systems for SDGEs that are subject to the order are currently classified under the HTSUS subheadings 8545.11.0010, a 3801.10, and 8545.11.0020. The HTSUS numbers are provided for convenience and customs purposes, but the written description of the scope remains dispositive.

^a The scope described in the order refers to the HTSUS subheading 8545.11.000. We note that, starting in 2010, imports of SDGEs are classified in the HTSUS under subheading 8545.11.0010 and imports of large diameter graphite electrodes are classified under subheading 8545.11.0020.

⁵ 19 U.S.C. § 1677(4)(A).

⁶ 19 U.S.C. § 1677(10); 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); Timken Co. v. United States, 913 F. Supp. 580, 584 (Ct. Int'l Trade 1996); Torrington Co. v. United States, 747 F. Supp. 744, 748-49 (Ct. Int'l Trade 1990), aff'd, 938 F.2d 1278 (Fed. Cir. 1991); see also S. Rep. No. 249, 96th Cong., 1st Sess. 90-91 (1979).

⁷ See, e.g., Internal Combustion Industrial Forklift Trucks from Japan, Inv. No. 731-TA-377 (Second Review), USITC Pub. 3831 at 8-9 (Dec. 2005); Crawfish Tail Meat from China, Inv. No. 731-TA-752 (Review), USITC Pub. 3614 at 4 (July 2003); Steel Concrete Reinforcing Bar from Turkey, Inv. No. 731-TA-745 (Review), USITC Pub. 3577 at 4 (Feb. 2003).

In the original investigation, the Commission defined a single domestic like product consisting of SDGE made in the United States corresponding to the SDGE in the scope of the investigation. The Commission considered and rejected respondents' request to define the domestic like product to include large diameter graphite electrodes ("LDGE") that were not within the scope definition.⁹

The domestic producers stated that they agree with the Commission's definition of the domestic like product in the original investigation. The record of this review does not indicate that there have been any significant changes in the characteristics or uses of SDGE since the original investigation. Therefore, we define the domestic like product as consisting of SDGE

^b See First Circumvention Determination, and accompanying IDM at Comment 6 (the scope of the order is amended to include imports classifiable under HTSUS 3801.10, *i.e.*, un-finished SDGEs).

^c See Second Circumvention Determination, and accompanying IDM at Comment 2 and 1 (the scope of the order is amended to include large diameter graphite electrodes, specifically those of 17 inches produced by Jilin Carbon classifiable under HTSUS 8545.11.0020).⁸

⁸ Issues and Decision Memorandum for the Final Results of Expedited First Sunset Review of the Antidumping Duty Order on Small Diameter Graphite Electrodes from the People's Republic of China from Christian Marsh, Deputy Assistant Secretary for Antidumping and Countervailing Duty Operations to Paul Piquado, Assistant Secretary for Import Administration at 4 (May 2, 2014).

⁹ The Commission found the issue to be a close one. It recognized that there were a number of ways in which SDGE and LDGE might be viewed as forming a continuum, including that price, current carrying capacity, and premium needle coke content all tended to increase with the size of the electrode, and that electrodes of adjacent sizes were most comparable with respect to these attributes. The Commission concluded, however, that, on balance, the record supported limiting the domestic like product to SDGE. It found that the features of graphite electrodes established a clear dividing line between SDGE and LDGE at 16 inches in diameter. First, there was very little overlap in end uses. SDGE were used generally in foundry, specialty furnace applications, and steel mill ladle applications, whereas the great majority of LDGE were used for primary melting of steel scrap in mini-mill electric arc furnaces. Second, there was very limited overlap in manufacturing facilities and equipment used to produce SDGE and LDGE. Of the four producers of graphite electrodes during the original investigation, only one, SGL, was able to produce both products on the same equipment using the same employees. Third, although interchangeability of all graphite electrodes was generally limited to adjacent diameter sizes, SDGE could not be substituted for LDGE in heavy melting applications due to coke content and other physical characteristics. Finally, purchasers did not use SDGE and LDGE for the same applications, often purchased them in separate transactions, and that the level of technical support and service for SDGE and LDGE could vary. USITC Pub. 4062 at 9-10.

¹⁰ Domestic Producers' Response to Notice of Institution at 23.

¹¹ See generally, Confidential Report ("CR") at I-6-12, Public Report ("PR") at I-5-8. We note that GrafTech became a domestic SDGE producer by acquiring C/G Electrodes LLC, a producer of LDGE and later ***. CR at I-13, PR at I-9. It is unclear from the limited record in this expedited review whether GrafTech ***.

made in the United States corresponding to the SDGE in the scope of the order for the same reasons articulated in the original investigation.

B. Domestic Industry

Section 771(4)(A) of the Tariff Act defines the relevant industry 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." 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.

In the original investigation, the Commission defined the domestic industry to consist of all domestic producers of SDGE, which, at that time were SGL and Superior. GrafTech, the third domestic producer that responded to the notice of institution of this review, started producing SDGE in 2013. The domestic producers stated that they agree with the Commission's definition of the domestic industry in the original investigation, with the proviso that the new producer GrafTech be included. There are no related parties issues in this review. Accordingly, we define the domestic industry as consisting of all domestic producers of SDGE, namely GrafTech, SGL, and Superior.

III. Revocation of the Antidumping Duty Order Would Likely Lead to Continuation or Recurrence of Material Injury Within a Reasonably Foreseeable Time

A. Legal Standards

In a five-year review conducted under section 751(c) of the Tariff Act, Commerce will revoke an antidumping or countervailing duty order unless: (1) it makes a determination that dumping or subsidization is likely to continue or recur and (2) the Commission makes a determination that revocation of the antidumping or countervailing duty order "would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time." The SAA states that "under the likelihood standard, the Commission will engage in a counterfactual analysis; it must decide the likely impact in the reasonably foreseeable future of an important change in the status quo – the revocation or termination of a proceeding and the

¹² 19 U.S.C. § 1677(4)(A). The definitions in 19 U.S.C. § 1677 are applicable to the entire subtitle containing the antidumping and countervailing duty laws, including 19 U.S.C. §§ 1675 and 1675a. *See* 19 U.S.C. § 1677.

¹³ Domestic Producers' Response to Notice of Institution at 22 and Exhibit 2.

¹⁴ Domestic Producers' Response to Notice of Institution at 23.

¹⁵ See Domestic Producers' Response to Notice of Institution at 20 and Exh. 10.

¹⁶ 19 U.S.C. § 1675a(a).

elimination of its restraining effects on volumes and prices of imports."¹⁷ Thus, the likelihood standard is prospective in nature. ¹⁸ The U.S. Court of International Trade has found that "likely," as used in the five-year review provisions of the Act, means "probable," and the Commission applies that standard in five-year reviews. ¹⁹

The statute states that "the Commission shall consider that the effects of revocation or termination may not be imminent, but may manifest themselves only over a longer period of time." According to the SAA, a "'reasonably foreseeable time' will vary from case-to-case, but normally will exceed the 'imminent' timeframe applicable in a threat of injury analysis in original investigations." and the commission of the state of the stat

Although the standard in a five-year review is not the same as the standard applied in an original investigation, it contains some of the same fundamental elements. The statute provides that the Commission is to "consider the likely volume, price effect, and impact of imports of the subject merchandise on the industry if the orders are revoked or the suspended investigation is terminated." It directs the Commission to take into account its prior injury determination, whether any improvement in the state of the industry is related to the order or the suspension agreement under review, whether the industry is vulnerable to material injury if

¹⁷ Uruguay Round Statement of Administrative Action (1994) ("SAA"), H.R. Rep. 103-316, vol. I at 883-84. The SAA states that "{t}he likelihood of injury standard applies regardless of the nature of the Commission's original determination (material injury, threat of material injury, or material retardation of an industry). Likewise, the standard applies to suspended investigations that were never completed." *Id.* at 883.

¹⁸ While the SAA states that "a separate determination regarding current material injury is not necessary," it indicates that "the Commission may consider relevant factors such as current and likely continued depressed shipment levels and current and likely continued {sic} prices for the domestic like product in the U.S. market in making its determination of the likelihood of continuation or recurrence of material injury if the order is revoked." SAA at 884.

[&]quot;'likely' means probable within the context of 19 U.S.C. § 1675(c) and 19 U.S.C. § 1675a(a)"), aff'd mem., 140 Fed. Appx. 268 (Fed. Cir. 2005); Nippon Steel Corp. v. United States, 26 CIT 1416, 1419 (2002) (same); Usinor Industeel, S.A. v. United States, 26 CIT 1402, 1404 nn.3, 6 (2002) ("more likely than not" standard is "consistent with the court's opinion;" "the court has not interpreted 'likely' to imply any particular degree of 'certainty'"); Indorama Chemicals (Thailand) Ltd. v. United States, 26 CIT 1059, 1070 (2002) ("standard is based on a likelihood of continuation or recurrence of injury, not a certainty"); Usinor v. United States, 26 CIT 767, 794 (2002) ("'likely' is tantamount to 'probable,' not merely 'possible'").

