Silicon Metal From Argentina, Brazil, and China

Investigations Nos. 731-TA-470-472 (Review)

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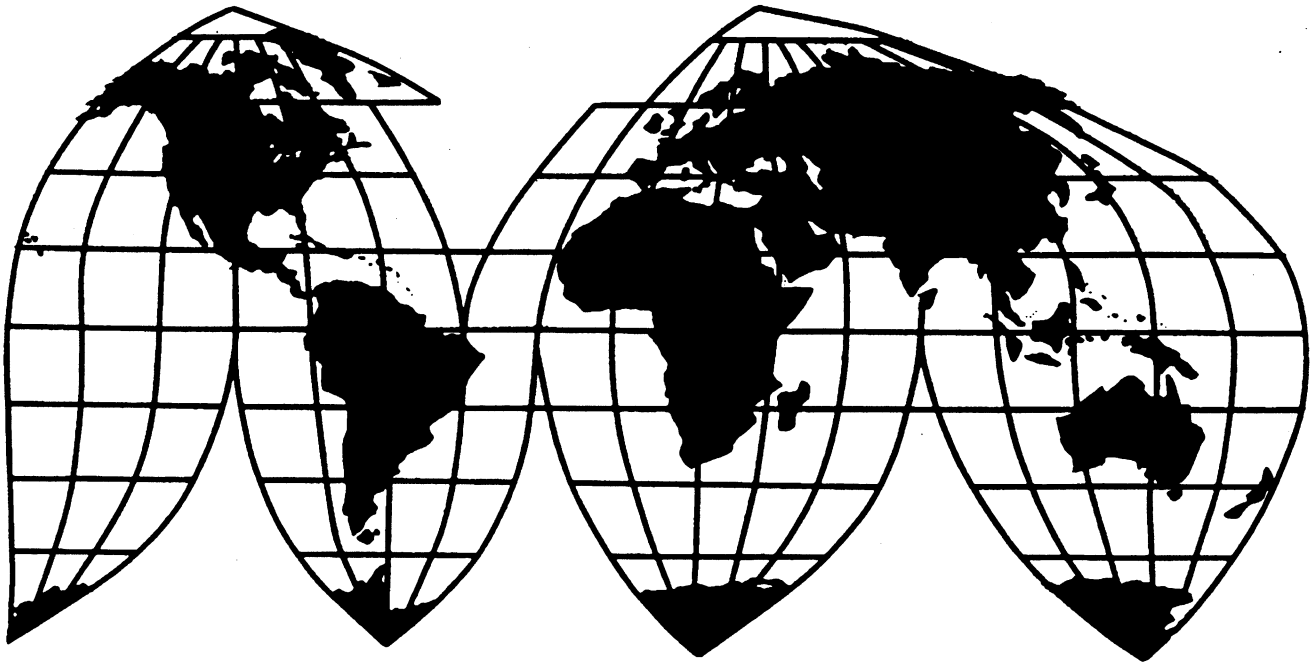
U.S. International Trade Commission



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Note.--Information that would reveal the business proprietary operations of individual concerns may not be published and, therefore, has been deleted from this report.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

UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigations Nos. 731-TA-470-472 (Review)

SILICON METAL FROM ARGENTINA, BRAZIL, AND CHINA

DETERMINATIONS

On the basis of the record[1] developed in the subject five-year reviews, the United States International Trade Commission determines, pursuant to section 751(c) of the Tariff Act of 1930 (19 U.S.C. § 1675(c)) (the Act), that revocation of the antidumping duty order on silicon metal from Argentina would not be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.[2] The Commission further determines that revocation of the antidumping duty orders on silicon metal from Brazil and 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.[3]

BACKGROUND

The Commission instituted these reviews on November 2, 1999 (64 F.R. 59209) and determined on February 3, 2000 that it would conduct full reviews (65 F.R. 7891, February 16, 2000). Notice of the scheduling of the Commission's reviews and of a public hearing to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the *Federal Register* on August 14, 2000 (65 F.R. 49595). The hearing was held in Washington, DC, on November 14, 2000, and all persons who requested the opportunity were permitted to appear in person or by counsel.

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[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] Vice Chairman Okun, former Commissioner Askey, and Commissioner Devaney not participating. Commissioner Bragg dissenting.

[3] Vice Chairman Okun, former Commissioner Askey, and Commissioner Devaney not participating.

VIEWS OF THE COMMISSION[1]

Based on the record in these five-year reviews, we determine under section 751(c) of the Tariff Act of 1930, as amended ("the Act"), that revocation of the antidumping duty order on silicon metal from Argentina would not be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.[2] We also determine that revocation of the antidumping duty orders on silicon metal from Brazil and 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.

I. BACKGROUND

On June 3, 1991, the Commission unanimously determined that a domestic industry was materially injured by imports of silicon metal from China.[3] On June 10, 1991, the Department of Commerce ("Commerce") issued an antidumping duty order with respect to imports from China.[4]

On July 24, 1991, the Commission unanimously determined that a domestic industry was materially injured by imports of silicon metal from Brazil.[5] On July 31, Commerce issued an antidumping duty order with respect to imports from Brazil.[6]

On September 19, 1991, the Commission unanimously determined that a domestic industry was materially injured by imports of silicon metal from Argentina.[7] On September 26, Commerce issued an antidumping duty order with respect to imports from Argentina.[8]

On November 2, 1999, the Commission instituted these reviews pursuant to section 751(c) of the Act to determine whether revocation of the antidumping duty orders on imports of silicon metal from Argentina, Brazil, and China would likely lead to continuation or recurrence of material injury.[9]

In five-year reviews, the Commission initially determines whether to conduct a full review (which would generally include a public hearing, the issuance of questionnaires, and other procedures) or an expedited review, as follows. First, the Commission determines whether individual responses to the notice of institution are adequate. Second, based on those responses deemed individually adequate, the Commission determines whether the collective responses submitted by two groups of interested parties -- domestic interested parties (producers, unions, trade associations, or worker groups) and respondent interested parties (importers, exporters, foreign producers, trade associations, or subject country

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[1] Vice Chairman Okun, Commissioner Devaney and former Commissioner Askey did not participate in these determinations.

[2] Commissioner Bragg dissenting.

[3] Silicon Metal from the People's Republic of China, Inv. No. 731-TA-472 (Final), USITC Pub. 2385 (June 1991) ("China Determination").

[4] 56 Fed. Reg. 26649 (June 10, 1991).

[5] Silicon Metal from Brazil, Inv. No. 731-TA-471 (Final), USITC Pub. 2404 (July 1991) ("Brazil Determination").

[6] 56 Fed. Reg. 36135 (July 31, 1991).

[7] Silicon Metal from Argentina, Inv. No. 731-TA-470 (Final), USITC Pub. 2429 (Sept. 1991) ("Argentina Determination").

[8] 56 Fed. Reg. 48779 (September 26, 1991). The order was subsequently amended as a result of a court remand. 60 Fed. Reg. 35551 (July 10, 1995).

[9] 64 Fed. Reg. 59209 (November 2, 1999).

governments) -- demonstrate a sufficient willingness among each group to participate and provide information requested in a full review.[10] If the Commission finds the responses from both groups of interested parties to be adequate, or if other circumstances warrant, it will determine to conduct a full review.

The Commission received a joint response to the Notice of Institution on behalf of three domestic producers of silicon metal: American Silicon Technologies, Elkem Metals Company, and Globe Metallurgical Inc., together accounting for *** percent of total U.S. production of silicon metal in 1998. In addition, the United Steelworkers of America, AFL-CIO, USWA Local 3661, USWA Local 5171, USWA Local 8538, USWA Local 9436, the Paper Allied-Industrial, Chemical and Energy Workers International Union, Local 5-89, and the International Union of Electronic, Electrical, Salaried Machine and Furniture Workers, AFL-CIO, Local 693, which are unions representing 100 percent of the silicon metal workers in the United States, joined the joint response. The sole Argentine producer of silicon metal, Electrometalurgica Andina S.A.I.C. ("Andina"), responded to the notice as did the following Brazilian producers and exporters: Companhia Ferroligas Minas Gerais-Minasligas, Companhia Carbureta de Cálcio, Ligas de Alumnínio S.A.-LIASA, Electrosilex S/A, Camargo Corrêa Metais S.A., and Rima Industrial S/A. These firms together accounted for *** percent of total production of silicon metal in Brazil in 1998 and *** percent of total subject exports to the United States in the same year. No respondent interested party, whether foreign producer, exporter, or U.S. importer, responded on behalf of China to the Commission's notice.

On February 3, 2000, with respect to Argentina, the Commission determined that the individual interested party responses to its notice of institution were adequate and that the domestic interested party and respondent interested party group responses were adequate. The Commission made the same determination with respect to Brazil. As pertains to China, the Commission determined that the individual interested party responses were adequate and that the domestic interested party group response was also adequate. The Commission determined that the respondent group response was inadequate.[11] The Commission decided to conduct full reviews for all three orders in these grouped reviews to promote administrative efficiency.[12]

II. DOMESTIC LIKE PRODUCT AND INDUSTRY

A. Domestic Like Product

In making its determination under section 751(c), the Commission defines "the domestic like product" and the "industry."[13] The 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."[14]

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[10] *See* 19 C.F.R. § 207.62(a); 63 Fed. Reg. 30599, 30602-05 (June 5, 1998).

[11] 65 Fed. Reg. 7891 (Feb. 16, 2000).

[12] *See* Explanation of Commission Determinations on Adequacy, Confidential Staff Report ("CR") at Appendix A, Public Staff Report ("PR") at Appendix A.

[13] 19 U.S.C. § 1677(4)(A).

[14] 19 U.S.C. § 1677(10). *See* NEC Corp. v. Department of Commerce, Slip Op. 98-164 at 8 (Ct. Int'l Trade Dec. 15, 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). *See also* S. Rep. No. 249, 96th Cong., 1st Sess. 90-91 (1979).

> Commerce has defined the subject merchandise in these reviews as follows:
> silicon metal containing at least 96.00 percent but less than 99.99 percent of silicon by weight. Also covered by [these reviews] is silicon metal . . . containing between 89.00 and 96.00 percent silicon by weight but which contains a higher aluminum content than the silicon metal containing at least 96.00 percent but less than 99.99 percent silicon by weight. Silicon metal is currently provided for under subheadings 2804.69.10 and 2804.69.50 of the Harmonized Tariff Schedule ("HTS") as a chemical product, but is commonly referred to as a metal. Semiconductor-grade silicon (silicon metal containing by weight not less than 99.99 percent of silicon and provided for in subheading 2804.61.00 of the HTS) is not subject to this order. Although the HTS numbers are provided for convenience and customs purposes, the written description remains dispositive.[15]

In the original investigations, the Commission defined the domestic like product to be all silicon metal, regardless of grade, having a silicon content of at least 96.00 percent but less than 99.99 percent of silicon by weight, and excluding semiconductor grade silicon.[16]

In the current reviews, no party argues that the Commission should define the domestic like product differently than it did in the original investigations, with the like product corresponding to the scope, and nothing in the current record indicates a basis for revisiting the issue. Therefore, we define the domestic like product as all silicon metal, regardless of grade, corresponding to the current scope of the orders.[17]

B. Domestic Industry

Section 771(4)(A) of the Act defines the relevant industry as the "domestic producers as a whole of a like product, or those producers whose collective output of the like product constitutes a major proportion of the total domestic production of that product."[18] 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, provided that adequate production-related activity is conducted in the United States.[19] The Commission

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[15] 65 Fed. Reg. 35607, 35608 (June 5, 2000); 65 Fed. Reg. 35608, 35609 (June 5, 2000); 65 Fed. Reg. 35609, 35610 (June 5, 2000). In response to a scope determination request by domestic silicon metal producers claiming that some silicon metal producers in China were evading application of the antidumping duty order by exporting to the United States silicon metal containing less than 96 percent silicon and containing a relatively high percentage of aluminum, Commerce broadened the scope of the antidumping duty orders to include silicon metal containing between 89 percent and 96 percent silicon and more aluminum than silicon metal containing 96 percent or more silicon. CR at I-11 n.7.

[16] China Determination at 10; Brazil Determination at 9; Argentina Determination at 8.

[17] We note that the current scope of the orders is somewhat broader than the scope of the original investigations.

[18] 19 U.S.C. § 1677(4)(A).

[19] *See, e.g.*, Stainless Steel Wire Rod from Germany, Italy, Japan, Korea, Spain, Sweden, and Taiwan, Inv. Nos. 701-TA-373, 731-TA-769-775 (Final), USITC Pub. 3126 at 7 (Sept. 1998); Manganese Sulfate from the People's Republic of China, Inv. No. 731-TA-725 (Final), USITC Pub. 2932 at 5 & n.10 (Nov. 1995) ("the Commission has generally included toll producers that engage in sufficient production-related activity to be part of the domestic industry"); Oil Country Tubular Goods from Argentina, Austria, Italy, Japan, Korea, Mexico, and Spain, Inv. Nos. 701-TA-363-364 and 731-TA-711-717 (Final), USITC Pub. 2911 (Aug. 1995) (not including threaders in the casing

bases its analysis on a firm's production-related activities in the United States.[20] Consistent with our definition of the like product, we find a single domestic industry consisting of all domestic producers of silicon metal.[21]

III. CUMULATION[22]

A. Framework

Section 752(a) of the Act provides that:

> the Commission may cumulatively assess the volume and effect of imports of the subject merchandise from all countries with respect to which reviews under section 1675(b) or (c) of this title were initiated on the same day, if such imports would be likely to compete with each other and with domestic like products in the United States market.

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and tubing industry because of "limited levels of capital investment, lower levels of expertise and lower levels of employment").

[20] The Commission typically considers six factors: (1) extent and source of a firm's capital investment; (2) the technical expertise involved in U.S. production activity; (3) the value added to the product in the United States; (4) employment levels; (5) the quantities and types of parts sourced in the United States and (6) any other costs and activities in the United States leading to production of the like product. *See* Certain Cut-to-Length Steel Plate from France, India, Indonesia, Italy, Japan, and Korea, Inv. Nos. 701-TA-387-391 (Final) and 731-TA-816-821 (Final), USITC Pub. 3273, at 8-9 (Jan. 2000).

[21] There are no related party issues in these reviews.

[22] Commissioner Bragg does not join this section. While she concurs with the majority's findings of reasonable overlap of competition and likely discernible adverse impact in the event the orders are revoked with respect to Brazil and China, she dissents with respect to Argentina. Commissioner Bragg's cumulation determinations are based upon a different analytical framework than that of her colleagues. *See* Separate Views of Commissioner Lynn M. Bragg regarding Cumulation in Sunset Reviews, found in Potassium Permanganate From China and Spain, Inv. Nos. 731-TA-125-126 (Review), USITC Pub. 3245 (Oct. 1999); *see also* Separate Views of Chairman Lynn M. Bragg Regarding Cumulation, found in Brass Sheet and Strip From Brazil, Canada, France, Germany, Italy, Japan, Korea, the Netherlands, and Sweden, Inv. Nos. 701-TA-269 & 270 (Review) and 731-TA-311-317 and 379-380 (Review), USITC Pub. 3290 (Apr. 2000). In particular, Commissioner Bragg notes that she examines the likelihood of no discernible adverse impact only after first determining there is likely to be a reasonable overlap of competition in the event of revocation. Commissioner Bragg finds a likely reasonable overlap of competition with regard to Brazil and China in these reviews for the same reasons as those set forth by the Commission majority. With respect to subject imports from Argentina, Commissioner Bragg notes that at the time of the original investigations the Commission found a reasonable overlap of competition among subject imports from Argentina, Brazil, and China. Upon review of the record in these grouped reviews, Commissioner Bragg determines that, on balance, this conclusion continues to be warranted. She notes that subject imports from Argentina had only a limited presence in the U.S. market during the period reviewed. Commissioner Bragg therefore finds a reasonable overlap of competition with regard to subject imports from Argentina, Brazil, and China and the domestic like product. After having found a likely reasonable overlap of competition in the event the orders are revoked, Commissioner Bragg turns to the issue of no discernible adverse impact. Based on the significant excess capacity in each of the subject countries as well as the subject producers' strong export orientation, Commissioner Bragg finds that revocation of each of the orders at issue will lead to a likely discernible adverse impact to the domestic industry. CR/PR at Table IV-3; CR/PR at Table IV-4; and CR/PR at Table IV-5. Accordingly, Commissioner Bragg cumulates subject imports from Argentina, Brazil, and China.

> The Commission shall not cumulatively assess the volume and effects of imports of the subject merchandise in a case in which it determines that such imports are likely to have no discernible adverse impact on the domestic industry.[23]

Thus, cumulation is discretionary in five-year reviews. However, the Commission may exercise its discretion to cumulate only if the reviews are initiated on the same day and the Commission determines that the subject imports are likely to compete with each other and the domestic like product in the U.S. market. The statute precludes cumulation if the Commission finds that subject imports from a country are likely to have no discernible adverse impact on the domestic industry.[24] We note that neither the statute nor the Uruguay Round Agreements Act ("URAA") Statement of Administrative Action ("SAA") provides specific guidance on what factors the Commission is to consider in determining that imports "are likely to have no discernible adverse impact" on the domestic industry.[25] With respect to this provision, the Commission generally considers the likely volume of the subject imports and the likely impact of those imports on the domestic industry within a reasonably foreseeable time if the orders are revoked.[26]

The Commission has generally considered four factors intended to provide a framework for determining whether the imports compete with each other and with the domestic like product.[27] Only a "reasonable overlap" of competition is required.[28] In five-year reviews, the relevant inquiry is whether there likely would be competition even if none currently exists. Moreover, because of the prospective

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[23] 19 U.S.C. § 1675a(a)(7).

[24] 19 U.S.C. § 1675a(a)(7).

[25] SAA, H.R. Rep. No. 103-316, vol. I (1994).

[26] For a discussion of the analytical framework of Chairman Koplan and Commissioners Miller and Hillman regarding the application of the "no discernible adverse impact" provision, *see* Malleable Cast Iron Pipe Fittings From Brazil, Japan, Korea, Taiwan, and Thailand, Inv. Nos. 731-TA-278-280 (Review) and 731-TA-347-348 (Review). For a further discussion of Chairman Koplan's analytical framework, *see* Iron Metal Construction Castings from India; Heavy Iron Construction Castings from Brazil; and Iron Construction Castings from Brazil, Canada, and China, Inv. Nos. 803-TA-13 (Review); 701-TA-249 (Review); and 731-TA-262, 263, and 265 (Review) (Views of Commissioner Stephen Koplan Regarding Cumulation).

[27] The four factors generally considered by the Commission in assessing whether imports compete with each other and with the domestic like product are: (1) the degree of fungibility between the imports from different countries and between imports and the domestic like product, including consideration of specific customer requirements and other quality related questions; (2) the presence of sales or offers to sell in the same geographical markets of imports from different countries and the domestic like product; (3) the existence of common or similar channels of distribution for imports from different countries and the domestic like product; and (4) whether the imports are simultaneously present in the market. *See, e.g.*, Wieland Werke, AG v. United States, 718 F. Supp. 50 (Ct. Int'l Trade 1989).

[28] *See* Mukand Ltd. v. United States, 937 F. Supp. 910, 916 (Ct. Int'l Trade 1996); Wieland Werke, AG, 718 F. Supp. at 52 ("Completely overlapping markets are not required."); United States Steel Group v. United States, 873 F. Supp. 673, 685 (Ct. Int'l Trade 1994), *aff'd*, 96 F.3d 1352 (Fed. Cir. 1996). We note, however, that there have been investigations in which the Commission has found an insufficient overlap in competition and has declined to cumulate subject imports. *See, e.g.*, Live Cattle from Canada and Mexico, Inv. Nos. 701-TA-386 (Preliminary) and 731-TA-812-813 (Preliminary), USITC Pub. 3155, at 15 (Feb. 1999), *aff'd sub. nom.* Ranchers-Cattleman Action Legal Foundation v. United States, 74 F. Supp.2d 1353 (Ct. Int'l Trade 1999); Static Random Access Memory Semiconductors from the Republic of Korea and Taiwan, Inv. Nos. 731-TA-761-762 (Final), USITC Pub. 3098, at 13-15 (Apr. 1998).

nature of five-year reviews, we have examined not only the Commission's traditional competition factors, but also other significant conditions of competition that are likely to prevail if the orders under review are revoked. The Commission has considered factors in addition to its traditional competition factors in other contexts where cumulation is discretionary.[29]

In these reviews, the statutory requirement for cumulation that all reviews be initiated on the same day is satisfied. The Commission instituted all three reviews on November 2, 1999.

B. Likelihood of No Discernible Adverse Impact

We find that subject imports from Argentina likely would have no discernible adverse impact on the domestic industry.

Imports from Argentina were low in 1990 at the time of the original investigation – only approximately 2,000 gross short tons, representing 1.1 percent of domestic consumption, and were 0 percent in 1999.[30] Whereas there were two active Argentine producers in 1990, there is currently only one: Andina.[31] Andina produced silicon metal until 1991 and resumed production in 1998 after modernizing its facilities.[32] Andina's capacity is limited and it currently has *** excess capacity.[33] ***.[34] In 1998, the cost of updating the one furnace it uses to produce silicon metal was *** and, although it has other furnaces, Andina cannot easily switch from the production of non-subject product to the production of silicon metal.[35]

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[29] *See, e.g.*, Torrington Co. v. United States, 790 F. Supp. at 1172 (affirming Commission's determination not to cumulate for purposes of threat analysis when pricing and volume trends among subject countries were not uniform and import penetration was extremely low for most of the subject countries); Metallverken Nederland B.V. v. United States, 728 F. Supp. 730, 741-42 (Ct. Int'l Trade 1989); Asociacion Colombiana de Exportadores de Flores v. United States, 704 F. Supp. 1068, 1072 (Ct. Int'l Trade 1988).

[30] CR/PR at Table I-1. In 1990, *** percent of Argentine shipments were exported and *** percent went to the United States. The 1990 data were available for only one Argentine producer, however. INV-0-084 at Table 21 & n.1 (May 17, 1991).

[31] Three producers in Argentina have been identified, although only Andina is known to be active in producing silicon metal during the period of review. Stein, a potentially large silicon metal producer in Argentina, according to petitioners' counsel, has not manufactured silicon metal for the past *** when it switched to the manufacture of ***. Andina's Prehearing Brief at 6. There is no evidence that it will switch production back to silicon metal in the reasonably foreseeable future, and the record indicates that it is difficult and costly to shift production back to silicon metal. CR at II-5, PR at II-3 - II-4. In addition, ***. Andina's Prehearing Brief at 5.

[32] *See* CR at II-6, PR at II-6.

[33] Andina's capacity was *** gross short tons in 1997 and *** gross short tons in both 1998 and 1999. It was *** gross short tons in both January-June 1999 and 2000. Its capacity utilization was *** percent in 1998 and *** percent in 1999, and was *** percent in January-June 1999 and *** percent in January-June 2000. CR/PR at Table IV-3. We note that to reach even the low level of market penetration achieved at the end of the original period of investigation, it would be necessary for Andina to shift almost *** percent of its total production to the United States, which is not likely to occur in the reasonably foreseeable future. Andina's production was *** gross short tons in 1999, *** gross short tons in January-June 1999 and *** gross short tons in January-June 2000. CR/PR at Table IV-3.

[34] Andina's Prehearing Brief at 7. In addition, Andina ***. Andina's Prehearing Brief at 7-8; Andina's Posthearing Brief at 4. *** would limit Andina's ability to obtain capital for any such capacity expansion.

[35] *See* CR at I-14, II-7, PR at I-12, II-4; Tr. at 204-05 (Mr. Perkins).