²⁰ 19 U.S.C. § 1675a(a)(5).

²¹ SAA at 887. Among the factors that the Commission should consider in this regard are "the fungibility or differentiation within the product in question, the level of substitutability between the imported and domestic products, the channels of distribution used, the methods of contracting (such as spot sales or long-term contracts), and lead times for delivery of goods, as well as other factors that may only manifest themselves in the longer term, such as planned investment and the shifting of production facilities." *Id*.

²² 19 U.S.C. § 1675a(a)(1).

the orders are revoked or a suspension agreement is terminated, and any findings by Commerce regarding duty absorption pursuant to 19 U.S.C. § 1675(a)(4).²³ The statute further provides that the presence or absence of any factor that the Commission is required to consider shall not necessarily give decisive guidance with respect to the Commission's determination.²⁴

In evaluating the likely volume of imports of subject merchandise if the orders under review are revoked and/or a suspended investigation is terminated, the Commission is directed to consider whether the likely volume of imports would be significant either in absolute terms or relative to production or consumption in the United States. ²⁵ In doing so, the Commission must consider "all relevant economic factors," including four enumerated factors: (1) any likely increase in production capacity or existing unused production capacity in the exporting country; (2) existing inventories of the subject merchandise, or likely increases in inventories; (3) the existence of barriers to the importation of the subject merchandise into countries other than the United States; and (4) 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. ²⁶

In evaluating the likely price effects of subject imports if the orders under review are revoked and/or a suspended investigation is terminated, the Commission is directed to consider whether there is likely to be significant underselling by the subject imports as compared to the domestic like product and whether the subject imports are likely to enter the United States at prices that otherwise would have a significant depressing or suppressing effect on the price of the domestic like product.²⁷

In evaluating the likely impact of imports of subject merchandise if the orders under review are revoked and/or a suspended investigation is terminated, the Commission is directed to consider all relevant economic factors that are likely to have a bearing on the state of the industry in the United States, including but not limited to the following: (1) likely declines in output, sales, market share, profits, productivity, return on investments, and utilization of capacity; (2) likely negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment; and (3) likely negative effects on the existing development and production efforts of the industry, including efforts to develop a derivative or more advanced version of the domestic like product.²⁸ All relevant economic factors are to be considered within the context of the business cycle and the conditions of competition that are

²³ 19 U.S.C. § 1675a(a)(1). Commerce has not made any duty absorption findings with respect to SDGE from China. CR at I-3, PR at I-3.

²⁴ 19 U.S.C. § 1675a(a)(5). Although the Commission must consider all factors, no one factor is necessarily dispositive. SAA at 886.

²⁵ 19 U.S.C. § 1675a(a)(2).

²⁶ 19 U.S.C. § 1675a(a)(2)(A-D).

²⁷ See 19 U.S.C. § 1675a(a)(3). The SAA states that "{c}onsistent with its practice in investigations, in considering the likely price effects of imports in the event of revocation and termination, the Commission may rely on circumstantial, as well as direct, evidence of the adverse effects of unfairly traded imports on domestic prices." SAA at 886.

²⁸ 19 U.S.C. § 1675a(a)(4).

distinctive to the industry. As instructed by the statute, we have considered the extent to which any improvement in the state of the domestic industry is related to the order under review and whether the industry is vulnerable to material injury upon revocation.²⁹

No respondent interested party participated in this expedited review. The record, therefore, contains limited new information with respect to the SDGE industry in China. There also is limited information on the SDGE market in the United States during the period of review. Accordingly, for our determination, we rely as appropriate on the facts available from the original investigation, and the limited new information on the record in this first five-year review.

B. Conditions of Competition and the Business Cycle

In evaluating the likely impact of the subject imports on the domestic industry if an order is revoked, the statute directs the Commission to consider all relevant economic factors "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."³⁰ The following conditions of competition inform our determination.

1. Demand Conditions

In the original investigation, the Commission stated that demand for SDGE is largely determined by demand for steel.³¹ The Commission characterized much of the original period of investigation (2005-2007) as "a boom period for domestic steel production."³² During that period, apparent U.S. consumption of SDGE increased by *** percent.³³

Demand for SDGE remains driven by demand for steel.³⁴ According to the domestic producers, U.S. steel production dropped by more than 40.7 percent between 2007 and 2009, and although it has grown since 2009, it had not fully recovered to pre-recession levels by 2013. Apparent U.S. consumption of SDGE was *** metric tons in 2013, or *** percent lower than the *** metric tons in 2007.³⁵ The domestic producers state that demand for SDGE is expected to remain fairly stable in 2014 compared to 2013, and to improve slightly in 2015.³⁶

²⁹ The SAA states that in assessing whether the domestic industry is vulnerable to injury if the order is revoked, the Commission "considers, in addition to imports, other factors that may be contributing to overall injury. While these factors, in some cases, may account for the injury to the domestic industry, they may also demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports." SAA at 885.

³⁰ 19 U.S.C. § 1675a(a)(4).

³¹ USITC Pub. 4062 at 14.

³² USITC Pub. 4062 at 14.

³³ Confidential Original Views, EDIS Doc. 319695 at 19, USITC Pub. 4062 at 14.

³⁴ CR at I-8 n.20, PR at I-6 n.20.

³⁵ CR/PR at Table I-4.

³⁶ Domestic Producers' Response to Notice of Institution at 22, Domestic Producers' Final Comments at 4.

2. Supply Conditions

During the original investigation, the U.S. SDGE market was supplied by the domestic industry, subject imports, and nonsubject imports. The domestic industry consisted of SGL and Superior. The domestic industry's capacity to produce SDGE declined from *** metric tons in 2005 and 2006 to *** metric tons in 2007, and its market share fell from *** percent to *** percent in this period. The market share of subject imports increased from *** percent in 2005 to *** percent in 2007, and the market share of nonsubject imports increased from *** percent to *** percent in this period. 37

Since the original investigation, a third domestic producer, GrafTech, entered the SDGE market. In 2010, GrafTech acquired C/G Electrodes LLC, a producer of LDGE, and *** to produce SDGE. In 2013, the domestic industry supplied a larger share of apparent U.S. consumption, *** percent, than it did in 2007. By contrast, the 2013 market share of subject imports was *** percent, lower than it was in 2007. Nonsubject imports supplied the largest share of the U.S. market in 2013, with *** percent of apparent U.S. consumption. In 2013, the three largest suppliers of nonsubject imports to the U.S. market were Japan, Mexico, and Canada.

3. Substitutability

In the original investigation, the Commission stated that the record indicated that the domestic like product and subject imports were at least moderately interchangeable. *** U.S. producers and a majority of importers reported that SDGE from China and SDGE produced in the United States were frequently interchangeable; and nearly all of the responding purchasers reported that SDGE from China and SDGE produced in the United States were always or frequently interchangeable. ⁴¹

There is nothing on the current record indicating that this level of interchangeability between SDGE made in China and in the United States has changed since the original investigation. Accordingly, we again find at least a moderate degree of interchangeability between SDGE made in the United States and China.

C. Likely Volume of Subject Imports

1. The Original Investigation

In the original investigation, the volume of subject imports, which was already sizeable at the beginning of the period of investigation, increased by 36.7 percent between 2005 and

³⁷ Confidential Original Views at 20-21; USITC Pub. 4062 at 14-15.

³⁸ CR at I-13, PR at I-9.

³⁹ CR/PR at Table I-5.

⁴⁰ CR/PR at Table I-3.

⁴¹ Confidential Original Views at 21; USITC Pub. 4062 at 15.

2007, rising from 10,082 metric tons to 13,784 metric tons. The market share of subject imports rose from *** percent in 2005 to *** percent in 2007. The ratio of subject imports to U.S. production rose from *** percent in 2005 to *** percent in 2007. 42

The Commission found that subject imports captured market share from the domestic industry despite overall rising demand during the period of investigation. The domestic industry's market share by quantity declined from *** percent in 2005 to *** percent in 2007. The domestic industry's U.S. shipments declined in each year as subject imports increased and demand increased overall from 2005 to 2007. The Commission also observed that, in contrast to the decline in the domestic industry's market share, nonsubject imports' market share by quantity followed the trend in demand, increasing from *** percent in 2005 to *** percent in 2006, and decreasing to *** percent in 2007.

The Commission found that the volume of subject imports and the increase in that volume was significant, both in absolute terms and relative to consumption and production in the United States.⁴⁴

2. This First Review

The available information in this review indicates that the antidumping duty order has had a disciplining effect on the volume of subject imports of SDGE from China. The volume of subject imports from China in the U.S. market in 2013 was substantially lower than in 2007.⁴⁵

No foreign producer or exporter of SDGE participated in this expedited review and therefore the record contains limited data concerning the SDGE industry in China. There is, however, available public data concerning production and exports of all graphite electrodes, a category that includes both subject and nonsubject merchandise. The available data indicate that China is the world's largest producer and exporter of all graphite electrodes, ⁴⁶ and that the graphite electrode industry in China likely has excess capacity that likely exceeds apparent U.S. consumption of SDGE. ⁴⁷

⁴² Confidential Original Views at 22-23; USITC Pub. 4062 at 16. During the January-September interim 2008 period, subject import volume was slightly lower, but market share was higher, than in interim 2007.

⁴³ Confidential Original Views at 22-23; USITC Pub. 4062 at 16.

⁴⁴ USITC Pub. 4062 at 16.

⁴⁵ The volume of subject imports was 13,784 metric tons in 2007 and 2,352 metric tons in 2013. CR/PR at Table I-2. We recognize that the import data cited were compiled from different sources for 2007 and 2013 – namely, from questionnaire responses and adjusted official Commerce statistics for 2007, and from official Commerce statistics for 2013. CR at I-17, PR at I-11-12.

⁴⁶ Domestic Producers' Response to Notice of Institution at 10; CR/PR at Table I-7.

⁴⁷ In the absence of published statistics on SDGE, Domestic Producers provided capacity data for all graphite electrodes. They provided data showing that 23 of the Chinese industry's producers have the collective capacity to produce about 871,000 metric tons of graphite electrodes, and that the Chinese graphite electrode industry likely had excess capacity of at least 226,013 metric tons in 2012. To put the Chinese industry's capacity and excess capacity in perspective, apparent U.S. consumption of (Continued...)

The United States likely remains an attractive market to the SDGE industry in China. Chinese SDGE producers maintain a significant interest in the U.S. market, as evidenced by their continued exports of SDGE to the United States since the imposition of the order. The circumstances underlying Commerce's two anticircumvention determinations involving subject imports also demonstrate Chinese producers' interest in accessing the U.S. market. Moreover, Chinese SDGE producers have considerable third-country exports that could be redirected to the U.S. market. Finally, antidumping duty investigations and orders against SDGE from China in other countries (namely Brazil, India, Mexico, and South Africa) provide another incentive for subject SDGE producers to increase exports to the United States upon revocation of the order.

In light of these considerations, we find that subject producers in China are likely, absent the restraining effects of the order, to direct substantial and increasing volumes of SDGE to the U.S. market, as they did during the original investigation.⁵² We find that the likely volume of subject imports both in absolute terms and relative to production and consumption in the United States would be significant if the order were revoked.

(...Continued)

SDGE in 2013 was estimated at *** metric tons. Domestic Producers' Response to Notice of Institution at 9-13. CR/PR at Table I-4.

⁴⁸ CR/PR at Table I-2.

duty order was issued. In the first, Commerce found that electrodes finished in the United Kingdom by UK Carbon & Graphite Company Ltd. from Chinese-origin artificial graphite/unfinished SDGE components and sold in the United States circumvented the antidumping duty order on SDGE. *Small Diameter Graphite Electrodes from the People's Republic of China: Affirmative Final Determination of Circumvention of the Antidumping Duty Order*, 77 Fed. Reg. 47596 (August 9, 2012). In the second ruling, Commerce concluded that imports from China of certain graphite electrodes, produced and/or exported by Jilin Carbon, with a diameter of 17 inches, and otherwise meeting the description of inscope merchandise, "constitute merchandise altered in form or appearance in such minor respects that it is properly subject to the Order." *Small Diameter Graphite Electrodes from the People's Republic of China: Affirmative Final Determination of Circumvention of the Antidumping Duty Order and Rescission of Later-Developed Merchandise Anticircumvention Inquiry*, 78 Fed. Reg. 56864 (September 16, 2013).

⁵⁰ See CR/PR at Table I-6 (showing China's exports of all graphite electrodes to various markets, 2008-2013).

⁵¹ CR at I-26, PR at I-18.

⁵² The record of this expedited review does not contain current information regarding any existing inventories of subject merchandise, any likely increase in such inventories, or the potential for product shifting if production facilities in China which can be used to produce SDGE are currently being used to manufacture other products.

D. Likely Price Effects

1. The Original Investigation

In the original investigation, the Commission found that price was an important factor in purchasing decisions. It indicated that domestic producers and a majority of importers reported that non-price differences between subject imports and the domestic like product were only *** in purchasing decisions. While a sizeable minority of responding importers reported that non-price differences were always or frequently an important factor in purchasing decisions, and almost all purchasers indicated that reliability, availability, product consistency, and whether the quality meets industry standards were among the most important factors in purchasing decisions in addition to price, few market participants could identify instances when Chinese imports failed to satisfy quality and availability requirements. ⁵³

The Commission collected quarterly pricing data for five types of SDGE for sales to both end users and distributors. The pricing data showed pervasive underselling by subject imports, with subject imports underselling the domestic like product in 54 of 60 price comparisons by margins ranging from 2.3 percent to 36.2 percent. The Commission found that the effects of underselling on the domestic industry differed with respect to the two domestic producers. Superior, which competed head-to-head with subject imports for sales across most SDGE sizes, submitted evidence of substantial lost sales to low-priced imports. SGL, on the other hand, rather than lowering its prices to meet subject import prices and maintain customers for 10-and 12-inch diameter SDGE, made a business decision to cede its market share for those products and to focus only on customers for whom Chinese quality was not yet acceptable. 55

The Commission found that the effects of underselling were in the lost volumes of domestic sales rather than in direct effects on domestic prices. Available data did not indicate that subject imports had significant depressing effects on domestic prices, as domestic prices for all five products for which data were collected rose over the period of investigation, reflecting strong demand for SDGE and rising raw material prices. The Commission also found that available data did not support a finding that subject imports suppressed domestic prices to a significant degree over the full period of investigation. The commission is supported to the commission of the commission

⁵³ Confidential Original Views at 24; USITC Pub. 4062 at 17.

⁵⁴ USITC Pub. 4062 at 17.

⁵⁵ USITC Pub. 4062 at 17.

⁵⁶ USITC Pub. 4062 at 18. The Commission did observe, however, that for one of the pricing products, which constituted *** percent of the quantity of product for which it had received pricing data and which had the largest margins of underselling by subject imports, the increase in domestic prices was *** than for the other products. Confidential Original Views at 25-26; USITC Pub. 4062 at 18.

⁵⁷ USITC Pub. 4062 at 18. The Commission found, however, that there was evidence that low-priced subject imports had adversely affected domestic producers' prices in certain instances. Specifically, in 2007, domestic unit sales values increased by less than the increase in unit cost of goods sold ("COGS"), despite continued strong demand in that year, and the ratio of COGS to net sales rose (Continued...)

The Commission found that there was significant underselling by subject imports and that this underselling led to lost sales in 2006 and 2007. It noted that the underselling allowed subject imports to gain market share at the expense of the domestic industry and that the domestic industry's U.S. shipments declined throughout the period of investigation, despite generally rising demand. The Commission therefore determined that subject imports had significant adverse price effects on the domestic industry. ⁵⁸

2. This First Review

In this review, we continue to find that subject imports from China are at least moderately interchangeable with SDGE manufactured in the United States and that price is an important factor in purchasing decisions. The record does not contain current pricing comparisons due to the failure of respondent interested parties to participate and the expedited nature of this review. We find that the significant underselling observed during the original investigation would likely recur if the antidumping duty order were revoked. This in turn would likely cause the domestic industry to lose sales and market share, as was the case in the original investigation.

E. Likely Impact

1. The Original Investigation

In the original investigation, the Commission found that the domestic industry's performance indicators showed declining overall trends despite strong demand conditions, and that these declines corresponded to increases in subject imports' volume and market share. ⁵⁹ U.S. producers' production, capacity utilization, and U.S. shipments all declined steadily from 2005 to 2007, but experienced some improvement when the interim periods were compared. ⁶⁰ Employment-related indicators generally declined, although hourly wages rose. ⁶¹

The Commission found that the domestic industry's financial indicators were lackluster despite rising prices and very strong demand throughout the period of investigation. The domestic industry's net sales quantities declined from 2005 to 2007. Net sales by value declined from 2005 to 2006, and then increased from 2006 to 2007. The domestic industry's operating income improved from *** in 2005 to *** in 2006, but declined in 2007. The

^{(...}Continued)

from *** percent in 2006 to *** percent in 2007. Confidential Original Views at 26-27; USITC Pub. 4062 at 18-19.