Andina's home market shipments now comprise *** of its total shipments[36] and it has long-term contracts to supply purchasers in Europe, its principal export market.[37] Whereas Andina's product is certified for sale in Europe, it is not certified for sale in the United States.[38] For the foregoing reasons we find that any limited exports to the United States by Andina would be likely to have no discernible adverse impact on the U.S. industry producing silicon metal.

As pertains to Brazil and China, we note that China is the world's largest producer as well as exporter of silicon metal and Brazil is the third largest producer (and the world's second largest exporter of silicon metal).[39] For the reasons discussed below, we find that increased volumes of subject imports from Brazil and China, given the significant excess capacity to produce silicon metal in those countries and the likelihood that the imports would undersell domestic silicon metal to a significant degree, would likely have a discernible adverse impact on the domestic industry.

C. Likelihood of Reasonable Overlap of Competition and Other Considerations

The Commission cumulated the volume and price effects of the subject imports of silicon metal in the original investigations, finding a reasonable overlap of competition sufficient to satisfy the requirements of cumulation, although there were questions regarding the fungibility of the Chinese product because of quality concerns.[40]

In determining whether to exercise our discretion to cumulate subject imports, we examine whether, upon revocation of the orders, subject imports from Brazil and China likely would compete in the U.S. market under similar conditions of competition relative to each other and to the domestic like product. As an initial matter we consider the likelihood of a reasonable overlap of competition among the subject imports and the domestic like product. We find that there is likely to be a reasonable overlap of competition among silicon metal from Brazil and China and domestic silicon metal.

The fungibility of the product has remained relatively unchanged since the time of the original investigations, except that petitioners report that the purity level of the Chinese product has improved, making it eligible for more uses than in 1991.[41] In addition, higher grade silicon metal is sometimes shipped to a purchaser with a lower specification requirement due to factors such as excess product availability and low shipping costs.[42]

According to questionnaire responses, all four purchasers comparing the U.S. product to the

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[36] Argentina's home market shipments totaled *** gross short tons in January-June 2000 and its total shipments were *** gross short tons. CR/PR at Table IV-3. Andina submitted a letter from Aluar, ***. Andina's Posthearing Brief, Exh. 1. In that letter Aluar states that it ***.

[37] Andina's Prehearing Brief at 8-9; Andina's Posthearing Brief at 4. These contracts call for minimum yearly supplies of *** of silicon metal, depending on market conditions. Sales to its *** clients accounted for *** percent of its silicon metal production in 1998, the equivalent of *** percent in 1999 and *** percent during the first two quarters of 2000. Andina's Prehearing Brief at 9. Moreover, there are no barriers to importation of Andina's product in other countries. Andina's Prehearing Brief at 10.

[38] *See* Andina's Prehearing Brief at 11.

[39] AST/Elkem/Unions' Prehearing Brief at 30; *see* Tr. at 191-92 (Dr. Button).

[40] China Determination at 23; Brazil Determination at 14; Argentina Determination at 14.

[41] CR at II-3, PR at II-2; *see* Tr. at 227 (Mr. Perkins).

[42] CR at I-13, PR at I-11.

Brazilian product stated that they may be used interchangeably in the same applications,[43] and four of the five purchasers comparing the U.S. and Chinese product reported the same.[44] All domestic producers reported that the U.S. and Brazilian products are interchangeable,[45] as did all the importers.[46] Similarly, all domestic producers reported that the U.S. and Chinese product are interchangeable,[47] and five of eight importers made the same assertion.[48]

Domestic producers stated that the Chinese product is interchangeable with the Brazilian product.[49] Three importers stated that the Chinese product was not interchangeable with the Brazilian product and three agreed that the Chinese and Brazilian products are interchangeable.[50] The only purchaser comparing subject products reported that Chinese and Brazilian products were interchangeable.[51]

Two of the four responding U.S. producers reported selling silicon metal nationwide, while ***.[52] Of the three reporting importers, one reported selling its Chinese product *** and its Brazilian product ***; one reported selling its imports ***; and the other reported sending its imports to ***.[53]

Most domestically-produced silicon metal is sold directly to end users or used internally, although some is also exchanged among producers or sold through distributors.[54] At least some subject imports were also sold to or imported by end users.[55] Subject imports from Brazil and China were present throughout the period of review.[56]

Given the fungibility between the U.S. product and subject imports, the general interchangeability between the subject imports and the evidence in the record that the quality of the Chinese product has improved, as well as the overlap of sales in the same geographical markets, the common channels of distribution, and the simultaneous presence in the market, there is sufficient evidence to find that there likely would be a reasonable overlap of competition both between the subject imports from Brazil and China, and between the subject imports and the domestic product, if these orders are revoked. Nothing in the record indicates that the subject imports from Brazil and China would likely compete under different conditions of competition in the U.S. market. Accordingly, we exercise our discretion to cumulate the subject imports from Brazil and China in these reviews.

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[43] CR at II-16 - II-17, PR at II-10, CR/PR at Table II-9.

[44] CR at II-21 - II-22, PR at II-15 - II–16, CR/PR at Table II-9.

[45] CR/PR at Table II-3.

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

[47] CR/PR at Table II-3.

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

[49] CR/PR at Table II-3.

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

[51] CR at II-22, PR at II-16.

[52] CR at II-2, PR at II-1.

[53] CR at II-2, PR at II-1.

[54] Sales through distributors were three percent of sales in 1999 and were only for secondary aluminum. Exchanges between producers were *** percent of sales in that year. CR at II-1 n.5, PR at II- 1 n.5.

[55] CR at II-1, PR at II-1.

[56] CR/PR at Table IV-1. In the original investigations, imports from all three subject countries were present in substantial amounts throughout the period of investigation. *See* China Determination at A-14, Table 2.

IV. LIKELIHOOD OF CONTINUATION OR RECURRENCE OF MATERIAL INJURY IF THE ORDERS ARE REVOKED[57]

A. Legal Standard in a Five-Year Review

In a five-year review conducted under section 751(c) of the Act, Commerce will revoke a countervailing or antidumping duty order unless: (1) it makes a determination that dumping is likely to continue or recur, and (2) the Commission makes a determination that revocation of an order "would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time."[58] The SAA states that "under the likelihood standard, the Commission will engage in a counter-factual 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 elimination of its restraining effects on volumes and prices of imports."[59] Thus, the likelihood standard is prospective in nature.[60] The statute states that "the Commission shall consider that the effects of revocation . . . may not be imminent, but may manifest themselves only over a longer period of time."[61] According to the SAA, a "'reasonably foreseeable time' will vary from case-to-case, but normally will exceed the 'imminent' time frame applicable in a threat of injury analysis [in antidumping and countervailing duty investigations]."[62] [63]

Although the standard in five-year reviews is not the same as the standard applied in original

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[57] Commissioner Bragg joins the remainder of these views with the exception of the Commission's discussion regarding Argentina, to which she dissents.

[58] 19 U.S.C. § 1675a(a).

[59] SAA, H.R. Rep. No. 103-316, vol. I, at 883-84 (1994). 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. SAA at 883.

[60] 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.

[61] 19 U.S.C. § 1675a(a)(5).

[62] 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.*

[63] In analyzing what constitutes a reasonably foreseeable time, Chairman Koplan examines all the current and likely conditions of competition in the relevant industry. He defines "reasonably foreseeable time" as the length of time it is likely to take for the market to adjust to a revocation. In making this assessment, he considers all factors that may accelerate or delay the market adjustment process including any lags in response by foreign producers, importers, consumers, domestic producers, or others due to: lead times; methods of contracting; the need to establish channels of distribution; product differentiation; and any other factors that may only manifest themselves in the longer term. In other words, this analysis seeks to define "reasonably foreseeable time" by reference to current and likely conditions of competition, but also seeks to avoid unwarranted speculation that may occur in predicting events into the more distant future.

antidumping or countervailing duty investigations, 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 order is revoked."[64] 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 under review, and whether the industry is vulnerable to material injury if the order is revoked or the suspension agreement is terminated.[65] [66]

We note that the statute authorizes the Commission to take adverse inferences in five-year reviews, but such authorization does not relieve the Commission of its obligation to consider the record evidence as a whole in making its determination.[67] We generally give credence to the facts supplied by the participating parties and certified by them as true, but base our decision on the evidence as a whole, and do not automatically accept the participating parties' suggested interpretation of the record evidence. Regardless of the level of participation and the interpretations urged by participating parties, the Commission is obligated to consider all evidence relating to each of the statutory factors and may not draw adverse inferences that render such analysis superfluous. "In general, the Commission makes determinations by weighing all of the available evidence regarding a multiplicity of factors relating to the domestic industry as a whole and by drawing reasonable inferences from the evidence it finds most persuasive."[68] In this case, a number of respondent interested parties did not provide questionnaire responses and/or participate in these reviews. Accordingly, we have relied on the facts available in these reviews, which consist primarily of the evidence in the record from the Commission's original investigations, the information collected by the Commission since the institution of these reviews, and information submitted by interested parties in these reviews.[69]

In evaluating the likely volume of imports of subject merchandise if the orders under review are revoked, the Commission is directed to consider whether the likely volume of subject imports would be significant either in absolute terms or relative to production or consumption in the United States.[70] In doing so, the Commission must consider "all relevant economic factors," including four enumerated

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[64] 19 U.S.C. § 1675a(a)(1).

[65] 19 U.S.C. § 1675a(a)(1). 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. 19 U.S.C. § 1675a(a)(5). While the Commission must consider all factors, no one factor is necessarily dispositive. SAA at 886.

[66] Section 752(a)(1)(D) of the Act directs the Commission to take into account in five-year reviews involving antidumping proceedings "the findings of the administrative authority regarding duty absorption." 19 U.S.C. § 1675a(a)(1)(D). Commerce has not issued any duty absorption findings with respect to these reviews.

[67] 19 U.S.C. § 1675(e).

[68] SAA at 869.

[69] The Brazilian Respondents urged the Commission to give little weight to pre-order conditions as an indicator of what might happen should the orders be revoked on the basis of alleged price-fixing activities by the domestic producers that may have tainted the record of the original investigation with the same type of misrepresentations and omissions found in the ferrosilicon case (Ferrosilicon from Brazil, China, Kazakhstan, Russia, Ukraine, and Venezuela, Inv. Nos. 303-TA-23, 731-TA-566-570, and 731-TA-641 (Reconsideration), USITC Pub. 3218 (Aug. 1999)). Brazilian Respondents' Prehearing Brief at 40-44. We disagree. The circumstances of these reviews are very different from those in the reconsideration proceedings on ferrosilicon. In the absence of evidence that the domestic producers provided false or misleading information to the Commission in the original silicon metal investigations, we decline to find information from the original investigation to be unreliable.

[70] 19 U.S.C. §1675a(a)(2).

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.[71]

In evaluating the likely price effects of subject imports if the orders are revoked, the Commission is directed to consider whether there is likely to be significant underselling by the subject imports as compared with domestic like products and whether the subject imports are likely to enter the United States at prices that would have a significant depressing or suppressing effect on the price of domestic like products.[72]

In evaluating the likely impact of imports of subject merchandise if the orders are revoked, 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: (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.[73] All relevant economic factors are to be considered within the context of the business cycle and the conditions of competition that are distinctive to the industry.[74] 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 antidumping duty orders at issue and whether the industry is vulnerable to material injury if the orders are revoked.[75]

For the reasons stated below, we determine that revocation of the antidumping duty order on silicon metal from Argentina would not be likely to lead to continuation or recurrence of material injury

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[71] 19 U.S.C. § 1675(a)(2)(A)-(D).

[72] 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.

[73] 19 U.S.C. § 1675a(a)(4).

[74] 19 U.S.C. § 1675a(a)(4). Section 752(a)(6) of the Act states that "the Commission may consider the magnitude of the margin of dumping" in making its determination in a five-year review investigation. 19 U.S.C. § 1675a(a)(6). The statute defines the "magnitude of the margin of dumping" to be used by the Commission in five-year review investigations as "the dumping margin or margins determined by the administering authority under section 1675a(c)(3) of this title." 19 U.S.C. § 1677(35)(C)(iv). *See also* SAA at 887. In the final results of its expedited reviews regarding the subject imports, Commerce found that revocation of the orders would be likely to lead to continuation or recurrence of dumping at the margin of 17.87 percent with respect to Argentine producers. 65 Fed. Reg. at 35609. With respect to producers in Brazil, Commerce found the likely margins of dumping to be 87.79 percent for CBCC, 93.20 percent for CCM and 91.06 percent for all others. 65 Fed. Reg. at 35608. As pertains to Chinese producers, Commerce found a sunset margin of 139.49 percent. 65 Fed. Reg. at 35610.

[75] 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.

to the domestic industry within a reasonably foreseeable time.[76] We also determine, for the reasons stated below, that revocation of the antidumping duty orders on subject imports from Brazil and China would be likely to lead to continuation or recurrence of material injury to the domestic industry within a reasonably foreseeable time.

B. Conditions of Competition

In evaluating the likely impact of the subject imports on the domestic industry, 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."[77]

Since the time of the original investigations, demand has expanded significantly.[78] Demand is derived from the demand for other products, such as chemical products and aluminum.[79] The world demand for these end products is projected to grow at a strong rate in the foreseeable future.[80]

In the decade since the orders were imposed, the domestic industry's capacity, capacity utilization and shipments have improved.[81] However, a number of U.S. producers have filed for bankruptcy protection since the orders were imposed. During the original investigations, there were eight firms producing silicon metal, while there are currently three. Reynolds closed its plant in 1990. Silicon Metaltech declared itself bankrupt and AST acquired its assets in 1993, but by September 1999 the facilities were closed down. Globe acquired Dow's production facility in 1993 and SKW's production plant in 1994. SiMETCO also filed for bankruptcy protection and SIMCALA acquired its assets in 1995.[82] American Alloys closed its facility in 1998, and is currently in Chapter 11 bankruptcy proceedings.[83]

Non-subject imports supply a portion of demand and at levels greater than those in the original investigations.[84]

There are three grades of silicon metal subject to these reviews, chemical, primary aluminum, and secondary aluminum, just as there were during the time of the original investigations. Price is an

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[76] Commissioner Bragg dissenting.

[77] 19 U.S.C. § 1675(a)(4).

[78] Apparent U.S. consumption was 217,078 gross short tons in 1990, INV-O-084 at Table 2, while it was 329,786 gross short tons in 1999. CR/PR at Table I-7.

[79] *See* CR at II-11, PR at II-7.

[80] *See* CR at II-13, PR at II-8.

[81] In 1990, U.S. average capacity totaled 183,174 gross short tons, INV-O-084 at Table 7, while it totaled 236,857 gross short tons in 1999. CR/PR at Table C-1. In 1990, capacity utilization was 85.8 percent, INV-O-084 at Table 7, as compared to 88.3 percent in 1999. CR/PR at Table C-1. Total shipments were 150,415 gross short tons in 1990, INV-O-084 at Table 8, and *** gross short tons in 1999. CR/PR at Table III-1.

[82] CR at I-15, PR at I-12.

[83] CR at III-1, III-3, PR at III-1, III-3.

[84] In 1990, non-subject imports totaled 11,525 gross short tons, INV-O-084 at Table 2, accounting for 5.3 percent of apparent U.S. consumption by quantity. Non-subject imports totaled 108,852 gross short tons in 1999, 54,463 gross short tons in January-June 1999, and 65,130 gross short tons in January-June 2000. CR/PR at Table I-6. In terms of quantity, non-subject imports accounted for 33.0 percent of apparent consumption in 1999, 32.9 percent in January-June 1999, and 36.3 percent in January-June 2000. CR/PR at Table I-7.

important factor affecting purchases of all grades of silicon metal.[85] Within each grade, there is moderate substitutability, assuming certification standards are met.[86] Chemical and primary aluminum grade silicon metal require certification;[87] however, once a producer is certified, price becomes more important as a factor in purchasing decisions.[88]

We find that the foregoing conditions of competition are likely to remain unchanged for the reasonably foreseeable future and thus provide an adequate basis by which to assess the likely effects of revocation within the reasonably foreseeable future.

C. Revocation of the Order on Subject Silicon Metal Imports From Argentina Is Not Likely to Lead to Continuation or Recurrence of Material Injury Within a Reasonably Foreseeable Time[89]

In the original investigations, the Commission found material injury by reason of cumulated imports from Argentina, Brazil and China and that imports increased sharply and substantially during the period of investigation and gained substantial market share while the domestic share of U.S. consumption by quantity declined overall. The Commission also found that there was significant underselling by the subject imports throughout the period of investigation and that the domestic producers were not able to modernize their facilities, had curtailed expansion and were experiencing difficulty in raising capital because of the subject imports.[90]

As stated above, we find that subject imports from Argentina likely would have no discernible adverse impact on the domestic industry if the order is revoked. The level of imports from Argentina was quite small at the time of the original investigation and is virtually nonexistent now. The number of Argentine producers has been reduced to one ***. Argentina's major export market is Europe and its product is not certified for sale in the United States, nor is there any evidence in the record that it would abandon its long-term European contracts to qualify and ship its product to the United States.

In view of the foregoing, we find that likely future levels of subject imports from Argentina will not be significant. The probable volumes, if any, will likely be too small to affect domestic prices significantly. In the absence of significant volume or price effects, we find that the likely impact on the domestic silicon metal industry of subject imports from Argentina, in the event of revocation, will not be significant. We therefore find that subject imports from Argentina would likely not lead to continuation or recurrence of material injury within a reasonably foreseeable time if the order were revoked.

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[85] Five purchasers who responded to the Commission's questionnaires ranked it as the most important factor in making purchasing decisions, six ranked it as the second, and seven ranked it as the third. CR/PR at Table II-1.

[86] *See* CR at I-12, PR at I-10.

[87] *See* CR at I-13, II-16, PR at I-11, II-9.

[88] *See* CR/PR at Table II-2.

[89] Commissioner Bragg dissenting.

[90] Argentina Determination at 15.

D. Revocation of the Orders on Subject Silicon Metal Imports From Brazil and China Is Likely to Lead to Continuation or Recurrence of Material Injury Within a Reasonably Foreseeable Time[91]

1. Likely Volume of Subject Imports

For all three countries in the original investigations, the Commission found that the cumulated volume of subject imports increased 8.0 percent from 1988 to 1989 and 74.6 percent from 1989 to 1990. The value of the imports decreased 1.7 percent from 1988 to 1989, but increased 48.2 percent from 1989 to 1990. The domestic share of U.S. consumption, as measured by quantity and by value, increased from 1988 to 1989, but declined in 1990. However, the market share of the subject imports as measured both by quantity and by value increased throughout the period.[92]

Foreign subject capacity in China and Brazil has increased since the original investigations. While the original record contained no data regarding the capacity in China to produce silicon metal in 1990[93] and the record data in these reviews are not precise,[94] China has significant unused capacity, approximating 37 percent of capacity.[95] This excess capacity in 1999 combined with current inventories would represent at least 46 percent of U.S. consumption if the capacity were utilized to produce silicon metal and the resulting production and inventories were shipped to the United States.[96] The industry in China is export-oriented,[97] and almost all of China's imports into the United States during the period of review have been as Temporary Imports under Bond ("TIB").[98] Utilizing the production numbers for the five reporting Chinese producers in conjunction with the lower end of the capacity range leads us to the

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[91] Commissioner Bragg notes that the addition of Argentina to the analysis strengthens the determination that the volume of subject imports is likely to be significant in the event of revocation.

[92] China Determination at 26-27; Brazil Determination at 15. Subject imports from Brazil and China rose from 22,593 gross short tons in 1988 to 27,345 gross short tons in 1989, and then to 58,443 gross short tons in 1990. INV-O-084 at Table 23.

[93] *See* INV-O-084 at Table 21.

[94] Because only five Chinese producers of the 42 that were identified provided responses to the Commission's questionnaires, CR at IV-8, PR at IV-6, precise data pertaining to the capacity of the Chinese silicon metal industry are lacking. The evidence in the record suggests Chinese capacity ranges from 250,000 tons to 400,000 tons. For purposes of our analysis, we have relied on the figure of 272,000 tons that was reported as 1998 exports by USGS Mineral Industry Surveys, Silicon, 1999 Annual Review, August 2000. CR at II-9 n.23, PR at II-6 n.23.

[95] If one considers China's production of silicon metal to be 250,000 tons and its production capacity to be 400,000 tons, the resulting capacity utilization rate is less than 63 percent. *See* AST/Elkem/Unions' Prehearing Brief at 29.

[96] The inventories used are those provided by the five Chinese producers responding to the Commission's questionnaires. The ratio of inventories to production was 7.1 percent in 1999, 3.8 percent in January-June 1999, and 2.4 percent in January-June 2000. CR/PR at Table IV-5.

[97] For the five responding Chinese producers, silicon metal exports totaled 77.7 percent of Chinese production in 1997, 85.7 percent in 1998, and 83.6 percent in 1999. The corresponding figures were 84.3 percent in January-June 1999 and 96.6 percent in January-June 2000. CR/PR at Table IV-5.

[98] TIB imports accounted for 100 percent of Chinese imports in 1999, 98 percent in 1998, and 80 percent in 1997. CR/PR at Table IV-1 n.1.

conclusion that their reported production represents only 10 percent of total exports.[99] In addition, China faces trade barriers in the European Union, which imposed an antidumping duty order on silicon metal from China and determined in December 1997 to continue the order at a duty rate of 49 percent *ad valorem*.[100]

Silicon metal production capacity in Brazil increased from 170,305 gross short tons in 1990[101] to 190,310 gross short tons in 1999.[102] The data collected in response to the Commission's questionnaires show that, like China, the Brazilian industry is heavily export-oriented. It exported 84.8 percent of its total shipments in 1999, 86.6 percent in January-June 1999 and 86.5 percent in January-June 2000.[103] The export volumes are large relative to U.S. production: 60.6 percent in 1999, 61.1 percent in January-June 1999, and 68.2 percent in January-June 2000.[104] The Brazilian silicon metal industry also has significant excess capacity. Its capacity utilization was 74.3 percent in 1999, 70.7 percent in January-June 1999, and 82.0 percent in January-June 2000. Further, its inventories would represent 8.9 percent of U.S. consumption in 1999, 15.8 percent in January-June 1999, and 16.1 percent in January-June 2000.[105] Brazil's aggregate inventories and excess capacity together would represent 23.7 percent of U.S. consumption in 1999, 32.6 percent in January-June 1999, and 25.8 percent in January-June 2000,[106] if the capacity were used to produce silicon metal and that production plus inventories were shipped to the United States. We note that Brazil's primary aluminum product is already certified for sale in the United States and that it has an existing customer base that could serve as the basis for expansion.[107] Lastly, Dow Corning Corporation, a large purchaser, has purchased CBCC, one of the largest Brazilian producers, and ***.[108]

In view of the demonstrated ability of Brazil and China to increase imports rapidly to the United States in the original investigation,[109] it is likely that Brazil and China will shift more of their production to the United States in the event the orders are revoked. Accordingly, we find that the likely volume of

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[99] The five responding Chinese producers manufactured 25,600 gross short tons in 1999, 15,600 in January-June 1999, and 24,800 gross short tons in January-June 2000. Chinese exports totaled 21,060 gross short tons in 1999, 12,020 gross short tons in January-June 1999, and 24,140 gross short tons in January-June 2000. CR/PR at Table IV-5.

[100] CR at IV-8, PR at IV-6.

[101] INV-O-084 at Table 21.

[102] CR/PR at Table IV-4.

[103] CR/PR at Table IV-4.

[104] *Compare* CR/PR at Table IV-4 *with* CR/PR at Table I-6.

[105] *Compare* CR/PR at Table IV-4 *with* CR/PR at Table I-7.

[106] *Compare* CR/PR at Table IV-4 *with* CR/PR at Table I-7.

[107] *See* CR at II-8,PR at II-5.

[108] CR at IV-6, PR at IV-4; Brazilian Respondents' Posthearing Brief, Exh.6; Globe's Posthearing Brief, Att. A, Exh. 1; Globe's Final Comments at 1-7.