⁵⁸ USITC Pub. 4062 at 19.

⁵⁹ USITC Pub. 4062 at 19. The Commission recognized that some indicators fluctuated during the period of investigation before recovering *** during interim 2008, after the petition was filed. Confidential Original Views at 28; USITC Pub. 4062 at 19.

⁶⁰ USITC Pub. 4062 at 20.

⁶¹ USITC Pub. 4062 at 20.

domestic industry's operating income margin increased from 2005 to 2006, and then fell in 2007. ⁶²

The Commission examined the role of nonsubject imports in the U.S. market during the period of investigation. It found that SDGE was not a commodity product because the SDGEs were produced to individual customer specifications. The Commission observed that nonsubject imports were generally priced above subject imports, particularly later in the period of investigation, and although nonsubject imports were present in substantial quantities, nonsubject import volume and market share fluctuated in the same manner as trends in apparent U.S. consumption. Moreover, nonsubject imports' market share declined significantly in 2007 when the domestic industry's condition worsened. The Commission concluded that adverse changes to the domestic industry's condition could not be attributed to nonsubject imports. ⁶³

The Commission concluded that subject imports had a significant adverse impact on the condition of the domestic industry during the period of investigation. It explained that subject imports gained market share at the expense of the domestic industry and caused domestic U.S. shipments to dwindle as subject imports aggressively undersold the domestic product. This pattern of underselling resulted in significant lost sales and suppressed domestic prices to some extent in 2007. The increase in subject imports and their adverse effects on U.S. prices materially impacted the domestic industry's profitability and market share over the period of investigation. ⁶⁴

2. This First Review

Because this is an expedited review, we have only limited information with respect to the domestic industry's trade and financial performance, consisting of data that the domestic producers provided in response to the notice of institution. Many of the domestic industry's performance indicators showed deterioration in 2013, as compared with 2007. Nonetheless, the limited record is insufficient for us to make a finding on whether the domestic industry is

⁶² USITC Pub. 4062 at 20-21.

⁶³ USITC Pub. 4062 at 21. The Commission addressed and rejected arguments by respondents that any adverse changes to the domestic industry's condition were not caused by subject imports, but rather by the poor performance of one of the two domestic producers (specifically by that producer's inability to control its direct labor, and selling, general and administrative costs) or by a *** in the domestic industry's export shipments. Confidential Original Views at 32; USITC Pub. 4062 at 22. It also addressed and rejected arguments that there was no adverse impact on the domestic industry because its profitability increased during the period of investigation, or because it allegedly could not supply the entire SDGE market. USITC Pub. 4062 at 23.

⁶⁴ USITC Pub. 4062 at 23.

⁶⁵ See CR/PR at Table I-1.

⁶⁶ We recognize that the domestic industry performed poorly in 2013, but this is based on only a single year of data.

vulnerable to the continuation or recurrence of material injury in the event of revocation of the order. ⁶⁷

In 2013, the capacity of the U.S. producers of SDGE was *** metric tons, production was *** metric tons, and capacity utilization was *** percent. U.S. shipments were *** metric tons, and the domestic producers reported an operating *** of \$*** from sales of \$***, resulting in an operating *** margin of *** percent in 2013. 69

Based on the record, we find that, should the order be revoked, the likely significant volume and likely significant price effects of subject imports would likely have a significant adverse impact on the domestic industry's production, shipments, sales, market share, and revenues, particularly because available information suggests that current and projected demand conditions in the U.S. market are less favorable than during the original investigation. These declines would likely cause the domestic industry's profitability to fall.

We also considered the role of factors other than subject imports, including the presence of nonsubject imports, so as not to attribute injury from other factors to the subject imports. In the original investigation, the Commission concluded that SDGE is not a commodity product. While we acknowledge that imports from nonsubject sources continue to have a sizeable U.S. market presence, and, in fact have increased their market share since the time of the original investigation, no party has argued that nonsubject imports or any other factor is likely to be an alternative cause of material injury to the domestic industry. We thus find that upon revocation, the significant volume of subject imports would again likely take market share from the domestic industry through significant underselling and result in impaired industry performance, as occurred during the original investigation.

Accordingly, we conclude that, if the antidumping duty order were revoked, subject imports from China would likely have a significant impact on the domestic industry within a reasonably foreseeable time.

IV. Conclusion

For the foregoing reasons, we determine that revocation of the antidumping duty order on SDGE from China would likely lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

⁶⁷Commissioner Pinkert finds the domestic industry to be vulnerable. He bases this conclusion largely on the industry's operating margin *** and COGS/net sales ratio *** in 2013. He notes in addition that the industry's market share in that year was *** and that its sales volume was lower than in 2007. CR/PR at Table I-1, Table I-5.

⁶⁸ CR/PR at Table I-1.

⁶⁹ CR/PR at Table I-1.

⁷⁰ USITC Pub. 4062 at 21.

⁷¹ The market share of nonsubject imports was *** percent in 2013, compared with *** percent in 2007. CR/PR at Table I-5.

INFORMATION OBTAINED IN THE REVIEW

INTRODUCTION

Background

On January 2, 2014, the U.S. International Trade Commission ("Commission" or "USITC") gave notice, pursuant to section 751(c) of the Tariff Act of 1930, as amended ("the Act"), ¹ that it had instituted a review to determine whether revocation of the antidumping duty order on small diameter graphite electrodes ("SDGE") from China would likely lead to the continuation or recurrence of material injury to a domestic industry. ^{2 3} On April 7, 2014, the Commission determined that it would conduct an expedited review pursuant to section 751(c)(3) of the Act. ⁴ The following tabulation presents information relating to the background and schedule of this proceeding:

¹ 19 U.S.C. 1675(c).

² Small Diameter Graphite Electrodes from China; Institution of a Five-Year Review, 79 FR 145, January 2, 2014. All interested parties were requested to respond to this notice by submitting the information requested by the Commission.

³ In accordance with section 751(c) of the Act, the U.S. Department of Commerce ("Commerce") published a notice of initiation of a five-year review of the subject antidumping duty order concurrently with the Commission's notice of institution. *Initiation of Five-Year ("Sunset") Review*, 79 FR 110, January 2, 2014.

⁴ Small Diameter Graphite Electrodes from China; Scheduling of an Expedited Five-Year Review, 79 FR 22531, April 22, 2014. The Commission received one submission in response to its notice of institution in the subject review. A joint response was filed on behalf of GrafTech International Ltd., SGL Carbon LLC, and Superior Graphite Company, U.S. producers believed to account for all U.S. production of the domestic like product in 2013. The Commission did not receive any responses from producers in China or importers of the subject merchandise from China. The Commission determined that the domestic interested party group response to its notice of institution was adequate and that the respondent interested party group response was inadequate. In the absence of respondent interested party responses and any other circumstances that would warrant the conduct of a full review, the Commission determined to conduct an expedited review.

Effective date	Action
February 26, 2009	Commerce's antidumping duty order on SDGE from China (74 FR 8775) http://www.gpo.gov/fdsys/pkg/FR-2009-02-26/pdf/E9-4126.pdf
January 2, 2014	Commission's institution of first five-year review (79 FR 145) http://www.gpo.gov/fdsys/pkg/FR-2014-01-02/pdf/2013-30798.pdf
January 2, 2014	Commerce's initiation of first five-year review (79 FR 110) http://www.gpo.gov/fdsys/pkg/FR-2014-01-02/pdf/2013-31429.pdf
	Commission's determination to conduct expedited five-year review (79 FR 22531, April 22, 2014) http://www.gpo.gov/fdsys/pkg/FR-2014-04-22/pdf/2014-09081.pdf
	The press release announcing the Commission's determination concerning adequacy and the conduct of the expedited review can be found at http://www.usitc.gov/press_room/news_release/2014/er0407mm1.htm
	A summary of the Commission's votes concerning the adequacy and the conduct of the expedited review can be found at http://pubapps2.usitc.gov/sunset/caseProfSuppAttmnt/download/11650
April 7, 2014	The Commission's explanation of its determination can be found at http://pubapps2.usitc.gov/sunset/caseProfSuppAttmnt/download/11651
	Commerce's final result of expedited five-year review of the antidumping duty order (79 FR 26208)
May 7, 2014	http://www.gpo.gov/fdsys/pkg/FR-2014-05-07/pdf/2014-10513.pdf
May 21, 2014	Commission's vote
June 2, 2014	Commission's determination

The original investigation

The original investigation resulted from a petition filed with Commerce and the Commission by SGL Carbon LLC, Charlotte, North Carolina and Superior Graphite Co., Chicago, Illinois, on January 17, 2008, alleging that an industry in the United States was materially injured and threatened with material injury by reason of less-than-fair-value ("LTFV") imports of SDGE from China. On January 14, 2009, Commerce determined that imports of SDGE from China were being sold at LTFV, by margins of 132.90 to 159.64 percent. On February 19, 2009, the Commission determined that an industry in the United States was materially injured by reason of LTFV imports of SDGE from China, but found that critical circumstances did not exist with respect to the subject imports covered by Commerce's affirmative critical circumstances

⁵ Final Determination of Sales at Less Than Fair Value and Affirmative Determination of Critical Circumstances: Small Diameter Graphite Electrodes from the People's Republic of China, 74 FR 2049, January 14, 2009.

determination. 6 Commerce issued an antidumping duty order on SDGE from China on February 26, 2009. 7

Commerce's reviews

Commerce has not issued any duty absorption findings and has not conducted any new shipper reviews or changed circumstances reviews. Commerce has published final results for administrative reviews covering three review periods: August 21, 2008 – January 31, 2010; February 1, 2010 – January 31, 2011; and February 1, 2011 – January 31, 2012.

- Commerce calculated the following margins in its first administrative review (revised to correct for ministerial errors): Beijing Fangda Carbon Tech Co., Ltd., Fangda Carbon New Material Co., Ltd., Fushun Carbon Co., Ltd., Hefei Carbon Co., Ltd., 1.10 percent; Fushun Jinly Petrochemical Carbon Co., Ltd., 39.83 percent; and Xinghe County Muzi Carbon Co., Ltd., 16.00 percent.
- Commerce calculated the following margins in its second administrative review: for eight specified companies, 36.79 percent; for the PRC-wide entity, 159.64 percent.⁹
- Commerce calculated the following margins in its third administrative review: Fushun Jinly Petrochemical Carbon Co., Ltd., Beijing Fangda Carbon Tech Co., Ltd., Chengdu Rongguang Carbon Co., Ltd., Fangda Carbon New Material Co., Ltd., Fushun Carbon Co., Ltd., Hefei Carbon Co., Ltd., and Xinghe County Muzi Carbon Co., Ltd., <u>0.00 percent</u>; and the PRC-wide entity, 159.64 percent.

Commerce's results of its expedited review of the subject antidumping duty order were published in the Federal Register on May 7, 2014. Commerce determined that revocation of the subject order would likely lead to continuation or recurrence of dumping at rates of 132.90 percent to 159.64 percent.¹¹

⁷ Antidumping Duty Order: Small Diameter Graphite Electrodes from the People's Republic of China, 74 FR 8775, February 26, 2009.

⁶ Small Diameter Graphite Electrodes from China, 74 FR 8568, February 25, 2009.

⁸ Small Diameter Graphite Electrodes from the People's Republic of China: Amended Final Results of the First Administrative Review of the Antidumping Duty Order, 77 FR 15042, March 14, 2012.

⁹ Small Diameter Graphite Electrodes from the People's Republic of China: Final Results of the Antidumping Duty Administrative Review, 77 FR 40854, July 11, 2012.

¹⁰ Small Diameter Graphite Electrodes from the People's Republic of China: Final Results of Antidumping Duty Administrative Review; 2011–2012, 78 FR 55680, September 11, 2013.

¹¹ Small Diameter Graphite ElectrodesFrom the People's Republic of China: Final Results of the Expedited Sunset Review of the Antidumping Duty Order, 79 FR 26208, March 7, 2014.

Previous and related investigations

SDGE has not been the subject of any prior antidumping or countervailing duty investigations in the United States.

THE PRODUCT

Commerce's scope

Commerce initially defined the subject merchandise as:

(A)II small diameter graphite electrodes of any length, whether or not finished, of a kind used in furnaces, with a nominal or actual diameter of 400 millimeters (16 inches) or less, and whether or not attached to a graphite pin joining system or any other type of joining system or hardware. The merchandise covered by this investigation also includes graphite pin joining systems for small diameter graphite electrodes, of any length, whether or not finished, of a kind used in furnaces, and whether or not the graphite pin joining system is attached to, sold with, or sold separately from, the small diameter graphite electrodes and graphite pin joining systems for small diameter graphite electrodes are most commonly used in primary melting, ladle metallurgy, and specialty furnace applications in industries including foundries, smelters, and steel refining operations. ¹²

Commerce has examined two circumvention issues since the issuance of the original antidumping duty order. In the first instance, Commerce found that electrodes finished in the United Kingdom by UK Carbon & Graphite Company Ltd. from Chinese-origin artificial graphite/unfinished SDGE components and sold in the United States circumvented the antidumping duty order on SDGE. In the second instance, Commerce concluded that imports from China of certain graphite electrodes, produced and/or exported by Jilin Carbon, with a diameter of 17 inches, and otherwise meeting the description of in-scope merchandise,

¹² Final Determination of Sales at Less Than Fair Value and Affirmative Determination of Critical Circumstances: Small Diameter Graphite Electrodes from the People's Republic of China, 74 FR 2049, January 14, 2009. Commerce also noted the Harmonized Tariff Schedule of the United States (HTSUS) subheading for the small diameter graphite electrodes and graphite pin joining systems for small diameter graphite electrodes subject to investigation, while observing that the written description of the scope was dispositive. See also the next section of this report for current U.S. tariff treatment.

¹³ Small Diameter Graphite Electrodes from the People's Republic of China: Affirmative Final Determination of Circumvention of the Antidumping Duty Order, 77 FR 47596, August 9, 2012.

"constitute merchandise altered in form or appearance in such minor respects that it is properly subject to the Order." ¹⁴

U.S. tariff treatment

At the time of the original investigation, imports of SDGE were classifiable in the Harmonized Tariff Schedule of the United States ("HTS") under subheading 8545.11.00 (carbon or graphite electrodes of a kind used for furnaces) and were free of duty under the general duty rate, applicable to China. This subheading contained other products besides SDGE (all carbon or graphite electrodes of a kind used in furnaces). Effective on January 1, 2010, this subheading was annotated for statistical reporting purposes by action of the Committee for Statistical Annotation of Tariff Schedules. SDGE are currently imported under HTS statistical reporting number 8545.11.0010 (graphite electrodes, not exceeding 425 mm in diameter, of a kind used for furnaces). SDGE imported from China continues to enter the U.S. market at a column 1-general duty rate of "free."

Domestic like product and domestic industry

The Commission examined the issue of the appropriate domestic like product in both the preliminary phase and the final phase of the original investigation. Characterizing the issue as "a close question," in the preliminary phase, the Commission defined the domestic like product as SDGE corresponding to the scope, while finding both differences and similarities between SDGE and large (greater than 16 inches) diameter graphite electrodes ("LDGE"). 15

In the final phase of the original investigation, the Commission noted that "we find the issue to be a close one," but ultimately concluded "on balance" that the record "merits limiting the domestic like product to SDGE." The Commission noted that price, current carrying capacity, and premium needle coke content all tend to increase with the size of the electrode and electrodes of adjacent sizes are most comparable with respect to these attributes; thus, "SDGE and LDGE might be viewed as forming a continuum." However, the Commission focused on such distinguishing features as:

 "very little" overlap in end uses between SDGE (foundry, specialty furnace applications and steel mill ladle applications) and LDGE (primary melting of steel scrap in mini-mill electric arc furnaces);

¹⁴ Small Diameter Graphite Electrodes from the People's Republic of China: Affirmative Final Determination of Circumvention of the Antidumping Duty Order and Rescission of Later-Developed Merchandise Anticircumvention Inquiry, 78 FR 56864, September 16, 2013.

¹⁵ Small Diameter Graphite Electrodes from China, Investigation No. 731-TA-1143 (Final), USITC Publication 4062, February 2009, p. 6.

- "very limited" overlap in manufacturing facilities and equipment that produce SDGE and LDGE, (only one of four domestic manufacturers of graphite electrodes made both products).
- SDGE "cannot" be substituted for LDGE in heavy melting applications due to coke content and other physical characteristics.
- purchasers identify similarities between SDGE and LDGE but "do not" use SDGE and LDGE for the same applications, often purchase them in separate transactions and note that the level of technical support and service for SDGE and LDGE may vary.

In its notice of institution for this review, the Commission solicited comments from interested parties regarding the appropriate domestic like product and domestic industry. In their joint response to the Commission's notice of institution, the domestic producers of SDGE indicated that they agree with the Commission's definitions of the domestic like product and domestic industry, while requesting that GrafTech, which became a U.S. producer of SDGE after the original investigation, be included in the definition of the domestic industry. The domestic producers of SDGE reserved the right to comment further on the appropriate definitions during the course of this proceeding. ¹⁷

Description and uses¹⁸

SDGE are cylindrical in shape, produced from various grades of petroleum coke, ¹⁹ and used primarily in ladle metallurgy, primary low-duty melting, and specialty furnace applications, such as the electric arc furnace ("EAF"). ²⁰ As a result of the different raw materials used, SDGE are produced in a variety of grades, including regular power ("RP"), normal power ("NP"), medium power ("MP"), high power ("HP"), super high power ("SHP"), and ultra high power ("UHP").