[109] Imports from Brazil into the United States increased from 12,911 gross short tons in 1988 to 32,083 gross short tons in 1990. INV-O-084 at Table 22. Further, imports from Brazil into the United States increased from 10,795 tons in 1997 to 14,268 tons in 1999, and were 5,324 tons in January-June 1999 as compared to 10,411 tons in January-June 2000. CR/PR at Table I-6. Imports from China into the United States increased from 9,682 gross short tons in 1988 to 26,360 gross short tons in 1990. INV-O-084 at Table 22. More recently, imports from China into the United States increased from 3,214 gross short tons in 1997 to 3,324 gross short tons in 1999, and were 1,673 gross short tons in January-June 1999 as compared to 1,812 gross short tons in January-June 2000.

cumulated subject imports from Brazil and China would be significant within a reasonably foreseeable time if the orders are revoked.

2. Likely Price Effects of Subject Imports[110]

In the original investigations, the Commission determined that there was significant underselling by the subject imports throughout the period of investigation, and that this was particularly significant in light of the generally declining prices for the domestic product.[111]

As noted above, both domestic and imported silicon metal is generally substitutable within grades and price is an important consideration for purchasers. The chemical grade product is typically purchased through long-term contracts, while primary aluminum producers sell the product through one-year contracts and secondary aluminum producers generally sell using quarterly contracts and spot sales.[112] Notwithstanding the existence of the three grades of silicon metal, only one price is published and this single price influences the prices of silicon metal of all grades by varying degrees.[113]

During the period of review, prices generally trended downward, although some grades showed increases toward the end of the period.[114] Current market prices are declining, and the domestic producers have had to renegotiate long-term contracts with major customers to adjust prices downward.[115]

Pricing data for the period of these reviews are limited, but even with the discipline of the order in place, the Brazilian product undersells the domestic like product, particularly with respect to pricing products *** from Brazil during the period of review.[116]

The prices for Chinese silicon metal are primarily for secondary aluminum product, brought into the United States under TIB and thus not subject to antidumping duties.[117] In the original investigation the margins of underselling for the Chinese product ranged from 3.6 percent to 13.6 percent.[118]

Given the record evidence in these reviews, and in view of the findings in the original investigations, we find that the likely significant increased volumes of subject silicon metal would likely undersell domestic silicon metal products to a significant degree and have significant price suppressing and depressing effects within a reasonably foreseeable time if the orders are revoked.[119]

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[110] Commissioner Bragg notes that the addition of Argentina to the analysis strengthens the determination that subject imports are likely to have significant negative price effects on the domestic industry in the event of revocation.

[111] China Determination at 27-28; Brazil Determination at 15.

[112] CR at II-1, PR at II-1.

[113] *See* AST/Elkem/Unions' Prehearing Brief at 42 & Exh.20; Brazilian Respondents' Posthearing Brief, Exh. 5; CR/PR at Table V-5; Tr. at 262-63 (Mr. McHale), 299 (Ms. Slater).

[114] *See* CR/PR at Tables V-1 - V-5.

[115] *See, e.g.*, Tr. at 182-83 (Mr. Kvernmo).

[116] *See* CR/PR at Tables V-2 - V-3.

[117] CR at IV-1, PR at IV-1.

[118] INV-O-084 at Table 31.

[119] Commissioner Bragg infers that, in the event of revocation, Chinese subject producers will revert to aggressive pricing practices in connection with exports of subject merchandise to the United States, as evidenced in the Commission's original determination.

3. Likely Impact of Subject Imports[120]

In the original investigations, the Commission found that the volume and price effects of the subject imports had a negative impact on the domestic industry, as shown by the steady increase in the ratio of the cost of goods sold to net sales over the period of investigation, indicating that prices had been suppressed relative to costs. It also determined that the domestic producers had been unable to modernize their facilities, had curtailed expansion, and were experiencing difficulty in raising capital due to the effects of the subject imports.[121]

We find in these reviews that the domestic industry is vulnerable to material injury should the antidumping orders be revoked. As explained above, two firms declared bankruptcy in 1993 and 1995. Most of the remaining firms have experienced ***, and the average ratio of operating income to net sales value declined from *** percent to *** percent over the period.[122] Two other domestic producers closed in 1998 and 1999, resulting in a loss of market share for the domestic industry, and one of them declared bankruptcy during the review period.[123] ***. Although the domestic industry's condition had improved somewhat since the orders were imposed,[124] such gains were eroded over the period of review.

Capacity utilization has decreased over the period of review,[125] as has production.[126] Domestic producers' shipments have declined as well.[127] Net sales have decreased steadily over the period.[128] The number of production and related workers has declined, as have their hours worked.[129] Similarly, capital

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[120] Commissioner Bragg notes that the addition of Argentina to the analysis strengthens the determination that subject imports are likely to have a significant adverse impact on the domestic industry in the event of revocation.

[121] China Determination at 28, Brazil Determination at 15.

[122] CR/PR at Table III-4. Total operating income declined from *** in 1997 to *** in 1999, although it was *** in January-June 1999 as compared to *** in January-June 2000. The weighted average ratio of operating income to net sales value was *** percent in January-June 1999 as compared to *** percent in January-June 2000. CR/PR at Table III-4.

[123] American Alloys closed in 1998 and is in Chapter 11 bankruptcy proceedings, and AST ceased production in 1999. CR at III-1, III-3, PR at III-1, III-3. The domestic producers' market share decreased from 64.5 percent in 1998 to 61.7 percent in 1999. CR/PR at Table I-7.

[124] For example, capacity, production and capacity utilization have increased, as have the quantity and value of U.S. shipments. *See* CR/PR at Table I-1.

[125] Capacity utilization fell from 94.4 percent in 1997 to 91.1 percent in 1998, then further to 88.2 percent in 1999. It was 89.2 percent in January-June 1999 as compared to 96.4 percent in January-June 2000. CR/PR at Table III-1.

[126] Production was 213,010 gross short tons in 1997 and 213,274 gross short tons in 1998, then declined to 209,117 gross short tons in 1999. It was 107,009 gross short tons in January-June 1999 and 106,744 gross short tons in January-June 2000. CR/PR at Table III-1.

[127] U.S. producers' U.S. shipments were 206,692 gross short tons in 1997 and 206,788 gross short tons in 1998, before falling to 203,342 gross short tons in 1999. They were 104,198 gross short tons in January-June 1999 and 101,870 gross short tons in January-June 2000. CR/PR at Table I-6.

[128] Net sales fell from *** in 1997 to *** in 1998, then further to *** in 1999. They totaled *** in January-June 1999 and *** in January-June 2000. CR/PR at Table III-3.

[129] Production and related workers numbered 816 in 1997, 816 in 1998 and 770 in 1999. They numbered 771 in January-June 1999 and 719 in January-June 2000. Their hours worked fell from 1.9 million hours in 1997 to 1.8 million hours in 1998, and were 1.8 million hours in 1999. Their hours worked were 911,000 in January-June 1999 and 835,000 in January-June 2000. CR/PR at Table III-1.

expenditures have decreased.[130] However, inventories are lower.[131]

As discussed above, revocation of the antidumping duty orders on Brazil and China likely would lead to significant increases in the volume of cumulated subject imports at prices that would likely undersell the domestic like product and significantly suppress or depress U.S. prices. In addition, the volume and price effects of the cumulated subject imports likely would have a significant adverse impact on the domestic industry and likely would cause the domestic industry to lose additional market share.

The price and volume declines likely would have a significant adverse impact on the production, shipment, sales, and revenue levels of the domestic industry. These reductions would have a direct adverse impact on the industry's profitability as well as its ability to raise capital and maintain necessary capital investments. In addition, we find it likely that revocation of the orders will result in commensurate employment declines for domestic firms.

CONCLUSION

For the foregoing reasons, we determine that revocation of the antidumping duty order on subject imports from Argentina would not be likely to lead to continuation or recurrence of material injury to the domestic industry producing silicon metal within a reasonably foreseeable time.[132] We also determine that revocation of the antidumping duty orders on subject imports from Brazil and China would be likely to lead to continuation or recurrence of material injury to the domestic industry producing silicon metal within a reasonably foreseeable time.

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[130] Capital expenditures increased from *** in 1997 to *** in 1998, then decreased to *** in 1999. They were *** in January-June 1999 and *** in January-June 2000. CR/PR at Table III-6.

[131] Inventories decreased from 11,174 gross short tons in 1997 to 10,982 gross short tons in 1998, then to 9,151 gross short tons in 1999. They were 8,056 gross short tons in January-June 1999 and 9,679 gross short tons in January-June 2000. CR/PR at Table III-1.

[132] Commissioner Bragg dissenting.

PART I: INTRODUCTION AND OVERVIEW

BACKGROUND

On November 2, 1999, the Commission gave notice, pursuant to section 751(c) of the Tariff Act of 1930 (the Act), that it had instituted reviews to determine whether revocation of the antidumping duty orders on silicon metal from Argentina, Brazil, and China would likely lead to the continuation or recurrence of material injury to a domestic industry (64 FR 59209, November 2, 1999). Effective February 3, 2000, the Commission determined that it would conduct full reviews pursuant to section 751(c)(5) of the Act (65 FR 7891, February 16, 2000). Information relating to the background and schedule of these reviews is provided in the following tabulation.[1]

Effective date	Action
China..... 6/10/91 Brazil..... 7/31/91 Argentina..... 9/26/91	Commerce's antidumping duty order (56 FR 26649) (56 FR 36135) (56 FR 48779)
November 2, 1999	Commission's institution of five-year reviews (64 FR 59209, November 2, 1999)
February 3, 2000	Commission's decision to conduct full reviews (65 FR 7891, February 16, 2000)
China..... 6/5/00 Brazil..... 6/5/00 Argentina..... 6/5/00	Commerce's final results of expedited reviews (65 FR 35609) (65 FR 35607) (65 FR 35608)
August 8, 2000	Commission's scheduling of the reviews (65 FR 49595, August 14, 2000)
November 14, 2000	Commission's hearing[2]
January 12, 2001	Commission's vote
January 25, 2001	Commission's determinations transmitted to Commerce

THE ORIGINAL INVESTIGATIONS

On August 24, 1990, a petition was filed with Commerce and the Commission alleging that an industry in the United States was materially injured or threatened with material injury by reason of dumped imports of silicon metal from Argentina, Brazil, and China.[3] The investigations for the three countries continued on slightly different schedules.

For Argentina, on August 9, 1991, Commerce made a final affirmative dumping determination, with a margin of 8.65 percent for Andina and for all other firms. The Commission made its final affirmative injury determination on September 19, 1991, and Commerce issued an antidumping duty

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[1] The Commission's notice of institution, notice to conduct full reviews, scheduling notice, and statement on adequacy appear in app. A and may also be found at the Commission's web site (internet address *www.usitc.gov*). Commissioners' votes on whether to conduct an expedited or full review may also be found at the web site. Relevant Commerce notices also appear in app. A.

[2] App. B contains a list of witnesses who appeared at the hearing.

[3] American Alloys, Elkem, Globe, Silicon Metaltech, SiMETCO, and SKW filed the petition.

order on September 26, 1991. The order was amended on July 10, 1995, as a result of a court remand, resulting in a margin of 17.87 for Andina and for all other firms.[4]

For Brazil, on June 12, 1991, Commerce made a final affirmative dumping determination, with margins of 87.79 percent for CBCC, 93.20 percent for CCM, and 91.06 percent for all other firms. The Commission made its final affirmative injury determination on July 24, 1991, and Commerce issued an antidumping duty order on July 31, 1991.

For China, on April 23, 1991, Commerce made a final affirmative dumping determination, with a margin of 139.49 percent for all firms. The Commission made its final affirmative injury determination on June 3, 1991, and Commerce issued an antidumping duty order on June 10, 1991.

SUMMARY DATA

Table I-1 presents a summary of data from the original investigations and from these reviews. A summary of data collected in these reviews is presented in appendix C.

U.S. industry data are based on the questionnaire responses of American Alloys, AST, Elkem, Globe, and SIMCALA, which accounted for all known U.S. production of silicon metal during the period under review. U.S. import data are based on official Commerce statistics. Almost all imports from China during 1997-99 were under temporary importation bond (TIB), which are "free as articles to be processed under bond for exportation, including processes which result in articles manufactured or produced in the U.S."[5] These imports are not subject to antidumping duties.

STATUTORY CRITERIA AND ORGANIZATION OF THE REPORT

Section 751(c) of the Act requires Commerce and the Commission to conduct a review no later than five years after the issuance of an antidumping or countervailing duty order or the suspension of an investigation to determine whether revocation of the order or termination of the suspended investigation "would be likely to lead to continuation or recurrence of dumping or a countervailable subsidy (as the case may be) and of material injury."[6]

Section 752(a) of the Act provides that in making its determination of likelihood of continuation or recurrence of material injury--

> *(1) IN GENERAL.-- . . . the Commission shall determine whether revocation of an order, or termination of a suspended investigation, would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time. The Commission shall consider the likely volume, price effect, and impact of imports of the subject merchandise on the industry if the order is revoked or the suspended investigation is terminated. The Commission shall take into account--*

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[4] 60 FR 35552.

[5] U.S. Department of Commerce memorandum dated March 22, 1984.

[6] Certain transition rules apply to the scheduling of reviews (such as these) involving antidumping and countervailing duty orders and suspensions of investigations that were in effect prior to January 1, 1995 (the date the WTO Agreement entered into force with respect to the United States). Reviews of these transition orders will be conducted over a three-year transition period running from July 1, 1998, through June 30, 2001. Transition reviews must be completed not later than 18 months after institution.

Table I-1
Silicon metal: Summary data from the original investigations and current reviews, 1988-90 and 1997-99

(Quantity=*1,000 gross short tons*; value=*1,000 dollars*; unit values, unit labor costs, and unit financial data are *per short ton*)

Item	Calendar year[1]					
	1988	1989	1990	1997	1998	1999
U.S. consumption quantity: Amount	214	196	217	339	321	330
Producers' share[2]	71.7	75.2	66.7	61.0	64.5	61.7
Importer's share: Argentina[2]	4.5	3.8	1.1	0.0	([3])	0.0
Importer's share: Brazil[2]	6.0	8.5	14.8	3.2	2.0	4.3
Importer's share: China[2 4]	4.5	5.4	12.1	0.9	1.0	1.0
All other countries[2]	13.2	7.0	5.3	34.9	32.6	33.0
Total imports[2]	28.3	24.8	33.3	39.0	35.5	38.3
U.S. consumption value: Amount	268,571	235,436	242,028	519,337	458,509	426,073
Producers' share[2]	72.5	78.8	71.1	61.8	67.6	65.2
Importer's share: Argentina[2]	3.8	3.3	0.9	0.0	([3])	0.0
Importer's share: Brazil[2]	6.3	7.9	12.8	3.3	1.8	4.0
Importer's share: China[2 4]	4.4	5.1	9.7	0.6	0.6	0.7
All other countries[2]	13.0	5.0	5.5	34.3	30.1	30.1
Total imports[2]	27.5	21.2	28.9	38.2	32.4	34.8

Footnotes appear at the end of the table.

Item	Calendar year[1]					
	1988	1989	1990	1997	1998	1999
U.S. imports from-- Argentina:						
Quantity	10	7	2	0	([5])	0
Value	10,274	7,747	2,206	0	61	0
Unit value	$1,064	$1,034	$927	([6])	$1,406	([6])
Brazil:						
Quantity	13	17	32	11	6	14
Value	16,876	18,511	30,894	17,010	8,251	17,203
Unit value	$1,307	$1,110	$963	$1,576	$1,302	$1,206
China:[4]						
Quantity	10	11	26	3	3	3
Value	11,723	11,964	23,539	3,373	2,559	2,885
Unit value	$1,211	$1,121	$893	$1,050	$837	$868
All other countries:						
Quantity	28	14	12	118	104	109
Value	34,946	11,673	13,426	178,206	137,765	128,344
Unit value	$1,243	$846	$1,165	$1,507	$1,319	$1,179
All countries:						
Quantity	60	49	72	132	114	126
Value	73,820	49,895	70,064	198,589	148,637	148,432
Unit value	$1,223	$1,026	$968	$1,502	$1,305	$1,174

Footnotes appear at the end of the table.

Item	Calendar year[1]					
	1988	1989	1990	1997	1998	1999
U.S. producers'--						
Capacity quantity	178	178	183	226	234	237
Production quantity	161	153	157	213	213	209
Capacity utilization[2]	90.1	85.5	85.8	94.4	91.1	88.3
U.S. shipments:						
Quantity	153	148	145	207	207	203
Value	194,751	185,541	171,964	320,748	309,872	277,641
Unit value	$1,271	$1,258	$1,188	$1,552	$1,499	$1,365
Ending inventory quantity	7	10	15	11	11	9
Inventories/total shipments[2]	4.5	6.4	9.9	5.3	5.2	4.4
Production workers	572	546	571	816	816	770
Hours worked (*1,000 hours*)	1,256	1,138	1,216	1,936	1,801	1,750
Wages paid (*1,000 dollars*)	17,046	15,757	17,413	31,474	31,829	32,174
Hourly wages	$13.57	$13.85	$14.32	$16.26	$17.67	$18.39
Productivity (*gross short tons per 1,000 hours*)	104.5	100.4	99.8	110.0	118.4	119.5
Net sales:						
Quantity	158	143	141	***	***	***
Value	202,670	179,170	168,679	***	***	***
Unit value	$1,283	$1,253	$1,192	$***	$***	$***
Cost of goods sold	177,060	167,769	159,900	***	***	***
Gross profit or (loss)	25,610	11,401	8,779	***	***	***
Operating income or (loss)	15,944	753	(1,708)	***	***	***
Unit cost of goods sold	$1,121	$1,174	$1,130	$***	$***	$***
Unit operating income or (loss)	$101	$5	$(12)	$***	$***	$***
Cost of goods sold/sales[2]	87.4	93.6	94.8	***	***	***
Operating income or (loss)/sales[2]	7.9	0.4	(1.0)	***	***	***

[1] Financial data for 1997-99 are on a fiscal year basis.
[2] In *percent.*
[3] Less than 0.05 percent.
[4] TIB imports account for the following: 100 percent in 1999, 98 percent in 1998, and 80 percent in 1997.
[5] Less than 500 gross short tons.
[6] Not applicable.

Note.–Because of rounding, figures may not add to the totals shown. Calculated data are based on unrounded numbers.

Source: Compiled from data submitted in response to Commission questionnaires and from official Commerce statistics.

(A) its prior injury determinations, including the volume, price effect, and impact of imports of the subject merchandise on the industry before the order was issued or the suspension agreement was accepted,

(B) whether any improvement in the state of the industry is related to the order or the suspension agreement,

(C) whether the industry is vulnerable to material injury if the order is revoked or the suspension agreement is terminated, and

(D) in an antidumping proceeding . . ., (Commerce's findings) regarding duty absorption . . ..

(2) VOLUME.--In evaluating the likely volume of imports of the subject merchandise if the order is revoked or the suspended investigation is terminated, the Commission shall consider whether the likely volume of imports of the subject merchandise would be significant if the order is revoked or the suspended investigation is terminated, either in absolute terms or relative to production or consumption in the United States. In so doing, the Commission shall consider all relevant economic factors, including–

(A) any likely increase in production capacity or existing unused production capacity in the exporting country,

(B) existing inventories of the subject merchandise, or likely increases in inventories,

(C) the existence of barriers to the importation of such merchandise into countries other than the United States, and

(D) 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.

(3) PRICE.--In evaluating the likely price effects of imports of the subject merchandise if the order is revoked or the suspended investigation is terminated, the Commission shall consider whether--

(A) there is likely to be significant price underselling by imports of the subject merchandise as compared to domestic like products, and

(B) imports of the subject merchandise are likely to enter the United States at prices that otherwise would have a significant depressing or suppressing effect on the price of domestic like products.

(4) IMPACT ON THE INDUSTRY.--In evaluating the likely impact of imports of the subject merchandise on the industry if the order is revoked or the suspended investigation is terminated, the Commission shall consider all relevant economic factors which are likely to have a bearing on the state of the industry in the United States, including, but not limited to--

(A) likely declines in output, sales, market share, profits, productivity, return on investments, and utilization of capacity,

(B) likely negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment, and

(C) 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.

The Commission shall evaluate all such relevant economic factors . . . within the context of the business cycle and the conditions of competition that are distinctive to the affected industry.

Section 752(a)(6) of the Act states further that in making its determination, "the Commission may consider the magnitude of the margin of dumping or the magnitude of the net countervailable subsidy. If a countervailable subsidy is involved, the Commission shall consider information regarding the nature of the countervailable subsidy and whether the subsidy is a subsidy described in Article 3 or 6.1 of the Subsidies Agreement."

Information obtained during the course of these reviews that relates to the above factors is presented throughout this report. Responses by U.S. producers, importers, and purchasers of silicon metal and producers of silicon metal in Argentina, Brazil, and China to a series of questions concerning the significance of the existing antidumping duty orders and the likely effects of revocation are presented in appendix D.

COMMERCE'S RESULTS OF EXPEDITED REVIEWS

On June 5, 2000, Commerce found that revocation of the antidumping duty orders on silicon metal from Argentina, Brazil, and China would likely lead to continuation or recurrence of dumping as follows:[7]

Country	Margin *(percent)*	
Argentina	Andina	17.87
	All others	17.87
Brazil	CBCC	87.79
	CCM	93.20
	All others	91.06
China	All Chinese producers/exporters	139.49

COMMERCE'S ADMINISTRATIVE REVIEWS

Commerce has conducted 4 administrative reviews of the antidumping duty order on silicon metal from Argentina as shown in the following tabulation:

[7] Commerce's notice is presented in app. A.

Period of review	Date review issued	Margin *(percent)*
03/29/91-08/31/92	04/94 (59 FR 16176)	Andina ..... 2.06 Silarsa 24.62
09/01/92-08/31/93	02/97 (62 FR 5613)	Andina ..... 13.80 Silarsa 24.62
09/01/93-08/31/94	12/95 (60 FR 64420)	Silarsa 24.62
09/01/97-08/31/98	02/00 (65 FR 5311)	Andina. 0.00

Commerce has conducted 7 administrative reviews of the antidumping duty order on silicon metal from Brazil as shown in the following tabulation:

Period of review	Date review issued	Margin *(percent)*
03/09/91-06/30/92	08/94 (59 FR 42806)	CBCC ..... 0.00 Minasligas ..... 0.00 Eletrosilex ..... 0.00 Rima 91.06
07/01/92-06/30/93	09/97 (62 FR 47441)	CBCC ..... 18.71 Minasligas ..... 0.00 Eletrosilex ..... 25.46 Rima 31.60
07/01/93-06/30/94	01/97 (62 FR 1954)	CBCC ..... 64.39 Minasligas ..... 0.00 Eletrosilex ..... 39.72 Rima ..... 91.06 CCM 5.97
07/01/94-06/30/95	10/97 (62 FR 54087)	CBCC ..... 0.37 Minasligas ..... 43.53 Eletrosilex ..... 6.68 Rima ..... 51.23 CCM 35.23
07/01/95-06/30/96	02/98 (63 FR 6899)	CBCC ..... 0.00 Minasligas ..... 1.67 Eletrosilex ..... 39.0 Rima 3.08
07/01/96-06/30/97	02/99 (64 FR 6305)	CBCC ..... 0.00 Minasligas ..... 0.00 Eletrosilex ..... 33.11 Rima ..... 0.00 Liasa 0.00
04/01/97-03/31/98	02/00 (65 FR 7497)	CBCC ..... 0.05 Liasa ..... 0.00 Eletrosilex ..... 18.87 Rima 0.00

Commerce has conducted 1 administrative review of the antidumping duty order on silicon metal from China as shown in the following tabulation:

Period of review	Date review issued	Margin *(percent)*
06/01/96-05/31/97	07/98 (63 FR 37850)	China-wide rate 139.49

Table I-2 contains Customs data on the actual duties collected under the antidumping duty orders on silicon metal from Argentina, Brazil, and China, and the customs value of subject imports in fiscal years 1993 through 1999.

Table I-2
Silicon metal: Actual duties collected on subject imports, fiscal years 1993-99

Country	1993	1994	1995	1996	1997	1998	1999
	Value *($1,000)*						
Argentina							
Duties collected	409	BPI	(1)	(1)	(1)	BPI	(1)
Value of imports	4,732	BPI	(1)	(1)	(1)	BPI	(1)
Brazil							
Duties collected	BPI	284	785	4,335	1,305	46	47
Value of imports	BPI	439	15,542	17,359	10,394	3,283	11,075
China							
Duties collected	(1)	BPI	BPI	BPI	946	(1)	BPI
Value of imports	(1)	BPI	BPI	BPI	678	(1)	BPI

[1] No entries recorded.

Note.-- "BPI" consists of business proprietary information not released by Customs.

Source: Compiled from U.S. Customs Service statistics.

THE SUBJECT PRODUCT

The imported product subject to the antidumping orders under review, as defined by Commerce, is:

> silicon metal containing at least 96.00 but less than 99.99 percent of silicon by weight. Also covered by the reviews is silicon metal from Argentina, Brazil, and China containing between 89.00 and 96.00 percent silicon by weight but which contains a higher aluminum content than the silicon metal containing at least 96.00 percent but less than 99.99 percent silicon by weight. Silicon metal is currently provided for under subheadings 2804.69.10 and 2804.69.50 of the Harmonized Tariff Schedule (HTS) as a chemical product, but is commonly referred to as a metal. Semiconductor-grade silicon (silicon metal containing by weight not less than 99.99 percent of silicon and provided for in subheading 2804.61.00 of the HTS) is not subject to the

reviews. The HTS numbers are provided for convenience and customs purposes, the written description remains dispositive.[8]

Silicon is a chemical element, metallic in appearance, solid in mass, and steel gray in color. Both imported and domestic silicon metal are usually sold in lump form. Size is specified by establishing a maximum length, usually between 4 and 6 inches, and a minimum width, usually between one-quarter and one-half inch.[9] Silicon metal is a polycrystalline material, whose crystals have a diamond cubic structure at atmospheric pressure.

There are four broadly defined categories for silicon metal, which are ranked in descending order of purity as: (1) semiconductor grade;[10] (2) chemical grade; (3) metallurgical grade used to produce primary aluminum; and (4) metallurgical grade used to produce secondary aluminum.

Silicon metal used in chemical, metallurgical, and related applications, but not for semiconductor use, is classified in either HTS subheading 2804.69.10 (silicon metal containing by weight less than 99.99 percent silicon but not less than 99 percent) or HTS subheading 2804.69.50 (silicon metal containing by weight less than 99 percent).[11] According to officials at U.S. producers, the type and level of impurities rather than the precise silicon content (assuming it is near 99 percent) is the principal factor determining whether the silicon metal product can be used in a given application.[12] As such, because of variability in the manufacturing processes and the raw materials used, imported chemical and metallurgical grade silicon metal can be classified in either HTS subheading 2804.69.10 or HTS subheading 2804.69.50 depending on the silicon content of the product being imported.

Although silicon metal has been described in terms of different grades, there is, in fact, no uniformly accepted grade classification system. Silicon metal "grades" actually refer to ranges of

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[8] 65 FR 35607, June 5, 2000. In response to a scope determination request by domestic silicon metal producers claiming that some silicon metal producers in China were evading application of the antidumping duty order by exporting to the United States silicon metal containing less than percent 96 silicon and containing a relatively high percentage of aluminum, the Department of Commerce broadened the scope of the antidumping duty orders to include silicon metal containing between 89 percent and 96 percent silicon and more aluminum than silicon metal containing 96 percent or more silicon. (Memorandum from Jessie Brooks, Verner Liipfert, counsel for American Silicon Technologies, Elkem Metals Co., and unions, December 7, 2000).

[9] *Silicon Metal from China*, Investigation No. 731-TA-472 (Final), USITC Pub. 2385, June 1991, p. A-5.

[10] According to an industry representative, semiconductor grade silicon metal contains by weight not less than 99.999 percent silicon, memorandum from Jessie Brooks and Bernd Janzen, counsel for domestic producers and unions, October 11, 2000.

[11] The regular duty rate is 5.3 percent *ad valorem* for HTS subheading 2804.69.10, and 5.5 percent for HTS subheading 2804.69.50.

[12] Chemical-use silicon metal typically contains less than 4,000 parts per million (ppm) of iron, less than 250 ppm of calcium, and less than 2,500 ppm of aluminum. This type of silicon metal is primarily used to produce silicones, which encompass liquids, lubricants, resins, rubbers, and solids, and are found in various chemicals, pharmaceuticals, and automotive and aerospace applications. U.S. chemical grade silicon metal typically contains less than 4,000 ppm of iron, less than 250 ppm of calcium, and less than 2,500 ppm aluminum. The metallurgical primary-aluminum use silicon metal typically contains less than 5,000 ppm of iron and less than 700 ppm of calcium. The metallurgical secondary-aluminum use silicon metal typically contains 10,000 ppm of iron and 3,500 ppm of calcium. Secondary-aluminum applications apply primarily to the automotive castings industry. Other applications for silicon metal include the production of brass and bronzes, steel, copper alloys, ceramic powders, and refractory coatings. *Silicon Metal from China*, Investigation No. 731-TA-472 (Final), USITC Pub. 2385, June 1991, p. A-5. Memorandum from Jessie Brooks, counsel for domestic producers and unions, October 11, 2000.

specifications that are typically sold to particular groups of customers. These specifications establish the minimum amounts of silicon and the maximum amounts of impurities, such as iron, calcium, aluminum, or titanium, that the silicon metal may contain.[13]

Chemical customers each have their own detailed specifications. Requirements also vary widely among primary-aluminum customers. Even some secondary-aluminum customers, whose product comes closest to representing a commodity, have differences in tolerances with regard to impurities. Nor do product specifications always conform to requirements. Higher grade silicon metal is sometimes shipped to a purchaser with a lower specification requirement because of market factors such as excess product availability and low shipping costs.

Table I-3 presents data collected during the reviews from U.S. producers, importers, and foreign producers, describing the end uses for their shipments of silicon metal in 1999.

Table I-3
Silicon metal: 1999 shipments by U.S. producers, importers, and foreign producers, by end uses

(In *percent*)

End uses	Producers' shipments	Importers' shipments		Foreign producers' exports to the U.S.		
		Subject	All other	Argentina[1]	Brazil	China
Chemical	***	***	***	***	***	***
Primary aluminum	***	***	***	***	***	***
Secondary aluminum	***	***	***	***	***	***
Other	***	***	***	***	***	***

[1] Data for Argentine exports are for ***.

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

Silicon metal is produced from mined quartzite, which is washed, crushed, and screened. The quartzite is combined with a carbon-containing reducing agent (low-ash coal, petroleum coke, charcoal, or coal char) and a bulking agent (such as wood chips) in a submerged-arc electric furnace to produce molten silica, which is reduced to silicon metal. The hot metal is poured into iron molds or onto beds of silicon metal fines for cooling, and is then shaped into ingots or crushed to the desired size for shipping.[14]

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[13] Testimony of Ronald Cunningham, President of SiMETCO, before the U.S. International Trade Commission, April 25, 1991, pp. 3-5. *Silicon Metal from China*, Investigation No. 731-TA-472 (Final), USITC Pub. 2385, June 1991, p. A-6.

[14] *Silicon Metal from China*, Investigation No. 731-TA-472 (Final), USITC Pub. 2385, June 1991, pp. A-1-9.

Two U.S. silicon metal producers also produce ferrosilicon[15] ***.[16] It is generally easier for firms to switch from silicon metal production to ferrosilicon production than the reverse. Ferrosilicon contains more impurities than silicon metal and tends to contaminate the furnace lining with impurities intolerable in silicon metal production. Typically when production is switched from ferrosilicon to silicon metal, the furnace must, at a minimum, be relined. In addition, certain furnace designs are more efficient at producing one product than another, leading to a consideration of an efficiency loss when switching production.[17]

DOMESTIC LIKE PRODUCT ISSUES

In its original determination the Commission found the appropriate like product to be "all silicon metal, regardless of grade, having a silicon content of at least 96.00 percent but less than 99.99 percent of silicon by weight, and excluding semiconductor grade silicon."[18] In response to a question soliciting comments regarding the appropriate domestic like product in the Commission's notice of institution of these reviews, parties had no objection to the Commission's original definition of the like product.

U.S. MARKET PARTICIPANTS

U.S. Producers

There are 3 firms currently producing silicon metal in the United States (Elkem, Globe, and SIMCALA), and 2 firms that have recently shut their facilities but could restart them depending on market conditions (American Alloys and AST). During the original investigations there were 8 firms producing the subject product (American Alloys, Elkem, SKW, Globe, Dow, Silicon Metaltech, SiMETCO, and Reynolds). Reynolds closed its plant in 1990. Silicon Metaltech declared bankruptcy and its assets were acquired by AST in 1993. By September of 1999 it had shut its facilities. Globe acquired Dow's production facility in 1993 and SKW's production plant in 1994. SiMETCO declared bankruptcy and its assets were acquired by SIMCALA in 1995. U.S. producers who were active during the review period, their plant locations, ownership, positions on revocation of the orders, and shares of 1997 and 1999 reported production are presented in table I-4. ***.

U.S. Importers

Sixteen importers responded to Commission questionnaires with usable data. Their locations, origin of imports, and shares of subject and total 1999 imports are summarized in table I-5. Responding importers accounted for 87.6 percent of subject imports in 1999 and 73.8 percent of total imports from all sources in 1999.

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[15] Ferrosilicon is a product used by the steel industry as an alloying agent. Ferrosilicon differs from silicon metal in that it has a much lower silicon content, ranging from 50 percent to 96 percent, and greater levels of impurities, including iron.

[16] According to table 3 of the *Mineral Industry Surveys, Silicon: 1999 Annual Review* published by the U.S. Geological Survey (August 2000), Elkem and Globe operate plants which produce both silicon metal and ferrosilicon.

[17] *Silicon Metal from China*, Investigation No. 731-TA-472 (Final), USITC Pub. 2385, June 1991, p. A-9.

[18] *Ibid.*, p. 10.

Table I-4
Silicon metal: U.S. producers, positions on revocation of the orders, shares of reported 1999 production, U.S. production locations, and parent companies

Firm	Position	Share of 1997 production *(percent)*	Share of 1999 production *(percent)*	Production location	Parent company and country
American Alloys	***	***	***	New Haven, WV	***
AST	***	***	***	Rock Island, WA	***
Elkem	***	***	***	Pittsburgh, PA Alloy, WV	***
Globe	***	***	***	Beverly, OH Niagara Falls, NY Selma, AL Springfield, OR	***
SIMCALA	***[1]	***	***	Montgomery, AL	***
Total		100.0	100.0		

[1] ***.

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

Table I-5
Silicon metal: U.S. importers, origin of imports, shares of 1999 imports, and locations

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U.S. Purchasers

Twenty three purchasers responded to Commission questionnaires with usable data. Purchasers included primary and secondary aluminum producers, chemical producers, and distributors.

APPARENT U.S. CONSUMPTION AND MARKET SHARES

Table I-6 presents apparent U.S. consumption for the review period and table I-7 presents U.S. market shares for the same period.

Table I-6
Silicon metal: U.S. shipments of domestic product, U.S. imports, and apparent U.S. consumption, 1997-99, January-June 1999, and January-June 2000

Item	Calendar year			January-June	
	1997	1998	1999	1999	2000
	Quantity (*gross short tons*)				
U.S. producers' U.S. shipments	206,692	206,788	203,342	104,198	101,870
U.S. imports from--					
Argentina	0	44	0	0	0
Brazil	10,795	6,341	14,268	5,324	10,411
China[1]	3,214	3,058	3,324	1,673	1,812
Subtotal	14,009	9,442	17,592	6,997	12,222
Other sources	118,250	104,453	108,852	54,463	65,130
Total imports	132,259	113,895	126,444	61,460	77,353
Apparent consumption	338,951	320,683	329,786	165,658	179,223
	Value (*$1,000*)				
U.S. producers' U.S. shipments	320,748	309,872	277,641	143,117	133,178
U.S. imports from--					
Argentina	0	61	0	0	0
Brazil	17,010	8,251	17,203	6,425	13,083
China	3,373	2,559	2,885	1,471	1,522
Subtotal	20,383	10,872	20,088	7,895	14,606
Other sources	178,206	137,765	128,344	65,530	68,311
Total imports	198,589	148,637	148,432	73,426	82,917
Apparent consumption	519,337	458,509	426,073	216,543	216,095

[1] TIB imports account for the following: 100 percent in 1999, 98 percent in 1998, and 80 percent in 1997.

Source: Compiled from data submitted in response to Commission questionnaires and from official Commerce statistics.

Table I-7
Silicon metal: U.S. market shares, 1997-99, January-June 1999, and January-June 2000

Item	Calendar year			January-June	
	1997	1998	1999	1999	2000
	Quantity (*gross short tons*)				
Apparent consumption	338,951	320,683	329,786	165,658	179,223
	Value (*1,000 dollars*)				
Apparent consumption	519,337	458,509	426,073	216,543	216,095
	Share of quantity (*percent*)				
U.S. producers' U.S. shipments	61.0	64.5	61.7	62.9	56.8
U.S. imports from--					
Argentina	0.0	([1])	0.0	0.0	0.0
Brazil	3.2	2.0	4.3	3.2	5.8
China[2]	0.9	1.0	1.0	1.0	1.0
Subtotal, subject sources	4.1	2.9	5.3	4.2	6.8
All other sources	34.9	32.6	33.0	32.9	36.3
Total imports	39.0	35.5	38.3	37.1	43.2
	Share of value (*percent*)				
U.S. producers' U.S. shipments	61.8	67.6	65.2	66.1	61.6
U.S. imports from--					
Argentina	0.0	([1])	0.0	0.0	0.0
Brazil	3.3	1.8	4.0	3.0	6.1
China	0.6	0.6	0.7	0.7	0.7
Subtotal, subject sources	3.9	2.4	4.7	3.6	6.8
All other sources	34.3	30.0	30.1	30.3	31.6
Total imports	38.2	32.4	34.8	33.9	38.4

[1] Less than 0.05 percent.
[2] TIB imports account for the following: 100 percent in 1999, 98 percent in 1998, and 80 percent in 1997.

Source: Compiled from data submitted in response to Commission questionnaires and from official Commerce statistics.

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

U.S. MARKET SEGMENTS/CHANNELS OF DISTRIBUTION

Silicon metal is sold in chemical grade, primary aluminum grade, and secondary aluminum grade. Different types of purchasers require silicon metal with different maximum impurities, and different purchasers within each grade may require silicon metal of different purity. U.S. producers report that there is a reasonable overlap of product sold to various types of purchasers; in contrast, the Brazilian respondents *** report that the market has two distinct sectors, the chemical and the aluminum sectors.[1] Dow (the largest U.S. purchaser) reported that because of the strict specifications in the chemical market, it used long-term contracts when purchasing U.S.-produced silicon metal. However, Dow purchased imports on the spot market.[2] Primary aluminum producers were reported to typically have 1-year contracts.[3] Secondary aluminum tends to be purchased using quarterly contracts and spot purchases.[4]

CHANNELS OF DISTRIBUTION

Most domestically-produced silicon metal is sold directly to end users, although some is also exchanged among producers or sold through distributors.[5] Some importers, 4 out of the 16 responding, did not sell silicon metal but were solely end users, and 3 of the 5 U.S. producers consume some silicon metal internally. Importers were asked to report whether their sales of subject product were spot or contract sales. Three importers answered this question: 2 reported selling most of their silicon metal (99 and 95 percent) in the contract market, and the other sold all its product in the spot market. All 4 responding U.S. producers reported selling from 90 to 100 percent of their product in the contract market. Two of the 4 responding U.S. producers reported selling nationwide, ***. Three importers reported the market area for subject product. One importer reported that it sold its Chinese product on the West Coast and its Brazilian product in the South. One reported selling in the South and Midwest. The other reported that its imports went to ***.

Purchasers were asked if any product was purchased under a "Buy American" program. Eighteen of the 19 responding purchasers reported no "Buy American" program, and the remaining purchaser reported that all its purchases were "Buy American."

MARKET STRUCTURE

Participants

There has been relatively little change in the silicon metal market in the United States since the implementation of the antidumping duties on imports from Argentina, Brazil, and China in 1991. One of

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[1] Brazilian prehearing brief, p. 4.

[2] James May of Dow, hearing transcript, pp. 237-238.

[3] Bob McHale of Alcoa, hearing transcript, p. 281.

[4] *Ibid.*

[5] Sales through distributors were 3 percent of sales in 1999 and were only for secondary aluminum, and exchanges between producers were *** percent of U.S. producers' sales in 1999.

the 3 responding U.S. producers reported changes. This firm reported increased sales to the chemical market. One of 11 responding importers reported that the market had changed since 1991, reporting that there were reductions in impurity levels and that E-commerce was having an effect. Of the 7 responding foreign producers, 3 reported increased silicon metal consumption by the chemical industry, 1 reported increased use in both the chemical and aluminum sector, and the other 3 reported no change or that they did not know.

Purchasers include chemical companies, primary aluminum producers, and secondary aluminum producers. Chemical companies purchasing silicon metal include Dow, ***. Primary aluminum purchasers include *** and Alcoa. Secondary aluminum purchasers include ***.

Production

Between 1990 and 1999, U.S. production of silicon metal rose from 157,000 to 204,000 short tons. U.S. total capacity increased from 183,000 short tons in 1990 to 237,000 short tons in 1999.

Foreign Participants

The original investigations reported 31 Chinese, 2 Argentine, and 6 Brazilian producers. There are currently at least 5 Chinese, 1 Argentine, and 6 Brazilian producers.[6]

Product

The product itself has remained relatively unchanged since 1991. However, petitioners report that the purity level of product produced in China has improved, making this product eligible for more uses than in 1991.[7] In addition, the Argentine producer reports that it ***. One importer reported importing Argentine product in 1998, ***. Five reported importing Brazilian product and 4 reported importing from China.

U.S. Market Leadership

Producers, importers, and purchasers were asked if individual firms affected price. Two of the 4 responding U.S. producers reported that specific firms affected the market, and 1 of these 2 reported that product from Russia and South Africa had caused prices to fall.[8] One producer reported that middlemen affected the price since their commissions did not require that the sale actually be profitable. Six of the 9 responding importers reported that individual firms did affect price. Eight importers reported how firms affected price;[9] 2 of these reported that U.S. firms had reduced prices to increase sales to the aluminum market or the secondary aluminum market between 1998 and 2000, 2 reported that all firms in the market affect price, 2 reported that firms can or had restrained supply to affect price, 1 reported that prices are

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[6] See also *40 Year History of Metal Silicon Production in China,* The Proceedings of INFACCON 8, 1998, He Yunping and Yu Zhichun, p. 99, which reported that there were "over 400 metal silicon producers in China."

[7] *Ibid.*, p. 102, which reported that some Chinese producers are producing "chemical silicon" for the international market.

[8] One of the producers that reported individual firms did not affect price also reported that the product from Russia and South Africa had generally caused prices to fall.

[9] One of these did not answer the question of whether individual firms affected the market.

always changing with world supply and demand, and 1 referred to the anti-trust case involving silicon metal.[10] Seven of the 15 responding purchasers reported that individual firms did affect price; 4 reported that producers had constrained supply, including 1 that reported that U.S. producers had constrained supply and 1 that referred to the anti-trust court case on industrial silicon. In addition, 1 reported that after the antidumping order was put in place the U.S. producers increased prices to unreasonable levels, thereby causing them to lose customer loyalty and ultimately to go out of business, 1 reported that increased supply of Russian silicon metal had affected the market, and 1 reported that imports from South Africa, Russia, and China had caused prices to fall.

Pricing

Two U.S. producers and 8 importers compared U.S. prices to those in other countries. Both U.S. producers and 6 importers reported that U.S. prices were higher than in other places for which they had price knowledge.[11] In addition, 1 importer reported that prices in Europe were higher than in the United States, and 1 reported that prices were lower where Chinese product was available.

SUPPLY AND DEMAND CONSIDERATIONS

U.S. Supply

Domestic Production

Based on available information, the U.S. producers are likely to respond to changes in price with moderate changes in the quantity of shipments to the U.S. market. There are some constraints on the U.S. producers' ability to reduce or increase production.

Industry capacity

U.S. producers' 1999 capacity utilization for silicon metal was 88.2 percent. In 1990 their capacity utilization was 85.8 percent. In both years it would have been possible for them to increase output somewhat in response to increased prices.

Export markets

In 1999, U.S. producers' exports were *** percent of their total production, down *** from 3.8 percent in 1990. Three did not export, and the 2 that exported reported that it was difficult to compete outside the United States; 1 of these 2 reported that the difficulty in competing was because of the presence of Brazilian and Chinese product in other markets. U.S. producers reported exporting only to Canada.

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[10] In 1997 and 1998 a criminal anti-trust case and a civil class action anti-trust case went to trial alleging a conspiracy to fix prices by domestic silicon metal producers.

[11] One of the importers reported that prices were higher in the United States because of price-fixing.

Production alternatives

The U.S. producers were asked what production alternatives existed. Three of the 4 responding firms reported that there were no production alternatives. One firm reported that it could convert production from silicon metal to ferrosilicon relatively easily, but that it is more difficult to shift production back to silicon metal. The iron from the ferrosilicon is a contaminant in silicon metal, therefore the furnace lining must be replaced when a firm moves from ferrosilicon to silicon metal; this requires 30 to 45 days and costs ***.[12] Elkem and Globe reported that they had converted ferrosilicon and calcium alloy furnaces to produce silicon metal.[13] In one of these cases conversion from ferrosilicon was not easy because the ferrosilicon furnace did not rotate but needed to rotate to produce silicon metal.[14]

Argentina

Production

Two companies produced silicon metal in Argentina in 1990;[15] however, only one Argentine producer (Andina) provided data to the Commission in the current investigation. It reported that it is now the only Argentine producer.[16] The U.S. producers' response to the institution of these review investigations cites 3 Argentine producers. In 1999, Argentine production was *** gross short tons, down from *** tons in 1998 but up from *** tons in 1990.[17] Reported Argentine capacity in 1999 was *** gross short tons, down from *** tons in 1990. The Argentine producer reported that in 1998 it ***.

Exports from Argentina to the United States fell from 2,200 gross short tons in 1990 to 0 tons in 1997 and 1999.[18] Imports from Argentina into the United States accounted for 0 percent of U.S. consumption in 1997 and 1999.

It is unclear how much Argentina will be able to increase shipments to the United States if the antidumping duty is removed. The Argentine producer anticipated *** in its exports to the United States if its duty were removed. It reports that it has long-term commitments with *** clients. Between these ***.

Industry capacity

The sole Argentine producer reported capacity utilization rates of *** percent in 1998 and *** percent in 1999, and thus has the ability to expand production. In addition, its aggregate inventories amounted to *** percent of its production in 1999. It reported that it produces silicon metal in only one

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[12] J. Marlin Perkins of Globe, hearing transcript, p. 205, and questionnaire response.

[13] Testimony by Geir Kvernmo of Elkem, hearing transcript, p. 181, and J. Marlin Perkins of Globe, p. 202.

[14] Testimony of J. Marlin Perkins of Globe, hearing transcript, p. 202.

[15] Data for production and capacity, however, were available from only one Argentine producer in 1990.