SDGE conduct electricity, generating the heat necessary to melt scrap metal, iron ore, or other raw materials used to produce steel or other metals. Electricity at very high amperes (units of electric current in the meter-kilogram-second system) passes though the SDGE and creates an electric arc between the electrodes and the raw material. Typically, electrodes are

¹⁶ Small Diameter Graphite Electrodes from China, Investigation No. 731-TA-1143 (Final), USITC Publication 4062, February 2009, pp. 9-10.

¹⁷ Response of GrafTech, SGL Carbon, and Superior Graphite to the notice of institution, February 3, 2014 (supplemented on February 28, 2014), p. 23.

¹⁸ Unless otherwise noted this information is based on *Small Diameter Graphite Electrodes from China, Investigation No. 731-TA-1143 (Final)*, USITC Publication 4062, February 2009, pp. I-6 through I-8.

¹⁹ SDGE are manufactured from a range of petroleum coke grades, from low-grade anode coke to premium high-grade needle coke. The grade of coke, along with other characteristics such as size and impregnation, determines the level of current an electrode can carry. SDGE typically have lower current carrying capacity ranging from 15,000 to 60,000 amps, but do not exceed 70,000 amps.

²⁰ SDGE are primarily used in steel refining, but are also used in foundry applications, steel melting, and other uses. Foundries are the primary users of electrodes that are 8 inches or less in diameter.

joined in columns by a threaded connecting system, most commonly a graphite connecting pin that is tapered and threaded at both ends. Alternating current electric arc furnaces generally use three columns of electrodes and direct current furnaces use one column. The electrodes are fed through holes in the top of the EAFs and held in place by electrical current carrying holders and arms designed for the specific size of electrode to be used. Because of the intensity of the melting process, the electrodes are consumed continuously during the course of the production of metal.

Production process²¹

The production of graphite electrodes begins with the high temperature blending of crushed and screened petroleum coke with coal or petroleum tar pitch. The mix is then charged into a ram type hydraulic press from which a cylindrical column is extruded and cooled. These "green electrodes" then enter an oven to undergo a baking process. The heating process follows a predetermined and gradually increasing heating curve, reaching a final temperature of approximately 900 degrees centigrade. During this stage, the petroleum pitch is converted into hard coke, and impurities are removed. After the baking process, the electrode forms may be impregnated with a special pitch and rebaked, filling pores to increase density and strength, and lowering the electrical resistivity. ²² The electrode forms are packed in electric furnaces surrounded by carbon particles to form a solid mass for graphitization. An electric current is passed through the furnace, raising the temperature to approximately 3,000 degrees centigrade (5,000 degrees Fahrenheit). The graphite electrodes, after cooling, may then go to a final stage to be machined to exact dimensions and tolerances. This stage may also include machining and fitting the ends of the electrode with a threaded graphite pin joining system (also known as a pinning or connecting system). The electrode size and prevailing industrial standards dictate the diameter size and threading of the connecting pin. The finished product is then packaged for shipment, typically placed between wooden chocks, and packed in wooden crates for protection during shipping. SDGE may also be bundled in steel strips before packing.

Interchangeability and customer and producer perceptions

With respect to distinctions between SDGE and graphite electrodes produced in diameters larger than 16 inches, the Commission observed that *** reported different applications and thus perceived SDGE and larger diameter graphite electrodes to be different products. Purchasers' views were mixed, but tended to support the notion of different end uses. The Commission also viewed interchangeability to be limited by the size requirements of

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²¹ Unless otherwise noted this information is based on *Small Diameter Graphite Electrodes from China, Investigation No. 731-TA-1143 (Final),* USITC Publication 4062, February 2009, pp. I-9 through I-11.

²² SDGE are not always impregnated, in contrast to larger diameter graphite electrodes.

installed equipment (whereby even shifting between adjacent sizes might be cost prohibitive) as well as the need for higher grade coke for larger graphite electrodes used in high intensity applications.²³

The Commission characterized U.S.-produced SDGE and subject imports of SDGE from China as "at least moderately interchangeable." It specifically noted the large share of market participants (collectively, producers, importers, and purchasers) that reported these products to be "always" or "frequently" interchangeable. 24

Channels of distribution

In general, graphite electrodes are sold directly to end users. In 2007, approximately *** percent of U.S. producers' U.S. commercial shipments of SDGE were to end users, as were *** percent of U.S. commercial shipments of electrodes in diameters larger than 16 inches. While comparable data are not available for more recent periods, the leading purchasers identified in the domestic producers' response to the notice of institution were all end users – ***. ²⁵

Pricing and related information

At the time of the original investigation, the average unit values of U.S. shipments of U.S.-produced SDGE increased from \$*** per metric ton in 2005 to \$*** in 2006, \$*** in 2007, and \$*** in January–September 2008 – lower than the average unit values of U.S.-produced graphite electrodes in diameters greater than 16 inches, but higher than U.S. shipments of imports of SDGE from China. With respect to price comparisons for specific forms of SDGE, prices of imports from China were lower than the U.S. producer prices in 54 of 60 quarterly comparisons by margins ranging from 2.3 percent to 36.2 percent, and higher in six instances by margins ranging from 0.1 to 17.4 percent. ²⁷

²³ Small Diameter Graphite Electrodes from China, Investigation No. 731-TA-1143 (Final), Confidential Views of the Commission, pp. 10-12.

²⁴ Small Diameter Graphite Electrodes from China, Investigation No. 731-TA-1143 (Final), Confidential Views of the Commission, p. 21.

²⁵ Response of GrafTech, SGL Carbon, and Superior Graphite to the notice of institution, February 3, 2014 (supplemented on February 28, 2014), p. 21.

²⁶ Small Diameter Graphite Electrodes from China, Investigation No. 731-TA-1143 (Final), Memorandum INV-GG-004, January 23, 2009, p. I-17 (table I-3).

²⁷ Small Diameter Graphite Electrodes from China, Investigation No. 731-TA-1143 (Final), USITC Publication 4062, February 2009, p. V-5.

THE INDUSTRY IN THE UNITED STATES

U.S. producers

At the time of the original investigation, two companies produced SDGE in the United States: SGL Carbon and Superior Graphite. SGL Carbon produced 14-inch and 16-inch SDGE as well as graphite electrodes in larger diameters (18-inch through 32-inch LDGE), while Superior Graphite produced 8-inch to 16-inch diameter SDGE. Two additional companies, Showa Denko and C/G Electrodes, produced graphite electrodes in diameters greater than 16 inches but did not produce SDGE. SGL Carbon, the only one of the four graphite electrode producers to produce in size both larger and smaller than 16 inches in diameter, accounted for *** percent of U.S. production of SDGE in 2007. No domestic producer was related to an exporter or importer of SDGE from China or imported SDGE from China during the original investigation, or was otherwise a related party as defined by the statute.

In response to the Commission's notice of institution in this current review, domestic producers of SDGE provided a list of three known and currently operating U.S. producers of SDGE: GrafTech (accounting for *** percent of 2013 U.S. SDGE production), SGL Carbon (*** percent); and Superior Graphite (*** percent).²⁹ Domestic producers are not aware of any related parties among the U.S. producers.³⁰

As noted by the domestic producers of SDGE, in April 2010, "GrafTech acquired 100 percent interest in C/G Electrodes LLC, which is a producer of large diameter graphite electrodes. *** its graphite electrode facility in St. Marys, PA to produce small diameter graphite electrodes." Thus, two of the current three U.S. producers of SDGE (SGL Carbon and GrafTech) produce graphite electrodes in size ranges above and below 16 inches in diameter; these two companies accounted for *** percent of 2013 U.S. SDGE production. Although comparable 2013 data are not available for total or larger-diameter graphite electrode production, SGL Carbon and C/G Electrodes (now GrafTech) together accounted for *** percent of 2007 U.S. production of graphite electrodes in diameters greater than 16 inches, and for *** percent of 2007 U.S. production of all graphite electrodes regardless of diameter. 32

²⁸ Small Diameter Graphite Electrodes from China, Investigation No. 731-TA-1143 (Final), Memorandum INV-GG-004, January 23, 2009, pp. I-3 and III-1 through III-2 (including table III-1).

²⁹ Response of GrafTech, SGL Carbon, and Superior Graphite to the notice of institution, February 3, 2014 (supplemented on February 28, 2014), pp. 3, 21-22.