[16] A. Manuel Garcia of Andina also reported that the new furnace that Stein, another Argentine firm, had built was being used in the production of calcium silicon, not silicon metal. Hearing transcript, p. 277.

[17] The Argentine producer reported that in 1997, it had no production, *** silicon metal.

[18] However, *** tons of Argentine silicon metal were exported to the United States in 1998.

of its furnaces and that the cost of updating this furnace had been $8 million.[19] Available data indicate that the Argentine producer *** in response to a relative price change in the price of silicon metal vis-a-vis the price of other products, using the same equipment and labor.

Alternative markets

The Argentine producer reported that the home market absorbed *** and *** percent of its production in 1998 and 1999, respectively. It produced no silicon metal in 1997. Sales to export markets other than the United States (mainly to ***) accounted for *** percent of its production in 1998 and *** percent in 1999.

Brazil

Production

Six Brazilian companies produced silicon metal in 1990, and the U.S. producers report that there are currently 7 Brazilian producers. Six Brazilian producers answered the Commission's questionnaire. Reported Brazilian production was 141,445 gross short tons in 1999, down from *** tons in 1990. Reported Brazilian capacity in 1999 was 190,310 gross short tons, up from *** tons in 1990. Exports from Brazil to the United States were 50,000 gross short tons in 1990; in 1997 exports to the United States were 9,572 tons and in 1999 exports were 10,729 tons.

It is unclear how much Brazil will be able to increase shipments to the United States if the antidumping duty were removed. *** responding Brazilian producers anticipated no change in their exports to the United States if the duty were removed. A representative of the Brazilian producers reported that only 3 Brazilian producers were qualified by U.S. customers, and not being qualified would prevent the other Brazilian firms from rapidly entering the U.S. market.[20]

Industry capacity

Brazilian producers reported a capacity utilization rate of 73.1 percent in 1997 and 74.3 percent in 1999, and are thus able to expand production. The Brazilian producers' aggregate inventories amounted to 22.2 percent of their shipments in 1997 and 20.2 percent in 1999. Three of the 6 responding Brazilian producers reported producing other products (***) on the same equipment used for silicon metal. One of the 3 that reported producing other products with the same equipment reported that it no longer used the system under which it ***. The Brazilian producers report that it is difficult to switch from ferrosilicon to silicon metal.[21] Available data indicate that some Brazilian producers can switch production from silicon metal to other products in response to a relative price change in the price of silicon metal vis-a-vis the price of those products, using the same equipment and labor. However, when

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[19] A. Manuel Garcia, hearing transcript, p. 259.

[20] Adelmo Melgaco of ABRAFE, hearing transcript p. 242.

[21] *Ibid.*, p. 243.

these firms switch from other products to silicon metal they must reline their furnaces. According to Globe, this requires from 30 to 45 days and costs ***.[22]

Alternative markets

All 5 responding Brazilian producers reported that the home market has been stable since 1991. The Brazilian market absorbed 12.4 percent of its production in 1997 and 15.4 percent in 1999. Sales to export markets other than the United States accounted for 75.7 percent of Brazilian production in 1997 and 79.5 percent in 1999. Other markets included Europe, Asia, South America, North America, the Middle East, and Canada. The EU eliminated antidumping duties on Brazilian product in February 1998.

China

Production

The number of Chinese firms producing silicon metal in 1990 is unclear; the Commerce Department reported that there were at least 17 producers. The petitioners report that in 1999 there are at least 43 Chinese producers of silicon metal. Five Chinese producers responded to the foreign producers' questionnaire. These firms' production was 25,600 gross short tons in 1999. In 1989 the U.S. Bureau of Mines estimated that Chinese production of silicon metal was 110,000 tons. In 1999, Chinese effective capacity was estimated to be 250,000 tons; however, 1998 exports were reported to be 272,000 tons.[23] Mr. Yao, President of Chemical and Alloy Inc., estimated that Chinese silicon metal capacity is about 200,000 metric tons, of which half is export quality.[24] In addition, he reported that the number of Chinese producers of silicon metal had fallen since 1991.[25] In 1990, responding producers' capacity was *** tons. Reported exports from China to the United States fell from 26,360 tons in 1990 to 360 tons in 1999.

It is unclear how much China will be able to increase shipments to the United States if the antidumping duty is removed. Four of the 5 responding Chinese producers anticipated no change if the duty was removed. The remaining producer reported that if the duty is removed "We will try to enlarge our exports to the U.S. market." Typically, Chinese product is only suitable for the secondary-aluminum market.[26] Mr. Yao estimated that if the antidumping order is revoked only about 1,000 to 2,000 metric tons of Chinese product would enter the U.S. in a reasonably foreseeable time.[27]

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[22] J. Marlin Perkins, hearing transcript, p. 240. ***. Staff phone notes, December 15, 2000.

[23] Both the effective capacity estimate and the larger export figures are from *USGS Mineral Industry Surveys: Silicon, 1999 Annual Review*, August 2000. Thomas Jones, the silicon commodity specialist at the U.S. Geological Survey (USGS), reported that this discrepancy may be because some Chinese exports are mis-classified; telephone notes of October 2, 2000. Other sources report Chinese capacity to be as high as 400,000 tons per year, with more than 400 Chinese producers. *40 Year History of Metal Silicon Production in China,* The Proceedings of INFACCON 8, 1998, He Yunping and Yu Zhichun, p. 99. Mr. Jones reported that some of this capacity may not be effective capacity.

[24] Hearing transcript, p. 254.

[25] *Ibid.*, p. 256.

[26] Kai Yao, hearing transcript, p. 256.

[27] *Ibid.*, p. 257.

Industry capacity

The responding Chinese producers reported a capacity utilization rate of 90.5 percent in 1997 and 90.1 percent in 1999, and thus these producers apparently have relatively little ability to expand production. The 5 Chinese producers' aggregate inventories amounted to 5.5 percent of their production in 1997 and 7.1 percent in 1999. Four of 5 Chinese producers report that they do not produce other products on the equipment and with the labor used to produce silicon metal and thus cannot easily switch production between silicon metal and other products in response to a relative price change in the price of silicon metal vis-a-vis the price of other products. One reported that it could switch to produce ferrosilicon.

Alternative markets

The 5 responding Chinese producers reported that the home market absorbed 22.3 percent of their production in 1997 and 16.1 percent in 1999. Sales to export markets other than the United States accounted for 77.6 percent of their production in 1997 and 80.9 percent in 1999. Other markets included Europe, Japan, India, Mexico, Slovenia, Turkey, South Africa, and South Korea. In 1997, the EU imposed an antidumping duty against silicon metal from China. One of the 5 responding Chinese producers reported that it currently faces antidumping duties in its sales to the European Union.

U.S. Demand

Demand Characteristics

All 3 responding producers and 9 of the 10 responding importers reported that demand had risen since 1991.[28] These producers and importers typically reported that demand had increased because of the increased use of silicon metal by the chemical industry and by aluminum producers. All 21 of the responding purchasers reported that there was no seasonal variation in demand over the course of a year. When asked if demand for silicon metal faced a business cycle, 7 of the 14 responding purchasers reported no business cycle. Of the 7 remaining purchasers, 2 reported cycles based on the demand for aluminum, 2 reported cycles based on supply and demand, 1 reported that it faced the typical business cycle, 1 reported that the business cycle had been distorted by price fixing but that in the last 10 years there had been steady growth in demand for silicon metal from the chemical industry, and 1 reported that there was a cycle but that it could not tell what it was.

Substitute Products

All 4 responding U.S. producers, all 9 responding importers, and all 20 responding purchasers reported that no product can be substituted for silicon metal. Silicon metal typically is an ongoing purchase; its cost ranged from *** percent to less than 1 percent of the cost of the final product. Eighteen aluminum producers responded; 16 of these reported silicon metal ranging from *** to less

[28] One importer reported that demand was cyclical.

than 1 percent of total cost for their most important uses.[29] The 3 responding chemical users reported that the cost of silicon metal for its most important uses ranged from *** to *** percent of costs.

TRENDS IN U.S. SUPPLY AND DEMAND

U.S. producers, importers, and purchasers were asked to discuss any supply factors that affected the availability of silicon metal in the U.S. market since 1991. Six importers reported some change in supply: 2 reported shortages or supply reductions by U.S. producers, 2 reported that the antidumping duties affected supply or that supply from China was not viable, 1 reported that demand for silicon metal outpaced supply in 1996-97 and that during this time subject product was not available, and 1 reported that changes in the Brazilian exchange rate increased supply. Six of the 18 responding purchasers reported no changes in supply. Of the 12 reporting changes, 3 reported shortages; 2 reported U.S. plant closures; 1 reported that domestic producers had shifted from supplying product to secondary-aluminum producers to producing for the chemical industry; 1 reported that demand had increased more than domestic supply and that domestic firms had colluded; 1 reported that in 1995 there was predicted to be a large increase in silicon metal demand in the chemical industry and that this had caused prices first to rise and then to fall, when demand did not increase as much as expected; 1 reported price changes for metallurgical grades; 1 reported price increases in 1995-97; 1 reported that after 1991 increased prices caused the purchaser to look for new sources of supply; and 1 reported that the market had softened in 1998-99. Two U.S. producers responded to this question: 1 reported increased supply because of the antidumping duties and 1 reported that energy curtailments in the summer of 1999 reduced output.

The U.S. producers, importers, and purchasers were also asked to discuss how demand for silicon metal has changed in the U.S. market since 1991. All 3 of the responding U.S. producers reported that demand increased between 1991 and now. One of these reported demand growth of 4 percent per year, and 1 reported that demand grew by 6 to 10 percent per year between 1991 and 1997, grew 1 percent in 1998, and fell in 1999; it reported that demand was now recovering from the Asian crisis. Of the 9 responding importers, 8 reported that demand was increasing and 1 reported that silicon metal demand depends on the demand for aluminum. One importer predicted that demand will have grown from 181,000 gross short tons in 1991 to 300,000 tons in 2000, and 1 reported that demand in the chemical industry had increased by 8 percent per year since 1991. Of the 13 responding purchasers, 11 reported that demand was growing, 1 reported that demand was unchanged, and 1 reported that the market had been tight in 1997 and 1998. The most common reasons given for growth in demand for silicon metal were the growth in demand for aluminum, reported by 7 purchasers, and the growth in demand from the chemical industry, reported by 4. Two purchasers reported that growth in demand by the chemical industry had outpaced demand growth in other industries.

When asked to anticipate future demand, all 3 responding U.S. producers reported that they expected demand to increase. One reported that it expected demand to increase by 4.4 percent per year in the United States and faster outside, and 1 reported that it expected chemical-grade demand to fall by 1 percent in 2000 *** but that it expected chemical demand to grow by 1 to 2 percent per year to 2005; in the aluminum industry it expected demand to increase by 5 percent in 2000, 3 percent in 2001, and 2-4 percent in 2002-05. Five of the 7 responding importers expected that demand would continue to increase, and the other 2 reported that U.S. demand would grow more slowly than world demand. One of these reported that this was because silicon metal prices were lower overseas. More specifically, 1 of the

[29] In addition, 1 aluminum producer reported that silicon metal costs were *** and 1 reported that silicon metal was ***.

importers predicted that demand growth would be 4 to 6 percent per year through 2005, and 1 predicted a 40-percent increase in the amount of aluminum in automobile engines in the next 3 to 5 years. Of the 11 responding purchasers, 2 expected no change, 6 expected demand to continue to grow, 1 expected demand to continue to grow in Europe and Asia at the expense of the United States if the antidumping duties continued in place, 1 reported that demand would depend on demand for aluminum, and 1 reported that if demand grows or if energy prices rise there may be supply problems.

The USGS reported that from 1980 through 1995 demand for silicon metal grew by 3.5 percent annually in the aluminum industry and by 8 percent annually in the chemical industry, and that demand overall grew at about 5.5 percent annually. However, demand in the chemical sector "had been set back in recent years by the economic turmoil in Asia, but conditions have been improving." It reported that there was one forecast for aluminum demand growth between 2000 to 2009 of 5 percent per year, indicating that demand growth for silicon metal from the aluminum industry "should be at least as great as during the two previous decades." Overall silicon metal demand was expected to have "an annual growth rate more modest than the former 8 percent."

SUBSTITUTABILITY ISSUES

The degree of substitution between domestic and imported silicon metal depends on such factors as relative prices, quality (chemical purity, chemical consistency, lump size, etc.), availability of the grade of silicon metal required, and conditions of sale (e.g., price discounts, lead times, payment terms, value added services, etc.). Based on available data, staff believes that there is a moderate degree of substitution between the domestic silicon metal and subject imported silicon metal.

One factor that might reduce substitutability is that many purchasers seldom change their suppliers. Thirteen of the 23 responding purchasers reported they infrequently or never changed suppliers. Of the remaining 10 purchasers, 4 reported changing suppliers as needed; 1 reported annual quotes with business awarded to historic suppliers; 1 reported usually changing suppliers not more than once a year; 1 reported changing its primary supplier once in the last several years; 1 reported changing depending on the suppliers, product, and number of competitors; 1 reported changing depending on price, quality, and delivery; and 1 reported wanting multiple suppliers. On the other hand, 21 of 22 responding purchasers reported that there were no types or grades of silicon metal that were available from only one source or country.

The Brazilian respondents report that "because each purchaser has its own specification requirements, the qualification process itself acts as a barrier to entry, particularly for purchases of silicon metal by specialty aluminum or chemical manufacturers."[30]

Factors Affecting Purchasing Decisions

Available data indicate that there are a variety of factors that influence purchasing decisions for silicon metal. Purchasers were asked to list the top three factors that they consider when choosing a supplier of silicon metal. Table II-1 summarizes the responses to this question.

The results depicted in table II-1 are further supported by purchasers' responses to the question on how often their firm's purchases of silicon metal was offered at the lowest price. None reported always buying the lowest-price silicon metal, 8 reported that they usually buy the lowest-priced material,

[30] Brazilian prehearing brief, p. 24.

10 reported sometimes buying the lowest-priced material, and 5 reported never buying the lowest-priced silicon metal.

Nineteen out of 21 responding purchasers require that the product they purchased have certification or prequalification.[31] One reported needing prequalification for new suppliers, and 1 did not need prequalification. Thirteen reported that the time required for qualification ranges from 7 days to 3 years. Eight reported that 3 months or less are required for qualification, 3 require 4 to 12 months, and 3 require from over 1 year to 3 years. Purchasers were also asked to rate the importance of 18 factors in their purchasing decisions (table II-2). Twenty purchasers responded to this question.

Comparisons of Domestic Product and Imports from Argentina

Questionnaire respondents were asked to discuss the interchangeability between U.S.-produced silicon metal and Argentine product (tables II-3 and II-4), differences between the product characteristics or sales conditions (tables II-5 and II-6), and price differences (tables II-7 and II-8). None of the

Table II-1
Silicon metal: Ranking of factors used in purchasing decisions, as reported by U.S. purchasers

Factor	Number one factor	Number two factor	Number three factor	Other factors
	Number of firms responding			
Quality	11	6	0	0
Price	5	6	7	0
Contract/traditional supplier	3	2	2	0
Qualified supplier/ product	2	0	0	1
Availability	1	1	8	0
Stability of supply/ dependability	0	2	0	1
Delivery	0	2	0	0
Specifications	0	2	0	0
Service	0	1	1	1
Other[1]	0	0	4	2

[1] Other factors include: integrity, size, price/delivery, and price/quality for the third factor; and for other factors, currency changes and packaging.

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

[31] Of the 19 purchasers requiring prequalification, 18 required it on all their product and 1 reported that it required it on none of its product; however, this firm bought all its silicon metal on long-term contracts.

purchasers compared the U.S. and Argentine silicon metals' interchangeability. No purchasers compared U.S. and Argentine imported silicon metal on the 18 factors discussed previously.

Comparisons of Domestic Product and Imports from Brazil

Questionnaire respondents were asked to discuss the interchangeability between U.S.-produced silicon metal and Brazilian product (tables II-3 and II-4), differences between the product characteristics or sales conditions (tables II-5 and II-6), and price differences (tables II-7 and II-8). All 4 purchasers that compared U.S. and Brazilian imported silicon metal reported that they could be used interchangeably in the same applications. Five purchasers compared U.S. and imported silicon metal from Brazil on the same 18 factors discussed previously (table II-9).

Table II-2
Silicon metal: Ranking of factor importance, as reported by U.S. purchasers

Factor	Very important	Somewhat important	Not important
	Number of firms responding		
Availability	22	0	0
Availability on contract	12	4	4
Delivery terms	8	11	1
Delivery time	16	4	0
Discounts offered	3	12	5
Lowest price	8	10	2
Minimum quantity requirements	2	11	7
Packaging	9	10	1
Product consistency	18	2	0
Product quality	19	1	0
Percentage fines	16	4	0
Size of lumps	13	7	0
Consistency of lump size	12	8	0
Product range	7	8	5
Reliability of supply	17	3	0
Technical support/service	6	11	3
Transportation network	3	11	6
U.S. transportation costs	3	10	7
Other[1]	0	1	0

[1] Other factor was payment terms.

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

Table II-3
Silicon metal: Interchangeability of product from country pairs, as reported by domestic producers

Country pair	United States	Argentina	Brazil	China
Argentina	4 yes 0 no			
Brazil	4 yes 0 no	3 yes 0 no		
China	4 yes 0 no	3 yes 0 no	3 yes 0 no	
Nonsubject countries	4 yes 0 no	3 yes 0 no	3 yes 0 no	3 yes 0 no

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

Table II-4
Silicon metal: Interchangeability of product from country pairs, as reported by importers

Country-pair	United States	Argentina	Brazil	China
Argentina	3 yes 0 no			
Brazil	7 yes 0 no	3 yes 0 no		
China	5 yes 3 no[1]	1 yes 2 no	3 yes 3 no	
Nonsubject countries	6 yes 0 no	1 yes 0 no	5 yes 0 no	2 yes 1 no

[1] The importers that reported that Chinese product is not interchangeable with other countries' product report that this is because it tends to have more impurities or that little is available in chemical grades.

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

Table II-5
Silicon metal: Differences in product characteristics or sales conditions of product from country pairs, as reported by domestic producers

Country-pair	United States	Argentina	Brazil	China
Argentina	4 yes 0 no			
Brazil	4 yes 0 no	3 yes 0 no		
China	3 yes 1 no[1]	3 yes 0 no	3 yes 0 no	
Nonsubject countries	3 yes 0 no	3 yes 0 no	3 yes 0 no	3 yes 0 no

[1] The producer reported that because Chinese product is produced by many small producers and sold through multiple brokers, purchasers often need to understand the source better and some must visit the source.

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

Table II-6
Silicon metal: Differences in product characteristics or sales conditions of product from country pairs, as reported by importers

Country-pair	United States	Argentina	Brazil	China
Argentina	1 yes[1] 2 no			
Brazil	1 yes[1] 4 no	0 yes 3 no		
China	3 yes[1, 2, 3] 3 no	1 yes[3] 2 no	1 yes[3] 3 no	
Nonsubject countries	1 yes[1] 3 no	0 yes 1 no	0 yes 2 no	0 yes 2 no

[1] The importer reported that all imports must be sold for less than the U.S.-produced product because of longer lead times, lack of technical support, and inability to customize product. In addition, it reported that Russian and Saudi Arabian products tend to be lower quality and lower priced.
[2] The importer reported that Chinese product does not contain the elemental silicon levels of Brazilian or Argentine product.
[3] The importer reports that Chinese product differs in quality, is less available, requires longer lead times, does not have the range of quality, and has little technical support.

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

Table II-7
Silicon metal: Price differences of product from country pairs, as reported by domestic producers

Country-pair	United States	Argentina	Brazil	China
Argentina	0 yes 4 no[1]			
Brazil	0 yes 4 no[1]	1 yes 0 no		
China	0 yes 4 no[1]	1 yes 1 no	1 yes 1 no	
Nonsubject countries	1 yes[2] 4 no[1]	1 yes[1] 1 no	1 yes[1] 1 no	1 yes[1] 3 no

[1] One of these reported that U.S. prices were higher because imports were unfairly low priced.
[2] This firm answered both yes and no for the nonsubject firms, reporting that it was yes for some (Canada) and no for others (Russia).

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

Table II-8
Silicon metal: Price differences of product from country pairs, as reported by importers

Country-pair	United States[1]	Argentina	Brazil	China
Argentina	1 yes 0 no			
Brazil	1 yes 2 no	0 yes 1 no		
China[2]	1 yes 1 no	1 yes 0 no	1 yes 1 no	
Nonsubject countries	1 yes 2 no	0 yes 1 no	1 yes 1 no	0 yes 2 no

[1] One importer reported that U.S. prices were higher to compensate for lead times, technical support, and customized product.
[2] One importer reported that Chinese prices were much lower than those of the U.S. or Brazilian product for slightly lower quality.

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

Table II-9
Silicon metal: Comparisons of U.S. product with imported product, as reported by purchasers[1]

Factor	Brazil			China			Canada			Russia		
	S	C	I	S	C	I	S	C	I	S	C	I
	Number of firms responding											
Availability	1	4	0	1	2	0	0	4	0	1	7	0
Availability on contract	0	5	0	1	2	0	0	4	0	0	8	0
Delivery terms	0	5	0	1	2	0	0	4	0	2	6	0
Delivery time	2	3	0	3	0	0	1	3	0	3	4	1
Discounts offered	0	5	0	0	3	0	0	4	0	1	7	0
Lowest price	0	1	4	0	0	3	0	2	1	0	0	7
Minimum quantity requirements	0	4	0	0	3	0	0	4	0	0	8	0
Packaging	0	4	0	0	3	0	0	4	0	1	7	0
Product consistency	0	4	0	0	3	0	0	4	0	3	5	0
Product quality	0	4	0	0	3	0	0	4	0	3	5	0
Percentage fines	1	3	0	1	2	0	1	3	0	3	5	0
Size of lumps	0	4	0	0	3	0	0	4	0	2	6	0
Consistency of lump size	0	4	0	1	2	0	0	4	0	2	6	0
Product range	0	4	0	0	3	0	0	4	0	1	7	0
Reliability of supply	2	2	0	0	3	0	0	4	0	1	6	1
Technical support/service	1	4	0	2	1	0	0	4	0	3	5	0
Transportation network	1	4	0	1	2	0	1	3	0	2	6	0
U.S. transportation costs	0	5	0	0	3	0	1	3	0	1	6	1
Other[2]	1	0	0	0	0	0	0	1	0	0	0	0

Note: S = U.S. superior, C = U.S. and other country comparable, I = U.S. inferior.

Continued on the following page.

Table II-9--*Continued*
Silicon metal: Comparisons of U.S. product with imported product, as reported by purchasers

Factor	South Africa			Australia			Philippines			Saudi Arabia		
	S	C	I	S	C	I	S	C	I	S	C	I
	Number of firms responding											
Availability	0	3	0	0	2	0	0	1	0	0	1	0
Availability on contract	0	3	0	0	2	0	0	1	0	0	1	0
Delivery terms	0	3	0	0	2	0	0	1	0	0	1	0
Delivery time	2	1	0	1	0	1	0	1	0	0	1	0
Discounts offered	0	3	0	0	2	0	0	1	0	0	1	0
Lowest price	0	1	2	0	1	1	0	0	0	0	1	0
Minimum quantity requirements	0	3	0	0	2	0	0	1	0	0	1	0
Packaging	0	3	0	0	2	0	0	1	0	0	1	0
Product consistency	0	3	0	0	2	0	0	1	0	0	1	0
Product quality	0	3	0	0	2	0	0	1	0	0	1	0
Percentage fines	0	3	0	0	2	0	0	1	0	0	1	0
Size of lumps	0	3	0	0	2	0	0	1	0	0	1	0
Consistency of lump size	0	3	0	0	2	0	0	1	0	0	1	0
Product range	0	3	0	0	2	0	0	1	0	0	1	0
Reliability of supply	0	3	0	0	1	1	0	1	0	0	1	0
Technical support/service	1	2	0	0	2	0	0	1	0	1	0	0
Transportation network	0	3	0	0	2	0	0	1	0	0	1	0
U.S. transportation costs	0	3	0	0	2	0	0	1	0	0	1	0

[1] No purchaser compared the U.S. product with the Argentine product.
[2] Other factor was payment terms.

Note: S = U.S. superior, C = U.S. and other country comparable, I = U.S. inferior.

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

Comparisons of Domestic Product and Imports from China

Questionnaire respondents were asked to discuss the interchangeability between U.S.-produced silicon metal and Chinese product (tables II-3 and II-4), differences between the product characteristics or sales conditions (tables II-5 and II-6), and price differences (tables II-7 and 8). Four of the 5 purchasers that compared U.S. and Chinese imported silicon metal reported that they could be used

interchangeably in the same applications.[32] Three purchasers compared U.S. and Chinese imported silicon metal on the same 18 factors discussed previously (table II-9).

Comparisons of Domestic Product and Nonsubject Imports

Imports of silicon metal are available from a variety of sources not subject to the antidumping orders under review, including Australia, Canada, France, Norway, the Philippines, Russia, Saudi Arabia, South Africa, and Spain. In 1999, nonsubject imports accounted for the majority of all imports by both quantity and value. U.S. producers and responding importers reported on whether domestic and nonsubject silicon metal were interchangeable (tables II-3 and II-4), on differences between the product characteristics or sales conditions (tables II-5 and II-6), and on price differences (tables II-7 and II-8). A number of purchasers compared the interchangeability of U.S.-produced and nonsubject silicon metal. Only one reported that these were not interchangeable, reporting that Russian product could only be used in secondary-aluminum applications. A number of purchasers compared U.S. and various nonsubject countries' silicon metal on the 18 factors requested (table II-9).

Comparisons of Imports from Subject Countries with Other Subject Imports

U.S. producers and importers compared product from the various subject countries (tables II-3 and II-4), differences between the product characteristics or sales conditions (tables II-5 and II-6), and price differences (tables II-7 and II-8). The Brazilian respondents report that "Brazilian imports do not compete with shipments from China and Argentina."[33] The only purchaser comparing subject products reported that Chinese and Brazilian product were interchangeable.

Comparisons of Imports from Subject Countries with Nonsubject Imports

U.S. producers and importers compared product from subject countries with product from nonsubject countries (tables II-3 and II-4), differences between the product characteristics or sales conditions (tables II-5 and II-6), and price differences (tables II-7 and II-8). The 1 purchaser that compared product from a subject and a nonsubject country reported that silicon metal from Canada and Brazil were used in the same applications.

MODELING ESTIMATES

This section discusses the elasticity estimates and an exogenous growth in demand estimate used in the COMPAS analysis. The U.S. producers believe that the COMPAS results for silicon metal cannot be meaningful because of the small market shares of subject imports in 1999.[34] They cite the melamine investigation which did not use the COMPAS model because of the small share of imports. However, in the case on melamine, subject imports were under 1 percent of the total market, whereas in the silicon metal investigations subject imports accounted for 5.3 percent of the U.S. market in 1999. Staff has

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[32] The other purchaser reported that Chinese quality was such that it could only be used in secondary aluminum applications.

[33] Brazilian prehearing brief, p. 9.

[34] U.S. producers' prehearing brief, appendix, p. 1.

estimated the impact of removing the antidumping duty only for Brazil because neither Argentina nor China had any exports to the United States in 1999 (other than TIB imports).

U.S. Supply Elasticity[35]

The domestic supply elasticity for silicon metal measures the sensitivity of the quantity supplied by U.S. producers to changes in the U.S. market price for silicon metal. The elasticity of domestic supply depends on several factors including the level of excess capacity, the ease with which producers can alter capacity, producers' ability to shift to production of other products, the existence of inventories, and the availability of alternative markets for U.S.-produced silicon metal. Analysis of these factors earlier indicates that the U.S. silicon metal industry is likely to be able to only moderately increase or decrease shipments to the U.S. market within a one-year time frame; an estimate in the range of 3 to 5 is suggested.

U.S. Demand Elasticity

The U.S. demand elasticity for silicon metal measures the sensitivity of the overall quantity demanded to a change in the U.S. market price for silicon metal. This estimate depends on the factors discussed earlier such as lack of substitute products. Based on the available information, the aggregate demand for silicon metal is likely to be low to moderately elastic; a range of -0.20 to -0.45 is suggested.

Substitution Elasticity

The elasticity of substitution depends upon the extent of product differentiation between the domestic and imported products.[36] Product differentiation, in turn, depends upon such factors as quality and conditions of sale. Staff originally estimated that the elasticity of substitution between U.S.-produced and subject silicon metal is likely to be moderate, in the range of 2 to 4. The U.S. producers estimated that elasticity of substitution should be in the range of 5 to 6, reporting that "all the subject countries produce chemical grade silicon metal that is acceptable to domestic purchasers and several producers specifically state in their questionnaire response that they are focusing their production on silicon metal for the chemical and primary aluminum sectors."[37] Staff notes, however, that silicon metal is not a pure commodity product, that almost all purchasers require prequalification of material, and that the acceptable impurity levels vary from customer to customer. Staff therefore adjusts its estimate of elasticity of substitution between U.S. and subject product to 3 to 5.

Exogenous Growth in Demand

As discussed previously, the U.S. producers reported that demand was rising; however, one reported that demand was going to contract because of ***. Importers reported that demand has been growing by an average of 7 percent per year and expect that this will continue. Based on available

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[35] A supply function is not defined in the case of a non-competitive market.

[36] The substitution elasticity measures the responsiveness of the relative U.S. consumption levels of the subject imports and U.S. like products to changes in their relative prices. This reflects how easily purchasers switch from the U.S. product to the subject products (or vice versa) when prices change.

[37] Petitioners' prehearing brief, appendix, p. 3.

information, exogenous growth in demand for silicon metal is likely to be in the range of 2 to 8 percent per year.

Elasticity of Foreign Supply

The limited information available indicates that the supply of imports of silicon metal is moderately elastic. Elasticity of supply depends on unused capacity and the ability to shift supply between markets. Staff initially estimated that the subject silicon metal producers are likely to be able to increase shipments relatively rapidly to the U.S. market within a one-year time frame, and that the elasticity of foreign supply is in the range of 3 to 5. The U.S. producers responded that the estimate in the original investigation was 3 to 8 and that there is no reason to believe that it should be lower given the low capacity utilization of both the Brazilian and Argentine producers.[38] Staff therefore adjusts its estimate to 3 to 8.

Model Results

This analysis uses a nonlinear partial equilibrium model that assumes that domestic and imported products are less than perfect substitutes. Such models, also known as Armington models, are relatively standard in applied trade policy analysis and are used for the analysis of trade policy changes in both partial and general equilibrium. Based on discussion earlier, staff has selected a range of estimates that represent price-supply, price-demand, and product-substitution relationships (i.e., supply elasticity, demand elasticity, and substitution elasticities) in the U.S. silicon metal market. The model uses these estimates along with data on market shares and Commerce's estimation of the likely level of dumping that will recur or continue.

The analysis uses the most recent one-year period, 1999, as the base year. The model results suggest the possible effects of revocation of the antidumping orders on the domestic U.S. silicon metal industry over a one-year time period only, i.e., from 1999 to 2000. The possible effects over a longer time period are not part of this modeling exercise. Finally, the model does not assume that all of the dumping margin will be passed forward to U.S. prices of the subject imports. The model simulates zero growth, "low growth," and "high growth" scenarios based on staff's estimates and the dumping margins provided by Commerce. Only the results for Brazil were calculated. The results are presented in the tabulation below. More details are provided in appendix E.

Simulation	Reduction in Price	Reduction in Output	Reduction in Revenue
Zero growth simulation	***	***	***
Low growth simulation 2.0 percent growth	***	***	***
High growth simulation 8.0 percent growth[39]	***	***	***

[38] U.S. producers' prehearing brief, appendix, p. 4.

[39] Negative numbers indicate increases in output and revenue by the U.S. producers under this scenario.

PART III: CONDITION OF THE U.S. INDUSTRY

U.S. PRODUCERS' CAPACITY, PRODUCTION, CAPACITY UTILIZATION, SHIPMENTS, INVENTORIES, AND EMPLOYMENT

Table III-1 presents data on the U.S. industry producing silicon metal during the period of review. Internal consumption of silicon metal was not significant.

During the review period American Alloys closed in 1998, resulting in a loss of about *** tons capacity, and AST ceased production in 1999, which will eventually result in a loss of about *** tons capacity not fully accounted for during the review period. Elkem increased its capacity by about *** tons during the review period. Globe added *** tons in 1997-98, and ***. However, in August 2000 it ***. Finally, SIMCALA's capacity remained steady.

Between 1997 and 1999, production declined about *** tons for SIMCALA, *** tons for AST, and *** tons for American Alloys. Globe's production remained steady, and Elkem increased its production by about *** tons. In each of the years 1997-99 (as well as in each of the years covered by the original investigations), U.S. producers' capacity to produce silicon metal was well below apparent U.S. consumption.

During the review period, AST lost about *** workers, American Alloys lost ***, Elkem added about ***, and Globe and SIMCALA's employment remained steady.

Table III-1
Silicon metal: U.S. production capacity, production, capacity utilization, shipments, end-of-period inventories, and employment-related indicators, 1997-99, January-June 1999, and January-June 2000

Item	Calendar year			January-June	
	1997	1998	1999	1999	2000
Capacity (*gross short tons*)	225,690	234,099	236,857	119,952	110,769
Production (*gross short tons*)	213,010	213,274	209,117	107,009	106,744
Capacity utilization (*percent*)	94.4	91.1	88.2	89.2	96.4
U.S. shipments:					
Quantity (*gross short tons*)	206,692	206,788	203,342	104,198	101,870
Value (*1,000 dollars*)	320,748	309,872	277,641	143,117	133,178
Unit value (*per ton*)	$1,552	$1,499	$1,365	$1,374	$1,307
Exports:					
Quantity (*gross short tons*)	***	***	***	***	***
Value (*1,000 dollars*)	***	***	***	***	***
Unit value (*per ton*)	$***	$***	$***	$***	$***
Total shipments:					
Quantity (*gross short tons*)	***	***	***	***	***
Value (*1,000 dollars*)	***	***	***	***	***
Inventories (*gross short tons*)	11,174	10,982	9,151	8,056	9,679
Ratio of inventories to total shipments (*percent*)	***	***	***	***	***
Production and related workers (PRWs)	816	816	770	771	719
Hours worked by PRWs (*1,000 hours*)	1,936	1,801	1,750	911	835
Wages paid to PRWs (*1,000 dollars*)	31,474	31,829	32,174	16,440	15,626
Hourly wages	$16.26	$17.67	$18.39	$18.05	$18.71
Productivity (*tons produced per 1,000 hours*)	110.0	118.4	119.5	117.5	127.8
Unit labor costs (*per ton*)	$148	$149	$154	$154	$146

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

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

FINANCIAL EXPERIENCE OF THE U.S. INDUSTRY

Background

This section presents financial data on the operations that produced or are producing silicon metal for the five U.S. companies that accounted for 100 percent of U.S. shipments.[1] Four of the five companies provided financial data on a calendar-year basis, while the remaining company reported on a fiscal-year basis.[2]

U.S. producers make other silicon-based products in the same plants, although not necessarily in the same furnaces as are used to produce silicon metal. These other products may include such nonsubject products as ferrosilicon.[3]

The structure of the U.S. industry that makes silicon metal has changed during the 1990s, reflecting a process of consolidation that is occurring within the metals industries on a worldwide basis. For example, Globe purchased Dow's plant in Springfield, OR in July of 1993, and purchased the plant in Niagara Falls, NY from SKW in 1994. Certain other U.S. producers have gone through bankruptcy reorganization. Silicon Metaltech entered bankruptcy in June 1990; AST purchased the assets and operates the plant at Rock Island, WA. American Alloys is currently in Chapter 11. SiMETCO, Inc. relinquished the ownership of its silicon metal plant at Mt. Meigs, AL, on February 10, 1995; SIMCALA subsequently purchased most of the assets of SiMETCO, including the Mt. Meigs plant.

Operations on Silicon Metal

Aggregate income and loss data for the U.S. producers on their operations producing silicon metal are presented in table III-2.

The quantity, value, and unit value of sales fell during the periods investigated (table III-2).[4] Although per-unit cost of goods sold (COGS) also fell, the decline in this indicator was not as great as the decline in the per-unit sales price. As a consequence, gross profit and operating income fell absolutely and as a ratio to net sales between 1997 and 1999. Between January-June 1999 and the same

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[1] American Alloys, AST, Elkem, and Globe provided financial data on their operations producing silicon metal in response to the Commission's questionnaire. SIMCALA refused to provide such data, and referred Commission staff to the company's financial reports filed with the U.S. Securities and Exchange Commission (SEC); data for this company's operations, therefore, are derived from the SEC's EDGAR database. SIMCALA's shipments of silicon metal, as reported in the trade section of the Commission's questionnaire, accounted for *** percent of the company's total sales as reported to the SEC.

[2] American Alloys has a fiscal year end of September 30, although it reported on a calendar-year basis in the Commission's questionnaire. Globe's fiscal year ends on the Saturday that is nearest to June 30 ***; AST, Elkem, and SIMCALA have fiscal years that end on December 31.

[3] Ferrosilicon is used by the steel and aluminum industries as a deoxidation agent and for alloying. For example, silicon-aluminum alloys are used in a variety of automobile components, including engine pistons, housings, and cast aluminum wheels. SIMCALA produces silicon metal and microsilica at its plant in Mt. Meigs, AL (SIMCALA, form 10-K for 1998, p. 1 as filed, *http://www.sec.gov/archives/edgar/data/941174/0000950144-99-003769.txt*, retrieved on September 27, 2000). ***.

[4] The volume and value of internal consumption was not material (accounting for *** of total net sales during the periods investigated) and has, therefore, been combined with trade sales in this presentation.

period in 2000, the decline in unit COGS was greater than the decline in unit sales price, leading to an increase in gross profit and operating income. Interest charges offset operating income to cause net losses in 1999 and interim 2000.

These results are affected by the shutdown of two of the U.S. producers, American Alloys and AST. ***.[5] On the other hand, industry results are favorably affected by the increased production capacity and shipments of Elkem.[6]

Table III-2
Results of operations of U.S. producers in the production of silicon metal, fiscal years 1997-99, January-June 1999, and January-June 2000

* * * * * * *

Table III-3 presents net sales, details of COGS, and operating profit for those companies that reported the components of COGS. Expenses relating to equipment maintenance, furnace or plant shutdown, and product conversion costs (chiefly, the costs of electricity and the consumption of electrodes) are included in the category of "other factory costs."

Table III-3
Components of COGS of U.S. producers in the production of silicon metal, fiscal years 1997-99, January-June 1999, and January-June 2000

* * * * * * *

Table III-4 presents selected financial information on a company-by-company basis. These data show the effect of falling prices on the operating income of individual U.S. producers. Operating income is affected by changes in price and volume as well as by changes in product mix (i.e., changes in the pattern of sales to different consuming industries). A comparison of product-by-product sales of Elkem and Globe (appendix F) illustrates this; these data also depict that prices fell to a greater extent for sales to the aluminum industry than for sales to the chemical industry during the periods investigated.[7]

Table III-4
Selected financial data of U.S. producers of silicon metal, by firm, fiscal years 1997-99, January-June 1999, and January-June 2000

* * * * * * *

Financial information is further depicted in a variance analysis for the industry in table III-5. A variance analysis, which depicts the effects of prices and volume on the producers' net sales, and of costs and volume on their total cost, may be affected partially by changes in product mix. Data in this table

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[5] Producers' questionnaire responses of ***.

[6] ***.

[7] Differences in the per-unit sales values between producers may be explained by differences in the composition of sales (or product mix). Pricing data was requested for sales to three consuming segments: primary-aluminum smelters, secondary-aluminum refiners, and the chemical industry. ***.

show that operating income decreased by $*** in 1999 from 1997, but that it increased between the first six months of 1999 and the same period in 2000 by $***. The substantial decreases in operating income between 1997 and 1998, and between 1998 and 1999, were primarily attributable to unfavorable price variances as well as to unfavorable net volume variances. A favorable net cost/expense variance more than compensated for an unfavorable price variance between January-June 1999 and the same period in 2000.

Table III-5
Variance analysis for U.S. producers on their silicon metal operations, fiscal years 1997-99 and January-June 1999-2000

* * * * * * *

Capital Expenditures, Research and Development (R&D) Expenses, and Investment in Productive Facilities

The firms' aggregated data on capital expenditures, R&D expenses, and the value of their property, plant, and equipment used in the production of silicon metal are shown in table III-6. Capital expenditures made by *** (shown in table III-7) accounted for a majority of the spending in that category; these were focused on the ***. The value of the industry's property, plant, and equipment was accounted for mostly by ***.

Table III-6
Capital expenditures, research and development expenses, and the value of assets of U.S. producers of silicon metal, fiscal years 1997-99, January-June 1999, and January-June 2000

* * * * * * *

Table III-7
Capital expenditures of U.S. producers of silicon metal, by firm, fiscal years 1997-99, January-June 1999, and January-June 2000

* * * * * * *

PART IV: U.S. IMPORTS AND THE FOREIGN INDUSTRIES

U.S. IMPORTS

Import data in table IV-1 were compiled from official U.S. Department of Commerce statistics. Almost all imports from China were under TIB, which are free as articles to be processed under bond for exportation, including processes which result in articles manufactured or produced in the United States. These imports are not subject to antidumping duties.

Table IV-1
Silicon metal: U.S. imports, by sources, 1997-99, January-June 1999, and January-June 2000

Source	Calendar year			January-June	
	1997	1998	1999	1999	2000
	Quantity (*gross short tons*)				
Argentina	0	44	0	0	0
Brazil	10,795	6,341	14,268	5,324	10,411
China[1]	3,214	3,058	3,324	1,673	1,812
All subject countries	14,009	9,442	17,592	6,997	12,222
Other sources	118,250	104,453	108,852	54,463	65,130
Total	132,259	113,895	126,444	61,460	77,353
	Value (*$1,000*)				
Argentina	0	61	0	0	0
Brazil	17,010	8,251	17,203	6,425	13,083
China[1]	3,373	2,559	2,885	1,471	1,522
All subject countries	20,383	10,872	20,088	7,895	14,606
Other sources	178,206	137,765	128,344	65,530	68,311
Total	198,589	148,637	148,432	73,426	82,917
	Unit value (*per gross short ton*)				
Argentina	(2)	$1,386	(2)	(2)	(2)
Brazil	$1,576	1,302	$1,206	$1,207	$1,257
China[1]	1,050	837	868	879	840
All subject countries	1,455	1,151	1,142	1,128	1,195
Other sources	1,507	1,319	1,179	1,203	1,049
Total	1,502	1,305	1,174	1,195	1,072

Footnotes appear at the end of the table.

Table IV-1—*Continued*
Silicon metal: U.S. imports, by sources, 1997-99, January-June 1999, and January-June 2000

Source	Calendar year			January-June	
	1997	1998	1999	1999	2000
	Share of quantity (*percent*)				
Argentina	0.0	([3])	0.0	0.0	0.0
Brazil	8.2	5.6	11.3	8.7	13.5
China[1]	2.4	2.7	2.6	2.7	2.3
All subject countries	10.6	8.3	13.9	11.4	15.8
Other sources	89.4	91.7	86.1	88.6	84.2
Total	100.0	100.0	100.0	100.0	100.0
	Share of value (*percent*)				
Argentina	0.0	([3])	0.0	0.0	0.0
Brazil	8.6	5.6	11.6	8.7	15.8
China[1]	1.7	1.7	1.9	2.0	1.8
All subject countries	10.3	7.3	13.5	10.8	17.6
Other sources	89.7	82.7	86.5	89.2	82.4
Total	100.0	100.0	100.0	100.0	100.0

[1] TIB imports account for the following: 100 percent in 1999, 98 percent in 1998, and 80 percent in 1997.
[2] Not applicable.
[3] Less than 0.05 percent.

Note.–Because of rounding, figures may not add to the totals shown; unit values and shares are calculated from the unrounded data.

Source: Compiled from official statistics of the U.S. Department of Commerce.

The following tabulation presents salient data on imports from leading nonsubject sources:

Source	Calendar year			January-June	
	1997	1998	1999	1999	2000
	Quantity (*gross short tons*)				
South Africa	16,006	26,011	28,566	13,194	20,791
Russia	34,656	40,211	25,713	12,941	15,066
Canada	23,909	19,038	25,334	12,772	16,128
Saudi Arabia	2,257	893	13,189	7,786	5,703
	Value (*$1,000*)				
South Africa	24,682	33,733	32,195	15,220	21,109
Russia	47,703	47,173	26,201	14,213	13,877
Canada	35,532	27,726	34,064	17,274	19,598
Saudi Arabia	2,981	1,011	13,306	8,250	5,511
	Unit value (*per gross short ton*)				
South Africa	$1,542	$1,297	$1,127	$1,154	$1,015
Russia	1,376	1,173	1,019	1,098	921
Canada	1,486	1,456	1,345	1,352	1,215
Saudi Arabia	1,321	1,132	1,009	1,060	966

U.S. IMPORTERS' INVENTORIES

U.S. importers' inventories are shown in table IV-2.

Table IV-2
Silicon metal: U.S. importers' end-of-period inventories of imports from subject countries, 1997-99, January-June 1999, and January-June 2000

* * * * * * *

THE INDUSTRY IN ARGENTINA

Three producers in Argentina have been identified, although only one, Andina, is known to be active in producing silicon metal during the review period.[1] Data for Andina are presented in table IV-3. ***. ***.[2] ***.

Table IV-3
Silicon metal: Data for Andina in Argentina, 1997-99, January-June 1999, and January-June 2000

* * * * * * *

THE INDUSTRY IN BRAZIL

Seven producers in Brazil have been identified, 6 of which provided data in response to Commission questionnaires, which are presented in table IV-4.[3] Exports to the United States from these firms accounted for *** percent of imports from Brazil of silicon metal in 1999. The industry in Brazil is alleged to have a capacity of *** short tons, which is about *** percent of the capacity of the U.S. industry in 1999.[4] The following tabulation presents the shares of reported 1999 capacity and shares of reported 1999 exports to the United States by the 6 responding firms.

Firm	Share of 1999 reported capacity *(percent)*	Share of 1999 reported exports to the U.S. *(percent)*
CBCC	***	***
CCM	***	***
Liasa	***	***
Minasligas	***	***
Rima	***	***
Sibra	***	***
Total	100.0	100.0

Dow Corning acquired CBCC and is ***.[5] The EU antidumping order against silicon metal from

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[1] Submission by counsel for domestic producers and unions, December 21, 1999, p. 17.

[2] E-mail from Jessie Brooks, counsel for Elkem, October 10, 2000.

[3] The remaining producer that did not respond is Eletrosilex, which exported *** tons of silicon metal to the United States in 1998, and produced a total of *** tons that year. Submission from counsel for Eletrosilex, December 21, 1999, pp. 14-15.

[4] Submission by counsel for domestic producers and unions, December 21, 1999, p. 15.

[5] Prehearing brief of U.S. producers and unions, p. 31.

Brazil was revoked in February 1998.[6] The order on Brazil lapsed automatically because the European silicon metal industry withdrew its request for a sunset review.[7]

[6] Witness statement of Adelmo Melgaso, p. 2.

[7] Posthearing brief of Brazilian respondents and Dow Corning Corp., p. 17.