³⁰ Response of GrafTech, SGL Carbon, and Superior Graphite to the notice of institution, February 3, 2014 (supplemented on February 28, 2014), p. 20.

³¹ Response of GrafTech, SGL Carbon, and Superior Graphite to the notice of institution, February 3, 2014 (supplemented on February 28, 2014), pp. 21-22.

³² Calculated from *Small Diameter Graphite Electrodes from China, Investigation No. 731-TA-1143* (*Final*), Memorandum INV-GG-004, January 23, 2009, p. III-2 (table III-1).

U.S. producers' trade and financial data

The Commission asked domestic interested parties to provide trade and financial data in their response to the notice of institution of the five-year review of the subject order. Table I-1 presents the data reported by responding U.S. producers from both the original investigation (2005-07) and the response to the notice of institution (2013). The data presented in table I-1 were provided by two firms for the period 2005-07 and by three firms for 2013, but in all cases are believed to account for all known U.S. production of SDGE.

Table I-1 SDGE: U.S. producers' trade and financial data, 2005-07 and 2013

Item	2005	2006	2007	2013
Capacity	***	***	***	***
Production (metric tons)	***	***	***	***
Capacity utilization (percent)	***	***	***	***
U.S. shipments				
Quantity (metric tons)	***	***	***	***
Value (1,000 dollars)	***	***	***	***
Unit value (dollars per metric ton)	***	***	***	***
Net sales				
Quantity (metric tons)	***	***	***	***
Value (1,000 dollars)	***	***	***	***
Unit value (dollars per metric ton)	***	***	***	***
Cost of goods sold (COGS) (\$1,000)	***	***	***	***
Gross profit or (loss) (\$1,000)	***	***	***	***
SG&A (\$1,000)	***	***	***	***
Operating income or (loss) (\$1,000)	***	***	***	***
COGS/sales (percent)	***	***	***	***
Operating income or (loss)/sales (percent)	***	***	***	***

Source: Compiled from Small Diameter Graphite Electrodes from China, Investigation No. 731-TA-1143 (Final), Memorandum INV-GG-004, January 23, 2009, p. C-3 (table C-1); and Response of GrafTech, SGL Carbon, and Superior Graphite to the notice of institution, February 3, 2014 (supplemented on February 28, 2014), exhibit 2.

The domestic producers of SDGE assert that the domestic industry "continues to find itself in an extremely vulnerable position." They observe that lower steel production (relative to pre-2009 levels) has reduced consumption of SDGE, "creating a difficult market for domestic producers." They contend that the domestic SDGE industry will not recover from its current condition based on 2014 market projections. ³³

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³³ Response of GrafTech, SGL Carbon, and Superior Graphite to the notice of institution, February 3, 2014 (supplemented on February 28, 2014), pp. 18-19.

U.S. IMPORTS AND APPARENT CONSUMPTION

U.S. importers

In the final phase of the original investigation, the Commission issued questionnaires to 32 firms believed to be importers of subject SDGE, as well as to all U.S. producers of SDGE and LDGE. Usable questionnaire responses were received from 12 companies, representing 58.3 percent of total imports from China under HTS subheading 8545.11.00, a broad category, for January 2005 – September 2008. *** and *** accounted for *** percent of reported imports of SDGE from China in 2007, and *** percent of adjusted imports from all other sources. *** also reported imports from ***. *** accounted for *** percent of adjusted imports from all other sources in 2007.³⁴

In their response to the Commission's notice of institution in this review, domestic producers provided a list of 26 known and currently operating U.S. importers of SDGE from China. 35

U.S. imports

In its original investigation, the Commission found that the volume of subject imports and the increase in that volume were significant, both in absolute terms and relative to consumption and production in the United States. The Commission characterized the volume of subject imports in 2005 as "sizeable," and observed that the volume increased by 36.7 percent from 2005 to 2007, rising from 10,082 metric tons in 2005 to 13,161 metric tons in 2006, then to 13,784 metric tons in 2007. Subject imports also increased as a share of the market, and relative to U.S. production, during 2005-07. The ratio of subject imports to U.S. production was lower in January-September 2008, after the filing of the petition, than in January-September 2007, as was the quantity of U.S. imports of SDGE from China, although the market share of SDGE from China was higher.³⁶

Table I-2 presents data regarding U.S. imports of SDGE from the period 2005-07 and 2013. Although intended to be similar, it should be noted that the presented data are compiled

³⁴ ***. *Small Diameter Graphite Electrodes from China, Investigation No. 731-TA-1143 (Final),* Memorandum INV-GG-004, January 23, 2009, p. IV-1 n.2.

³⁵ Response of GrafTech, SGL Carbon, and Superior Graphite to the notice of institution, February 3, 2014 (supplemented on February 28, 2014), exh. 10.

³⁶ Small Diameter Graphite Electrodes from China, Investigation No. 731-TA-1143 (Final), USITC Publication 4062, February 2009, p. 16.

from different sources – namely, questionnaire and adjusted official Commerce statistics for 2005-07, and official import statistics of Commerce for 2013.³⁷

Table I-2 SDGE: U.S. imports, 2005-07 and 2013

Item	2005	2006	2007	2013		
		Quantity (m	netric tons)			
China	10,082	13,161	13,784	2,352		
All other	***	***	***	13,244		
Total imports	***	***	***	15,596		
		Landed, duty-pai	id value (\$1,000)			
China	15,819	21,638	24,003	7,931		
All other	***	***	***	52,144		
Total imports	***	***	***	60,075		
		Unit value (<i>dollar</i>	s per metric ton)			
China	1,569	1,644	1,741	3,372		
All other	***	***	***	3,937		
Average, total	***	***	***	3,852		
	Share of quantity (percent)					
China	***	***	***	15.1		
All other	***	***	***	84.9		
Total	100.0	100.0	100.0	100.0		
		Share of value	ue (<i>percent)</i>			
China	***	***	***	13.2		
All other	***	***	***	86.8		
Total	100.0	100.0	100.0	100.0		
		Ratio to produc	ction (percent)			
China	***	***	***	***		
All other	***	***	***	***		
Total	***	***	***	***		

Note.--Because of rounding, figure may not add to total shown.

Source: Small Diameter Graphite Electrodes from China, Investigation No. 731-TA-1143 (Final), Memorandum INV-GG-004, January 23, 2009, pp. IV-4 (table IV-2) and IV-10 (table IV-5); official statistics of Commerce for HTS statistical reporting number 8545.11.0010.

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³⁷ As noted previously, HTS statistical reporting number 8545.11.0010 (graphite electrodes, not exceeding 425 mm in diameter, of a kind used for furnaces) did not enter into effect until January 1, 2010, as a result of the annotation for statistical reporting purposes of subheading 8545.11 by action of the Committee for Statistical Annotation of Tariff Schedules.

Table I-3 presents the quantity, value, and unit value for imports from China as well as the other top sources of U.S. imports (shown in descending order of 2013 imports by quantity). Though substantially lower in quantity than during 2005-07, SDGE from China retain a presence in the U.S. market, with unit values below the average for total imports in each year between 2010 and 2013, and in most instances below the unit values for the other individual leading sources of import supply.

Table I-3 SDGE: U.S. imports, 2010-13

ltem	2010	2011	2012	2013
		Quantity (n	netric tons)	
China (subject)	2,792	1,190	2,406	2,352
Mexico	4,013	4,942	3,966	3,627
Japan	4,589	4,656	5,387	2,846
Canada	41	1,901	1,667	2,018
India	2,357	7,261	6,772	1,886
Germany	1,178	1,390	1,411	572
All other imports (nonsubject)	3,980	6,654	5,418	2,295
Total imports	18,950	27,994	27,027	15,596
		Landed, duty-pa	id value (\$1,000)	
China (subject)	6,715	2,979	8,082	7,931
Mexico	11,715	13,105	11,752	10,215
Japan	34,499	32,462	38,915	13,811
Canada	251	9,356	8,471	8,573
India	7,028	18,065	17,733	7,534
Germany	10,411	14,116	13,079	2,658
All other imports (nonsubject)	17,918	26,452	23,758	9,353
Total imports	88,537	116,535	121,790	60,075
		Unit value (dolla	rs per metric ton)	
China (subject)	2,405	2,503	3,359	3,372
Mexico	2,919	2,652	2,963	2,816
Japan	7,518	6,972	7,224	4,853
Canada	6,122	4,922	5,082	4,248
India	2,982	2,488	2,619	3,995
Germany	8,838	10,155	9,269	4,647
All other imports (nonsubject)	4,502	3,975	4,385	4,075
Average, total	4,672	4,163	4,506	3,852

Note.--Because of rounding, figure may not add to total shown.