Table IV-4
Silicon metal: Data for Six Brazilian producers, 1997-99, January-June 1999, and January-June 2000

Item	Calendar year			January-June	
	1997	1998	1999	1999	2000
	Quantity (*gross short tons*)				
Capacity	179,010	181,330	190,310	95,156	97,086
Production	130,935	129,114	141,445	67,288	79,566
End-of-period inventories	27,887	33,150	29,300	26,167	28,776
Shipments:					
Internal consumption/transfers	550	417	440	225	140
Home market	16,260	15,924	21,715	9,604	10,673
Exports to:					
United States	9,572	5,673	10,729	7,320	8,723
All other markets	99,093	101,839	112,411	56,354	60,734
Total exports	108,664	107,512	123,140	63,674	69,457
Total shipments	125,474	123,852	145,295	73,502	80,270
	Ratios and shares (*percent*)				
Capacity utilization	73.1	71.2	74.3	70.7	82.0
Inventories/production	21.3	25.7	20.7	19.4	18.1
Inventories/shipments	22.2	26.8	20.2	17.8	17.9
Share of total shipments:					
Internal consumption/transfers	0.4	0.3	0.3	0.3	0.2
Home market	13.0	12.9	14.9	13.1	13.3
Exports to:					
United States	7.6	4.6	7.4	10.0	10.9
All other markets	79.0	82.2	77.4	76.7	75.7
Total exports	86.6	86.8	84.8	86.6	86.5

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

THE INDUSTRY IN CHINA

Forty-two producers in China were identified by counsel for domestic producers and unions; 5 of those firms provided data in response to Commission questionnaires, which are presented in table IV-5.[8] Exports to the United States from these firms accounted for *** percent of imports from China of silicon metal in 1999. The industry in China is alleged to have a capacity of *** short tons, which is about *** percent of the capacity of the U.S. industry in 1999.[9] The following tabulation presents the shares of reported 1999 capacity and shares of reported 1999 exports to the United States by the 5 responding firms.

Firm	Share of 1999 reported capacity (percent)	Share of 1999 reported exports to the U.S. (percent)
China Hunan	***	***
Hezhou	***	***
Liaoning	***	***
Minhe	***	***
Yunnan	***	***
Total	100.0	100.0

In 1997, the European Community reviewed its antidumping order on silicon metal from China, and in December 1997 determined to continue the order at a duty rate of 49 percent *ad valorem*.[10]

[8] Questionnaires were sent by fax to all producers in China with contact numbers.

[9] Submission by counsel for domestic producers and unions, December 21, 1999, p. 17.

[10] Prehearing brief of domestic producers and unions, p. 10.

Table IV-5
Silicon metal: Data for five Chinese producers, 1997-99, January-June 1999, and January-June 2000

Item	Calendar year			January-June	
	1997	1998	1999	1999	2000
	Quantity (*gross short tons*)				
Capacity	20,300	22,200	28,400	16,100	29,700
Production	18,380	20,800	25,600	15,600	24,800
End-of-period inventories	1,020	1,400	1,820	1,200	1,200
Shipments:					
Internal consumption/transfers	0	0	0	0	0
Home market	4,100	2,930	4,120	2,240	860
Exports to:					
United States	0	0	360	240	300
All other markets	14,260	17,490	20,700	11,780	23,840
Total exports	14,260	17,490	21,060	12,020	24,140
Total shipments	18,360	20,420	25,180	14,260	25,000
	Ratios and shares (*percent*)				
Capacity utilization	90.5	93.7	90.1	96.9	83.5
Inventories/production	5.5	6.7	7.1	3.8	2.4
Inventories/shipments	5.6	6.9	7.2	4.2	2.4
Share of total shipments:					
Internal consumption/transfers	0.0	0.0	0.0	0.0	0.0
Home market	22.3	14.3	16.4	15.7	3.4
Exports to:					
United States	0.0	0.0	1.4	1.7	1.2
All other markets	77.7	85.7	82.2	82.6	95.4
Total exports	77.7	85.7	83.6	84.3	96.6

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

PART V: PRICING AND RELATED INFORMATION

FACTORS AFFECTING PRICES

Raw Material Costs

Three of 4 responding U.S. producers and 5 of 6 responding foreign producers reported that costs of raw materials were relatively unchanged between 1997 and 1999. One U.S. producer reported that the increased cost of raw material has had little effect on price, and 1 foreign producer reported higher electricity prices.

Transportation Costs to the U.S. Market

Based on 1999 official statistics, transportation charges from Brazil were 10.4 percent of customs value and from China were 11.0 percent. Transportation charges from the rest of the world to the U.S. market are estimated to average 6.3 percent of customs value. Transportation charges from Argentina to the U.S. market are estimated to be 2.5 percent of customs value.[1]

U.S. Inland Transportation Costs

Four U.S. producers reported U.S. inland transportation costs, which accounted for 1 to 5 percent of the total delivered price of silicon metal. Seven importers reported transportation costs which accounted for from 3 to 11 percent of total delivered costs; 3 of these reported that transportation costs were 10 percent of the delivered price of silicon metal.

Tariff Rates

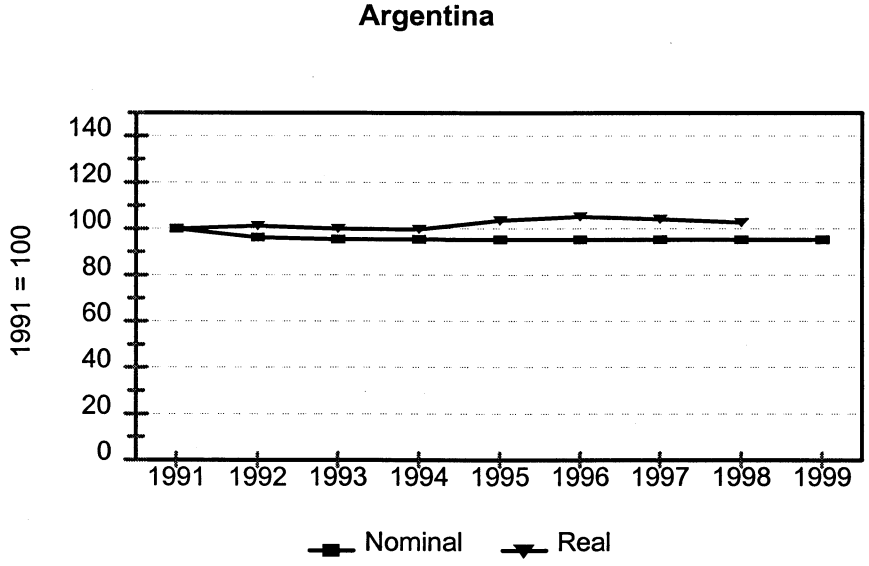
Silicon metal is covered by HTS subheadings 2804.69.10 and 2804.69.50. The normal trade relations tariff rates for HTS subheadings 2804.69.10 and 2804.69.50 were 5.3 and 5.5 percent, respectively, in 1999.

Exchange Rates

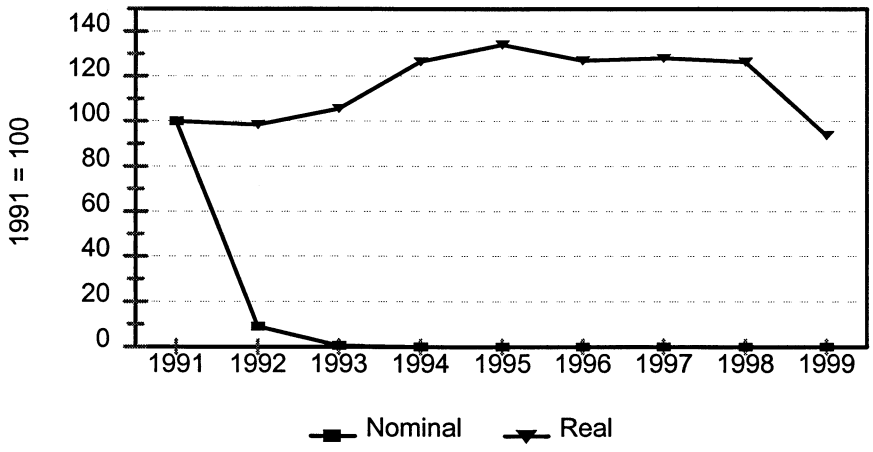
Annual exchange rates reported by the International Monetary Fund for Argentina, Brazil, and China during the period January 1991-December 1999 are shown in figure V-1.

[1] Based on 1998 statistics because no imports of silicon metal from Argentina were recorded in 1999.

Figure V-1
Exchange rates: Indexes of the nominal and real exchange rates of the Argentine peso relative to the U.S. dollar, by year, 1991-99

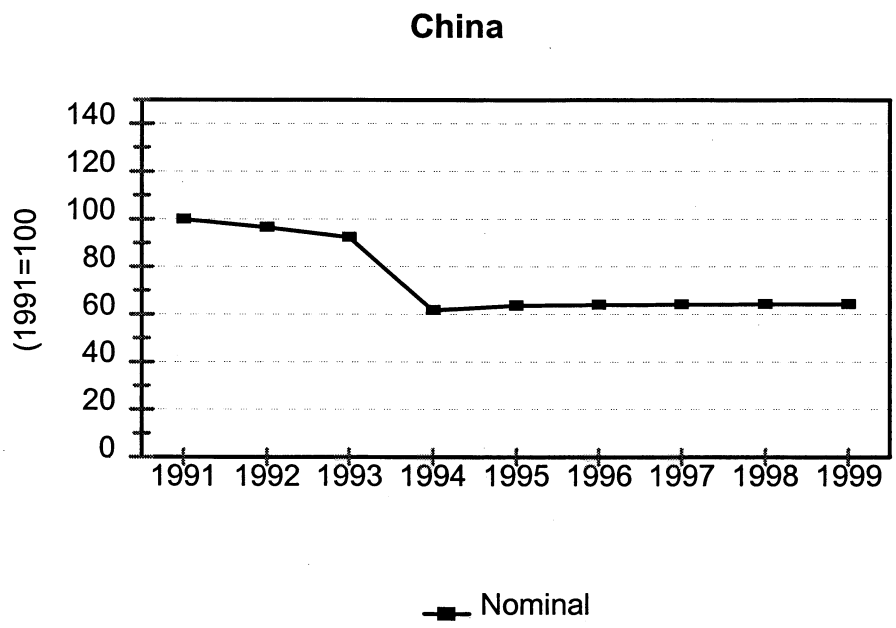


Exchange rates: Indexes of the nominal and real exchange rates of the Brazil reais relative to the U.S. dollar, by year, 1991-99



Continued on the following page.

Figure V-1--*Continued*
Exchange rates: Index of the nominal exchange rate of the China yuan relative to the U.S. dollar, by year, 1991-99



Source: International Monetary Fund, *International Financial Yearbook,* 1999 *International Financial Yearbook Statistics*, July 2000.

PRICING PRACTICES

Silicon metal is sold by weight. Prices differ by the type of silicon metal, chiefly by its levels and types of impurities.

In 1999, U.S. producers' silicon metal was sold mainly directly to end users, although some was also sold through wholesalers/distributors. Imports of silicon metal were used either internally by the importer, sold to end users, or sold to distributors. ***. Eight of the 15 responding importers imported only nonsubject product. Of the other 7, 5 reported imports from Brazil, 4 from China, and 1 from Argentina, with some importing from more than 1 country.

Three of the 4 responding U.S. producers and all 9 responding importers did not use price lists. All 4 responding U.S. producers and all 7 responding importers reported either no discounts or no discount policy. Three of the 4 responding U.S. producers reported mainly negotiating sales contracts directly with purchasers, and 1 of the U.S. producers reported selling through distributors. The importers reported that prices were either determined by contract-by-contract negotiations, or prices were set by the market, or prices were determined from published data. Chemical and primary aluminum producers are more likely to purchase on contracts or on longer-term contracts than secondary aluminum producers.[2]

[2] Geir Kvernmo of Elkem, hearing transcript, p. 209.

Two U.S. producers reported selling on both an f.o.b. and delivered basis, 1 sold on a delivered basis, and 1 on an f.o.b. basis. Two importers sold on a delivered basis and 1 sold on both a c.i.f. basis and on a delivered basis.

PRICE DATA

The Commission requested U.S. producers and importers of silicon metal to provide quarterly data for the total quantity (short tons in contained weight) and value of silicon metal that was shipped to unrelated customers in the U.S. market. Data were requested for the period January 1997-June 2000. The Commission also requested that purchasers provide their purchase prices; data were requested for the period January 1998-June 2000. Relatively little pricing data were received on import prices. The products for which pricing data were requested are as follows:

Product 1.-- for sales to primary aluminum producers -- silicon metal that contains a minimum of 98.5% silicon, a maximum of 1.00% iron, a maximum of 0.07% calcium, and no restriction of the aluminum content

Product 2.-- for sales to secondary aluminum producers -- silicon metal that contains a minimum of 98.0% silicon, a maximum of 1.00% iron, a maximum of 0.4% calcium, and no restriction of the aluminum content

Product 3.-- for sales to chemical manufacturers -- silicon metal that contains a minimum of 98.5% silicon, a maximum of 0.65% iron, a maximum of 0.2% calcium, and a maximum of 0.35% aluminum.

Nine purchasers, 4 U.S. producers, and 2 importers provided usable pricing data for purchases or sales of the requested products, although not all firms reported pricing for all products for all quarters. Price data from Platt's Metal Week were also obtained, since a number of producers, importers, and purchasers report that they used these prices in price determination. Import numbers in Part IV are in gross weight while the price data are for net weight -- i.e., the actual amount of silicon in the product sold or purchased. The net quantities have not been converted, but the difference would be small. The purchaser data covered 45.0 percent of shipments of U.S.-produced silicon metal, *** percent of shipments of Brazilian product, and *** percent of shipments of Chinese product. Pricing data reported by U.S. producers accounted for 77.4 percent of U.S. producers' shipments of silicon metal, and data from importers accounted for *** percent of U.S. shipments of imports from Brazil in 1999. No importer pricing data were obtained on imports of Argentine or Chinese silicon metal. The Brazilian respondents report one reason there may be differences between U.S. prices and import prices is that import prices are more likely to be spot prices while U.S. prices are more likely to be contract prices.[3]

Price Trends

The weighted-average purchase prices for U.S.-produced and imported silicon metal from Brazil and China are presented in tables V-1 through V-3 and in figures V-2 through V-4. The weighted-average

[3] Philippe Bruno, hearing transcript, p. 280. Producers, importers, and purchasers were not asked to provide contract and spot prices separately.

selling prices reported by U.S. producers and importers for sales of silicon metal to unrelated parties are shown are tables V-4 and V-5 and in figure V-5.[4]

Table V-1
Silicon metal: Weighted-average delivered prices and quantities of domestic and imported product 1[1] (reported by purchasers) and margins of underselling/(overselling), by quarters, January 1998-June 2000

Period	United States		Brazil			China		
	Price (*per ton*)	Quantity (*tons*)	Price (*per ton*)	Quantity (*tons*)	Margin (*percent*)	Price (*per ton*)	Quantity (*tons*)	Margin (*percent*)
1998:								
Jan.-Mar.	$1,607	1,848	***	***	***	--	--	--
Apr.-June	1,587	2,129	***	***	***	--	--	--
July-Sept.	1,580	2,111	--	--	--	***	***	***
Oct.-Dec.	1,599	1,942	--	--	--	--	--	--
1999:								
Jan.-Mar.	1,340	2,712	***	***	***	--	--	--
Apr.-June	1,346	2,367	--	--	--	***	***	***
July-Sept.	1,343	2,596	--	--	--	--	--	--
Oct.-Dec.	1,346	2,384	--	--	--	--	--	--
2000:								
Jan.-Mar.	1,273	2,638	--	--	--	--	--	--
Apr.-June	1,286	2,527	***	***	***	--	--	--

[1] Product 1.– for sales to primary aluminum producers -- silicon metal that contains a minimum of 98.5% silicon, a maximum of 1.00% iron, a maximum of 0.07% calcium, and no restriction of the aluminum content.

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

[4] No Argentine price data were available from any source. Purchaser price data for imports from China were only available for product 1. No importers provided price data for Chinese product, and importers only provided price data for Brazilian product 1.

Table V-2
Silicon metal: Weighted-average delivered prices and quantities of domestic and imported product 2[1] (reported by purchasers) and margins of underselling/(overselling), by quarters, January 1998-June 2000

Period	United States		Brazil		
	Price (*per ton*)	Quantity (*tons*)	Price (*per ton*)	Quantity (*tons*)	Margin (*percent*)
1998:					
Jan.-Mar.	$1,353	1,279	***	***	***
Apr.-June	1,619	218	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
1999:					
Jan.-Mar.	1,313	361	***	***	***
Apr.-June	1,239	1,207	***	***	***
July-Sept.	1,211	497	***	***	***
Oct.-Dec.	1,575	214	***	***	***
2000:					
Jan.-Mar.	1,238	151	***	***	***
Apr.-June	***	***	***	***	***

[1] Product 2.-- for sales to secondary aluminum producers -- silicon metal that contains a minimum of 98.0% silicon, a maximum of 1.00% iron, a maximum of 0.4% calcium, and no restriction of the aluminum content.

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

Table V-3
Silicon metal: Weighted-average delivered prices and quantities of domestic and imported product 3[1] (reported by purchasers) and margins of underselling/(overselling), by quarters, January 1998-June 2000

* * * * * * *

Table V-4
Silicon metal: Weighted-average f.o.b. prices and quantities of domestic and imported product 1[1] sold, and margins of underselling/(overselling), by quarters, January 1997-June 2000

Period	United States		Brazil		
	Price (*per ton*)	Quantity (*tons*)	Price (*per ton*)	Quantity (*tons*)	Margin (*percent*)
1997:					
Jan.-Mar.	$1,713	8,434	--	--	--
Apr.-June	1,709	7,985	--	--	--
July-Sept.	1,707	7,736	--	--	--
Oct.-Dec.	1,703	8,417	--	--	--
1998:					
Jan.-Mar.	1,622	7,583	--	--	--
Apr.-June	1,614	7,834	--	--	--
July-Sept.	1,529	6,692	--	--	--
Oct.-Dec.	1,492	8,081	***	***	***
1999:					
Jan.-Mar.	1,381	7,780	***	***	***
Apr.-June	1,366	7,711	***	***	***
July-Sept.	1,334	7,686	***	***	***
Oct.-Dec.	1,333	6,631	***	***	***
2000:					
Jan.-Mar.	1,230	8,360	***	***	***
Apr.-June	1,247	7,593	--	--	--

[1] Product 1.– for sales to primary aluminum producers -- silicon metal that contains a minimum of 98.5% silicon, a maximum of 1.00% iron, a maximum of 0.07% calcium, and no restriction of the aluminum content.

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

Table V-5
Silicon metal: Weighted-average f.o.b. prices and quantities of domestic products 2 and 3[1] sold, and prices from Platt's Metals Week, by quarters, January 1997-June 2000

Period	Silicon metal published price	Product 2		Product 3	
	Price (per ton)	Price (*per ton*)	Quantity (*tons*)	Price (*per ton*)	Quantity (*tons*)
1997:					
Jan.-Mar.	$1,733	$1,331	6,292	***	***
Apr.-June	1,722	1,563	5,047	***	***
July-Sept.	1,590	1,552	3,326	***	***
Oct.-Dec.	1,464	1,503	3,850	***	***
1998:					
Jan.-Mar.	1,423	1,448	3,457	***	***
Apr.-June	1,440	1,471	3,083	***	***
July-Sept.	1,431	1,458	2,769	***	***
Oct.-Dec.	1,342	1,390	4,657	***	***
1999:					
Jan.-Mar.	1,296	1,270	8,195	***	***
Apr.-June	1,256	1,243	7,244	***	***
July-Sept.	1,070	1,211	5,836	***	***
Oct.-Dec.	1,024	1,204	5,583	***	***
2000:					
Jan.-Mar.	1,106	1,151	6,814	***	***
Apr.-June	1,155	1,163	6,923	***	***

[1] Product 2.-- for sales to secondary aluminum producers -- silicon metal that contains a minimum of 98.0% silicon, a maximum of 1.00% iron, a maximum of 0.4% calcium, and no restriction of the aluminum content. Product 3.-- for sales to chemical manufacturers -- silicon metal that contains a minimum of 98.5% silicon, a maximum of 0.65% iron, a maximum of 0.2% calcium, and a maximum of 0.35% aluminum.

Source: Compiled from data submitted in response to Commission questionnaires. Prices from Platt's Metals Week provided by Mr. Thomas Jones of the USGS.

Figure V-2
Silicon metal: Weighted-average delivered prices per ton of product 1 provided by purchasers, by quarters, January 1998-June 2000

* * * * * * *

Figure V-3
Silicon metal: Weighted-average delivered prices per ton of product 2 provided by purchasers, by quarters, January 1998-June 2000

* * * * * * *

Figure V-4
Silicon metal: Weighted-average delivered prices per ton of product 3 provided by purchasers, by quarters, January 1998-June 2000

* * * * * * *

Figure V-5
Silicon metal: Weighted-average f.o.b. prices per ton of product 1 to unrelated purchasers reported by U.S. producers and importers, by quarters, January 1997-June 2000

* * * * * * *

Price Comparisons

The following tabulation shows a summary of underselling/(overselling) information for Brazilian product reported by purchasers or U.S. producers and importers for the 3 products for which data were collected. Chinese product price data were only available for 2 quarters (and only from purchasers), and are not presented in the tabulation. In the third quarter of 1998, Chinese product 1 undersold U.S.-produced product 1 by *** percent and, in the second quarter of 1999, Chinese product oversold the U.S. product 1 by *** percent.

	Purchasers' price data			U.S. producers' and importers' price data		
	Number of instances of underselling	Number of instances of overselling	Average margin of under/ overselling (percent)	Number of instances of underselling	Number of instances of overselling	Average margin of under/ overselling (percent)
1998.....	***	***	***	***	***	***
1999.....	***	***	***	***	***	***
2000 (Jan.-June)	***	***	***	***	***	***
Total.....	***	***	***	***	***	***

APPENDIX A

FEDERAL REGISTER NOTICES AND ADEQUACY STATEMENT

INTERNATIONAL TRADE COMMISSION

[Investigations Nos. 731–TA–470–472 and 671–673 (Review)]

Silicon Metal From Argentina, Brazil, and China and Silicomanganese From Brazil, China, and Ukraine

AGENCY: United States International Trade Commission.

ACTION: Institution of five-year reviews concerning the antidumping duty orders on silicon metal from Argentina, Brazil, and China; the antidumping duty orders on silicomanganese from Brazil and China; and the suspended investigation on silicomanganese from Ukraine.

SUMMARY: The Commission hereby gives notice that it has instituted reviews pursuant to section 751(c) of the Tariff Act of 1930 (19 U.S.C. § 1675(c)) (the Act) to determine whether revocation of the antidumping duty orders on silicon metal from Argentina, Brazil, and China; the antidumping duty orders on silicomanganese from Brazil and China; and the suspended investigation on silicomanganese from Ukraine would be likely to lead to continuation or recurrence of material injury. Pursuant to section 751(c)(2) of the Act, interested parties are requested to respond to this notice by submitting the information specified below to the Commission; [1] to be assured of consideration, the deadline for responses is December 21, 1999. Comments on the adequacy of responses may be filed with the Commission by January 13, 2000.

For further information concerning the conduct of these reviews and rules of general application, consult the Commission's Rules of Practice and Procedure, part 201, subparts A through E (19 CFR part 201), and part 207, subparts A, D, E, and F (19 CFR part 207). Recent amendments to the Rules of Practice and Procedure pertinent to five-year reviews, including the text of subpart F of part 207, are published at 63 F.R. 30599, June 5, 1998, and may be downloaded from the Commission's World Wide Web site at http://www.usitc.gov/rules.htm.Q02

EFFECTIVE DATE: November 2, 1999.