Source: Official statistics of Commerce for HTS statistical reporting number 8545.11.0010.

Apparent U.S. consumption and market shares

Table I-4 presents U.S. shipments of domestic product, U.S. imports and apparent U.S. consumption in 2005-07 and 2013. Data on U.S. market shares during 2005-07 and 2013 are presented in Table I-5.

Table I-4 SDGE: U.S. shipments of domestic product, U.S. shipments of imports, and apparent U.S. consumption, 2005-07 and 2013

Item	2005	2006	2007	2013			
	Quantity (metric tons)						
U.S. producers'							
U.S. shipments	***	***	***	***			
U.S. shipments of imports from							
China	***	***	***	***			
All other	***	***	***	***			
Total imports	***	***	***	***			
Apparent U.S.							
consumption	***	***	***	***			
	Value (1,000 dollars)						
U.S. producers'							
U.S. shipments	***	***	***	***			
U.S. shipments of							
imports from							
China	***	***	***	***			
All other	***	***	***	***			
Total imports	***	***	***	***			
Apparent U.S.							
consumption	***	***	***	***			

Note.--Because of rounding, figure may not add to total shown.

Note.-Data for 2013 are based on U.S. imports rather than U.S. shipments of imports.

Source: Small Diameter Graphite Electrodes from China, Investigation No. 731-TA-1143 (Final), Memorandum INV-GG-004, January 23, 2009, pp. IV-7 (table IV-3); official statistics of Commerce for HTS statistical reporting number 8545.11.0010.

Table I-5 SDGE: U.S. market shares, 2005-07 and 2013

Item	2005	2006	2007	2013			
	Quantity (metric tons)						
Apparent U.S.							
consumption	***	***	***	***			
		Value (1,0	00 dollars)				
Apparent U.S.							
consumption	***	***	***	***			
		Share of quar	ntity (percent)				
Producer's share	***	***	***	***			
China	***	***	***	***			
All other sources	***	***	***	***			
Total imports	***	***	***	***			
		Share of val	ue (percent)				
Producer's share	***	***	***	***			
·							
China	***	***	***	***			
All other sources	***	***	***	***			
Total imports	***	***	***	***			

Note.--Because of rounding, figure may not add to total shown.

Note.-Data for 2013 are based on U.S. imports rather than U.S. shipments of imports.

Source: Small Diameter Graphite Electrodes from China, Investigation No. 731-TA-1143 (Final), Memorandum INV-GG-004, January 23, 2009, pp. IV-9 (table IV-4); official statistics of Commerce for HTS statistical reporting number 8545.11.0010.

THE INDUSTRY IN CHINA

Background

During the final phase of the original investigation, the Commission issued foreign producer/exporter questionnaires to 125 firms identified in the petition and Commerce's notice as producers or exporters of SDGE in China, for which contact information was publicly available. Thirteen firms provided responses to the Commission's questionnaires. The responding firms reported that they accounted for an estimated nearly *** percent of production of SDGE in China during 2007, and nearly *** percent of exports from China to the United States of SDGE during 2007.³⁸

The Commission did not receive any responses to the notice of institution from foreign producers or exporters. The domestic producers of SDGE provided a list of 112 firms that they believe currently produce SDGE in China.³⁹

During the original investigation, the responding producers of SDGE in China consistently operated at capacity utilization levels in excess of ***, and by January-September 2008 were operating at *** of reported capacity. Home market shipments accounted for approximately *** of total shipments during 2005-07, while exports (primarily to markets other than the United States) accounted for approximately ***, although the share of shipments to the home market was *** higher in January-September 2008. Reported inventories declined both absolutely and relative to total shipments during 2005-07 and into 2008. ⁴⁰

Since no Chinese producers responded to the notice of institution, no further primary source data are available specific to the production or capacity of subject SDGE in China. Domestic producers of SDGE, however, presented in their response to the notice of institution data published by the China Carbon Association indicating that Chinese production of all graphite electrodes fell markedly between 2008 and 2009 (from 586,700 metric tons to 481,100 metric tons), but has since recovered to 644,987 metric tons by 2012. They further calculate the total graphite electrode capacity available to 23 Chinese companies that have requested separate antidumping duty rates from Commerce to be 871,000 metric tons, suggesting that the Chinese graphite electrode industry has available capacity of at least 226,013 metric tons.

³⁸ Small Diameter Graphite Electrodes from China, Investigation No. 731-TA-1143 (Final), Memorandum INV-GG-004, January 23, 2009, p. VII-1.

³⁹ Response of GrafTech, SGL Carbon, and Superior Graphite to the notice of institution, February 3, 2014 (supplemented on February 28, 2014), exh. 4.

⁴⁰ Small Diameter Graphite Electrodes from China, Investigation No. 731-TA-1143 (Final), Memorandum INV-GG-004, January 23, 2009, p. VII-4 (table VII-2).

⁴¹ Response of GrafTech, SGL Carbon, and Superior Graphite to the notice of institution, February 3, 2014 (supplemented on February 28, 2014), pp. 13-14 and exh. 4.

⁴² Response of GrafTech, SGL Carbon, and Superior Graphite to the notice of institution, February 3, 2014 (supplemented on February 28, 2014), pp. 10-13.

Exports

The leading markets for Chinese graphite electrodes (of all sizes) since 2008 are presented in Table I-6.

Table I-6
Graphite electrodes: China's exports, by quantity, 2008-13

Item	2008	2009	2010	2011	2012	2013
	1		Quantity (n	netric tons)		
Russia	10,306	4,783	12,838	19,555	19,856	22,125
Italy	10,942	4,858	9,270	12,971	13,504	16,311
Korea	15,375	6,065	9,940	12,935	11,818	11,715
Germany	10,169	3,500	10,579	13,321	11,221	11,665
Japan	13,606	5,768	10,718	11,468	11,583	10,290
Malaysia	4,897	2,570	3,260	4,336	8,500	10,290
United States	22,008	4,851	11,455	15,622	16,670	9,543
India	22,042	15,100	21,525	34,624	13,053	9,190
Vietnam	6,363	5,771	6,668	11,109	9,704	8,805
Indonesia	7,602	5,200	6,832	7,240	8,326	7,534
All other	117,300	60,632	87,923	107,102	107,192	96,604
Total	240,610	119,098	191,006	250,283	231,427	214,070

Note.--Because of rounding, figures may not add to total shown.

Source: Global Trade Information Services, Inc., *Global Trade Atlas*, HS subheading 8545.11. Data include product that is outside the scope of this review, i.e. graphite electrodes greater than 16 inches in diameter.

Tariff or non-tariff barriers to trade

During the original investigation, Chinese SDGE (and graphite electrodes of larger diameters) were subject to an existing antidumping duty order in India and an ongoing antidumping duty investigation in Brazil.⁴³ Domestic producers of SDGE report current measures in place in Brazil (dumping margin of 145.3 percent) and in Mexico (dumping margins of 38 -250 percent), with additional ongoing proceedings in India and South Africa.⁴⁴

THE GLOBAL MARKET

Table I-7 presents the largest global export sources of graphite electrodes (of all sizes) during 2008-13.

⁴³ Small Diameter Graphite Electrodes from China, Investigation No. 731-TA-1143 (Final), USITC Publication 4062, February 2009, p. VII-3.

⁴⁴ Response of GrafTech, SGL Carbon, and Superior Graphite to the notice of institution, February 3, 2014 (supplemented on February 28, 2014), pp. 14-15 and exh. 7.

Table I-7
Graphite electrodes: Global exports by major sources, 2008-13

Item	2008	2009	2010	2011	2012	2013
			Quantity (n	netric tons)		
China	240,610	119,098	191,006	250,283	231,427	214,070
Japan	143,774	103,167	135,241	141,062	133,963	118,466
Spain	87,588	57,497	72,886	96,980	78,234	94,619
India	47,480	25,527	46,265	72,440	79,973	80,120
Germany	73,395	44,012	49,848	60,529	57,450	41,434
France	38,542	19,160	31,851	37,816	29,415	36,823
Russia	53,733	30,970	43,824	37,634	40,088	32,809
United States	65,321	14,183	27,125	24,857	20,097	21,356
South Africa	17,553	4,268	10,392	10,536	12,242	15,672
Mexico	32,612	14,011	26,115	24,981	22,941	15,623
All other	152,958	71,593	109,773	142,473	123,402	94,009
Total	953,565	503,487	744,325	899,591	829,230	765,000

Note.--Because of rounding, figures may not add to total shown.

Source: Global Trade Information Services, Inc., *Global Trade Atlas*, HS subheading 8545.11. Data include product that is outside the scope of this review, i.e. graphite electrodes greater than 16 inches in diameter.