FOR FURTHER INFORMATION CONTACT: Mary Messer (202–205–3193) or Vera Libeau (202–205–3176), Office of Investigations, U.S. International Trade Commission, 500 E Street SW, Washington, DC 20436. Hearing-impaired persons can obtain information on this matter by contacting the Commission's TDD terminal on 202–205–1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202–205–2000. General information concerning the Commission may also be obtained by accessing its internet server (http://www.usitc.gov).

SUPPLEMENTARY INFORMATION:

Background

On the dates listed below, the Department of Commerce issued antidumping duty orders on the subject imports:

Order date	Product/country	Inv. No.	F.R. cite
6/10/91	Silicon metal/China	731–TA–472	56 F.R. 26649
7/31/91	Silicon metal/Brazil	731–TA–471	56 F.R. 36135
9/26/91	Silicon metal/Argentina	731–TA–470	56 F.R. 48779
12/22/94	Silicomanganese/Brazil	731–TA–671	59 F.R. 66003
12/22/94	Silicomanganese/China	731–TA–672	59 F.R. 66003

On October 31, 1994, the Department of Commerce suspended an antidumping duty investigation (Inv. No. 731–TA–673) on imports of silicomanganese from Ukraine (59 F.R. 60951, Nov. 29, 1994). The Commission is conducting reviews to determine whether revocation of the orders and termination of the suspended investigation would be likely to lead to continuation or recurrence of material injury to the domestic industry within a reasonably foreseeable time. It will assess the adequacy of interested party responses to this notice of institution to determine whether to conduct full reviews or an expedited reviews. The Commission's determinations in any expedited reviews will be based on the facts available, which may include information provided in response to this notice.

Definitions

The following definitions apply to these reviews:

(1) *Subject Merchandise* is the class or kind of merchandise that is within the scope of the five-year reviews, as defined by the Department of Commerce.

(2) The *Subject Countries* in these reviews are Argentina, Brazil, China, and Ukraine.

(3) The *Domestic Like Product* is the domestically produced product or products which are like, or in the absence of like, most similar in characteristics and uses with, the Subject Merchandise. In its original determinations concerning silicon metal, the Commission found one Domestic Like Product: silicon metal, regardless of grade, having a silicon content of at least 96.00 percent but less than 99.99 percent of silicon by weight, and excluding semiconductor grade silicon. In its original determinations concerning silicomanganese, the Commission found one Domestic Like Product: all silicomanganese. For purposes of this notice, you should report information separately on each of the following Domestic Like Products: (1) silicon metal, regardless of grade, having a silicon content of at least 96.00 percent but less than 99.99 percent of silicon by weight, and excluding semiconductor grade silicon and (2) all silicomanganese.

(4) The *Domestic Industry* is the U.S. producers as a whole of the Domestic Like Product, or those producers whose collective output of the Domestic Like Product constitutes a major proportion of the total domestic production of the product. In its original determinations concerning silicon metal, the Commission found one Domestic Industry: producers of silicon metal, regardless of grade, having a silicon content of at least 96.00 percent but less than 99.99 percent of silicon by weight, and excluding semiconductor grade silicon. In its original determinations concerning silicomanganese, the Commission one Domestic Industry: producers of silicomanganese. For purposes of this notice, you should report information separately on each of

[1] No response to this request for information is required if a currently valid Office of Management and Budget (OMB) number is not displayed; the OMB number is 3117–0016/USITC No. 99–5–037, expiration date July 31, 2002. Public reporting burden for the request is estimated to average 7 hours per response. Please send comments regarding the accuracy of this burden estimate to the Office of Investigations, U.S. International Trade Commission, 500 E Street, SW, Washington, DC 20436.

the following Domestic Industries: (1) producers of silicon metal, regardless of grade, having a silicon content of at least 96.00 percent but less than 99.99 percent of silicon by weight, and excluding semiconductor grade silicon and (2) producers of silicomanganese.

(5) The *Order Dates* are the dates that the antidumping duty orders under review became effective and the investigation was suspended. In these reviews, the Order Dates are as shown in the preceding tabulation.

(6) An *Importer* is any person or firm engaged, either directly or through a parent company or subsidiary, in importing the Subject Merchandise into the United States from a foreign manufacturer or through its selling agent.

Participation in the Reviews and Public Service List

Persons, including industrial users of the Subject Merchandise and, if the merchandise is sold at the retail level, representative consumer organizations, wishing to participate in the reviews as parties must file an entry of appearance with the Secretary to the Commission, as provided in section 201.11(b)(4) of the Commission's rules, no later than 21 days after publication of this notice in the **Federal Register**. The Secretary will maintain a public service list containing the names and addresses of all persons, or their representatives, who are parties to the reviews.

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

Pursuant to section 207.7(a) of the Commission's rules, the Secretary will make BPI submitted in these reviews available to authorized applicants under the APO issued in the reviews, provided that the application is made no later than 21 days after publication of this notice in the **Federal Register**. Authorized applicants must represent interested parties, as defined in 19 U.S.C. § 1677(9), who are parties to the reviews. A separate service list will be maintained by the Secretary for those parties authorized to receive BPI under the APO.

Certification

Pursuant to section 207.3 of the Commission's rules, any person submitting information to the Commission in connection with these reviews must certify that the information is accurate and complete to the best of the submitter's knowledge. In making the certification, the submitter will be deemed to consent, unless otherwise specified, for the Commission, its employees, and contract personnel to use the information provided in any other reviews or investigations of the same or comparable products which the Commission conducts under Title VII of the Act, or in internal audits and investigations relating to the programs and operations of the Commission pursuant to 5 U.S.C. Appendix 3.

Written Submissions

Pursuant to section 207.61 of the Commission's rules, each interested party response to this notice must provide the information specified below. The deadline for filing such responses is December 21, 1999. Pursuant to section 207.62(b) of the Commission's rules, eligible parties (as specified in Commission rule 207.62(b)(1)) may also file comments concerning the adequacy of responses to the notice of institution and whether the Commission should conduct expedited or full reviews. The deadline for filing such comments is January 13, 2000. All written submissions must conform with the provisions of sections 201.8 and 207.3 of the Commission's rules and any submissions that contain BPI must also conform with the requirements of sections 201.6 and 207.7 of the Commission's rules. The Commission's rules do not authorize filing of submissions with the Secretary by facsimile or electronic means. Also, in accordance with sections 201.16(c) and 207.3 of the Commission's rules, each document filed by a party to the reviews must be served on all other parties to the reviews (as identified by either the public or APO service list as appropriate), and a certificate of service must accompany the document (if you are not a party to the reviews you do not need to serve your response).

Inability To Provide Requested Information

Pursuant to section 207.61(c) of the Commission's rules, any interested party that cannot furnish the information requested by this notice in the requested form and manner shall notify the Commission at the earliest possible time, provide a full explanation of why it cannot provide the requested information, and indicate alternative forms in which it can provide equivalent information. If an interested party does not provide this notification (or the Commission finds the explanation provided in the notification inadequate) and fails to provide a complete response to this notice, the Commission may take an adverse inference against the party pursuant to section 776(b) of the Act in making its determinations in the reviews.

Information To Be Provided in Response to This Notice of Institution

Please provide the requested information separately for each Domestic Like Product, as defined above, and for each of the products identified by Commerce as Subject Merchandise. If you are a domestic producer, union/worker group, or trade/business association; import/export Subject Merchandise from more than one Subject Country; or produce Subject Merchandise in more than one Subject Country, you may file a single response. If you do so, please ensure that your response to each question includes the information requested for each pertinent Subject Country. As used below, the term "firm" includes any related firms.

(1) The name and address of your firm or entity (including World Wide Web address if available) and name, telephone number, fax number, and E-mail address of the certifying official.

(2) A statement indicating whether your firm/entity is a U.S. producer of the Domestic Like Product to which your response pertains, a U.S. union or worker group, a U.S. importer of the Subject Merchandise, a foreign producer or exporter of the Subject Merchandise, a U.S. or foreign trade or business association, or another interested party (including an explanation). If you are a union/worker group or trade/business association, identify the firms in which your workers are employed or which are members of your association.

(3) A statement indicating whether your firm/entity is willing to participate in these reviews by providing information requested by the Commission.

(4) A statement of the likely effects of the revocation of the antidumping duty orders and termination of the suspended investigation on each Domestic Industry for which you are filing a response in general and/or your firm/entity specifically. In your response, please discuss the various factors specified in section 752(a) of the Act (19 U.S.C. 1675a(a)) including the likely volume of subject imports, likely price effects of subject imports, and likely impact of imports of Subject Merchandise on the Domestic Industry.

(5) A list of all known and currently operating U.S. producers of each Domestic Like Product for which you are filing a response. Identify any known related parties and the nature of the relationship as defined in section 771(4)(B) of the Act (19 U.S.C. 1677(4)(B)).

(6) A list of all known and currently operating U.S. importers of the Subject Merchandise and producers of the Subject Merchandise in the Subject Countries that currently export or have exported Subject Merchandise to the United States or other countries since the years the petitions were filed. The Subject Merchandise, the Subject Countries, and the years the petitions were filed are listed below:

Subject merchandise/subject countries	Years
Silicon metal/Argentina, Brazil, and China	1990
Silicomanganese/Brazil, China, and Ukraine	1993

(7) If you are a U.S. producer of a Domestic Like Product, provide the following information separately on your firm's operations on each product during calendar year 1998 (report quantity data for silicon metal in gross tons; quantity data for silicomanganese in short tons; and value data in thousands of U.S. dollars, f.o.b. plant). If you are a union/worker group or trade/business association, provide the information, on an aggregate basis, for the firms in which your workers are employed/which are members of your association.

(a) Production (quantity) and, if known, an estimate of the percentage of total U.S. production of each Domestic Like Product accounted for by your firm's(s') production;

(b) The quantity and value of U.S. commercial shipments of each Domestic Like Product produced in your U.S. plant(s); and

(c) The quantity and value of U.S. internal consumption/company transfers of the Domestic Like Product produced in your U.S. plant(s).

(8) If you are a U.S. importer or a trade/business association of U.S. importers of the Subject Merchandise from the Subject Countries, provide the following information on your firm's(s') operations on that product during calendar year 1998 (report quantity data for silicon metal in gross tons; quantity data for silicomanganese in short tons; and value data in thousands of U.S. dollars). If you are a trade/business association, provide the information, on an aggregate basis, for the firms which are members of your association.

(a) The quantity and value (landed, duty-paid but not including antidumping or countervailing duties) of U.S. imports and, if known, an estimate of the percentage of total U.S. imports of Subject Merchandise from the Subject Countries accounted for by your firm's(s') imports;

(b) The quantity and value (f.o.b. U.S. port, including antidumping and/or countervailing duties) of U.S. commercial shipments of Subject Merchandise imported from the Subject Countries; and

(c) The quantity and value (f.o.b. U.S. port, including antidumping and/or countervailing duties) of U.S. internal consumption/company transfers of Subject Merchandise imported from the Subject Country.

(9) If you are a producer, an exporter, or a trade/business association of producers or exporters of the Subject Merchandise in the Subject Countries, provide the following information on your firm's(s') operations on that product during calendar year 1998 (report quantity data for silicon metal in gross tons; quantity data for silicomanganese in short tons; and value data in thousands of U.S. dollars, landed and duty-paid at the U.S. port but not including antidumping or countervailing duties). If you are a trade/business association, provide the information, on an aggregate basis, for the firms which are members of your association.

(a) Production (quantity) and, if known, an estimate of the percentage of total production of Subject Merchandise in the Subject Countries accounted for by your firm's(s') production; and

(b) The quantity and value of your firm's(s') exports to the United States of Subject Merchandise and, if known, an estimate of the percentage of total exports to the United States of Subject Merchandise from the Subject Countries accounted for by your firm's(s') exports.

(10) Identify significant changes, if any, in the supply and demand conditions or business cycle for each Domestic Like Product that have occurred in the United States or in the market for the Subject Merchandise in the Subject Countries since the Order Dates, and significant changes, if any, that are likely to occur within a reasonably foreseeable time. Supply conditions to consider include technology; production methods; development efforts; ability to increase production (including the shift of production facilities used for other products and the use, cost, or availability of major inputs into production); and factors related to the ability to shift supply among different national markets (including barriers to importation in foreign markets or changes in market demand abroad). Demand conditions to consider include end uses and applications; the existence and availability of substitute products; and the level of competition among the Domestic Like Product produced in the United States, Subject Merchandise produced in the Subject Countries, and such merchandise from other countries.

(11) (Optional) A statement of whether you agree with the above definitions of the Domestic Like Product and Domestic Industry; if you disagree with either or both of these definitions, please explain why and provide alternative definitions.

Authority: These reviews are being conducted under authority of title VII of the Tariff Act of 1930; this notice is published pursuant to section 207.61 of the Commission's rules.

Issued: October 25, 1999.

By order of the Commission.

Donna R. Koehnke,

Secretary.

[FR Doc. 99-28531 Filed 11-1-99; 8:45 am]

BILLING CODE 7020-02-P

INTERNATIONAL TRADE COMMISSION

[Investigations Nos. 731–TA–470–472 and 671–673 (Review)]

Silicon Metal From Argentina, Brazil, and China and Silicomanganese From Brazil, China, and Ukraine

AGENCY: United States International Trade Commission.

ACTION: Notice of Commission determinations to conduct full five-year reviews concerning the antidumping duty orders on silicon metal from Argentina, Brazil, and China; the antidumping duty orders on

[1] Commissioner Askey did not make a determination as to whether the respondent interested party group response was adequate in this review.

[2] Chairman Bragg and Commissioner Koplan dissenting.

silicomanganese from Brazil and China; and the suspended investigation on silicomanganese from Ukraine.

SUMMARY: The Commission hereby gives notice that it will proceed with full reviews pursuant to section 751(c)(5) of the Tariff Act of 1930 (19 U.S.C. § 1675(c)(5)) to determine whether revocation of the antidumping duty orders on silicon metal from Argentina, Brazil, and China and the antidumping duty orders on silicomanganese from Brazil and China; and termination of the suspended investigation on silicomanganese from Ukraine would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time. The Commission has determined to exercise its authority to extend the review period by up to 90 days pursuant to 19 U.S.C. § 1675(c)(5)(B); a schedule for the reviews will be established and announced at a later date. For further information concerning the conduct of these reviews and rules of general application, consult the Commission's Rules of Practice and Procedure, part 201, subparts A through E (19 CFR part 201), and part 207, subparts A, D, E, and F (19 CFR part 207).

EFFECTIVE DATE: February 3, 2000.

FOR FURTHER INFORMATION CONTACT: George Deyman (202–205–3197), Office of Investigations, U.S. International Trade Commission, 500 E Street SW, Washington, DC 20436. Hearing-impaired persons can obtain information on this matter by contacting the Commission's TDD terminal on 202–205–1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202–205–2000. General information concerning the Commission may also be obtained by accessing its internet server (*http://www.usitc.gov*).

SUPPLEMENTARY INFORMATION: On February 3, 2000, the Commission determined that it should proceed to full reviews in the subject five-year reviews pursuant to section 751(c)(5) of the Act. The Commission, in consultation with the Department of Commerce, grouped these reviews because they involve similar domestic like products. See 19 U.S.C. § 1675(c)(5)(D); 63 F.R. 29372, 29374 (May 29, 1998). With regard to silicon metal from Argentina and Brazil and silicomanganese from Brazil and Ukraine, the Commission found that both the domestic interested party group responses and the respondent interested party group responses to its notice of institution [1] were adequate and voted to conduct full reviews. With regard to both silicon metal and silicomanganese from China, the Commission found that the domestic interested party group responses were adequate and the respondent interested party group responses were inadequate. The Commission also found that other circumstances warranted conducting full reviews.

A record of the Commissioners' votes, the Commission's statement on adequacy, and any individual Commissioner's statements will be available from the Office of the Secretary and at the Commission's web site.

Authority: These reviews are being conducted under authority of title VII of the Tariff Act of 1930; this notice is published pursuant to section 207.62 of the Commission's rules.

Issued: February 9, 2000.

By order of the Commission.

Donna R. Koehnke,

Secretary.

[FR Doc. 00–3706 Filed 2–15–00; 8:45 am]

BILLING CODE 7020–02–P

DEPARTMENT OF COMMERCE

International Trade Administration

[A–351–806]

Silicon Metal From Brazil; Final Results of Expedited Sunset Review of Antidumping Duty Order

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

ACTION: Notice of final results of expedited sunset review of silicon metal from Brazil.

SUMMARY: On November 2, 1999, the Department of Commerce ("the Department") initiated a sunset review of the antidumping duty order on silicon metal from Brazil (64 FR 59160) pursuant to section 751(c) of the Tariff Act of 1930, as amended ("the Act"). On the basis of a notice of intent to participate and an adequate substantive response filed on behalf of domestic interested parties and inadequate response (in this case, waivers of response) from respondent interested parties, the Department determined to conduct an expedited review. As a result of this review, the Department finds that revocation of the antidumping duty order would likely lead to continuation or recurrence of dumping at the levels indicated in the Final Results of Review section of this notice.

EFFECTIVE DATE: June 5, 2000.

FOR FURTHER INFORMATION CONTACT: Kathryn B. McCormick or Carole A. Showers, Office of Policy for Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW, Washington, DC 20230; telephone: (202) 482–1930 or (202) 482–3217, respectively.

SUPPLEMENTARY INFORMATION:

Statute and Regulations

Unless otherwise indicated, all citations to the Act are references to the provisions effective January 1, 1995, the effective date of the amendments made to the Act by the Uruguay Round Agreements Act ("URAA"). In addition, unless otherwise indicated, all citations to the Department regulations are to 19 CFR part 351 (1999). Guidance on methodological or analytical issues relevant to the Department's conduct of sunset reviews is set forth in the Department's Policy Bulletin 98.3—*Policies Regarding the Conduct of Five-year ("Sunset") Reviews of Antidumping and Countervailing Duty Orders; Policy Bulletin*, 63 FR 18871 (April 16, 1998) ("*Sunset Policy Bulletin*").

Background

On November 2, 1999, the Department initiated a sunset review of the antidumping duty order on silicon metal from Brazil (64 FR 59160), pursuant to section 751(c) of the Tariff Act of 1930, as amended ("the Act"). The Department received a notice of intent to participate on behalf of American Silicon Technologies ("AST"), Elkem Metals Company ("Elkem"), and Globe Metallurgical Inc. ("Globe") (collectively, "domestic interested parties"), within the applicable deadline (November 15, 1999) specified in 19 CFR 351.218(d)(1)(i). Domestic interested parties claimed interested-party status under section 771(9)(C) of the Act, as U.S. producers of a domestic like product.

On November 29, 1999, we received a waiver of response from respondent interested parties Companhia Brasileira Carbureto de Calcio, Camargo Correa Metais, S.A., Ligas de Aluminio S.A., Companhia Ferroligas Minas Gerais—Minasligas, and RIMA Industrial S.A., pursuant to 19 CFR 351.218(d)(2)(i). On December 2, 1999, we received a waiver of response from respondent interested party Eletrosilex Bela Horizonte.

On December 1, 1999, we received a complete substantive response from domestic interested parties, within the 30-day deadline specified in the *Sunset Regulations* under § 351.218(d)(3)(i). Domestic interested parties claim that, in 1990, Elkem, Globe, and four other domestic producers filed the petition that resulted in the issuance of the antidumping duty order on silicon metal from Brazil (*see* December 1, 1999, Substantive Response of domestic interested parties at 2). Domestic interested parties also claim that at least one of them has actively participated in each of the administrative reviews conducted by the Department, as well as in a number of related appeals and remand proceedings. *Id.* at 3. Without a substantive response from respondent

interested parties the Department, pursuant to 19 CFR 351.218(e)(1)(ii)(C), determined to conduct an expedited, 120-day review of this order.

In accordance with section 751(c)(5)(C)(v) of the Act, the Department may treat a review as extraordinarily complicated if it is a review of a transition order (*i.e.*, an order in effect on January 1, 1995). This review concerns a transition order within the meaning of section 751(c)(6)(ii) of the Act. Accordingly, on February 29, 2000, the Department determined that the sunset review of silicon metal from Brazil is extraordinarily complicated, and extended the time limit for completion of the final results of this review until not later than May 30, 2000, in accordance with section 751(c)(5)(B) of the Act.[1]

Scope of Review

The merchandise covered by this review is silicon metal containing at least 96.00 percent but less than 99.99 percent of silicon by weight. Also covered by this review is silicon metal from Brazil containing between 89.00 and 96.00 percent silicon by weight but which contains a higher aluminum content than the silicon metal containing at least 96.00 percent but less than 99.99 percent silicon by weight. Silicon metal is currently provided for under subheadings 2804.69.10 and 2804.69.50 of the Harmonized Tariff Schedule ("HTS") as a chemical product, but is commonly referred to as a metal. Semiconductor-grade silicon (silicon metal containing by weight not less than 99.99 percent of silicon and provided for in subheading 2804.61.00 of the HTS) is not subject to this order. Although the HTS numbers are provided for convenience and customs purposes, the written description remains dispositive.

Analysis of Comments Received

All issues raised in the case and rebuttal briefs by parties to this sunset review are addressed in the "Issues and Decision Memorandum" ("Decision Memo") from Jeffrey A. May, Director, Office of Policy, Import Administration, to Troy H. Cribb, Acting Assistant Secretary for Import Administration, dated May 30, 2000, which is hereby adopted by this notice. The issues discussed in the attached Decision Memo include the likelihood of continuation or recurrence of dumping and the magnitude of the margin likely to prevail were the order revoked. Parties can find a complete discussion of all issues raised in this review and the corresponding recommendations in this public memorandum which is on file in the Central Records Unit, room B–099, of the main Commerce building.

In addition, a complete version of the Decision Memo can be accessed directly on the Web at www.ita.doc.gov/import_admin/records/frn. The paper copy and electronic version of the Decision Memo are identical in content.

Final Results of Review

We determine that revocation of the antidumping duty order on silicon metal from Brazil would be likely to lead to continuation or recurrence of dumping at the following percentage weighted-average margins:

Manufacturer/exporters	Margin (percent)
Companhia Brasileira Carbureto de Calcio ("CBCC")	87.79
Camargo Correa Metais, S.A. ("CCM")	93.20
All Others	91.06

This notice also serves as the only reminder to parties subject to administrative protective orders ("APO") of their responsibility concerning the return or destruction of proprietary information disclosed under APO in accordance with 19 CFR 351.305. Timely notification of the return or destruction of APO materials or conversion to judicial protective order is hereby requested. Failure to comply with the regulations and terms of an APO is a violation which is subject to sanction.

This five-year ("sunset") review and notice are in accordance with sections 751(c), 752, and 777(i)(1) of the Act.

Dated: May 30, 2000.

Troy H. Cribb,

Acting Assistant Secretary for Import Administration.

[FR Doc. 00–14026 Filed 6–2–00; 8:45 am]

BILLING CODE 3510–DS–P

[1] *See Extension of Time Limit for Final Results of Expedited Five-Year Reviews*, 65 FR 11761 (March 6, 2000).

DEPARTMENT OF COMMERCE

International Trade Administration

[A–357–804]

Silicon Metal From Argentina; Final Results of Expedited Sunset Review of Antidumping Duty Order

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

ACTION: Notice of final results of expedited sunset review of silicon metal from Argentina.

SUMMARY: On November 2, 1999, the Department of Commerce ("the Department") initiated a sunset review of the antidumping duty order on silicon metal from Argentina (64 FR 59160) pursuant to section 751(c) of the Tariff Act of 1930, as amended ("the Act"). On the basis of a notice of intent to participate and an adequate substantive response filed on behalf of domestic interested parties and inadequate response (in this case, no response) from respondent interested parties, the Department determined to conduct an expedited review. As a result of this review, the Department finds that revocation of the antidumping duty order would likely lead to continuation or recurrence of dumping at the levels indicated in the Final Results of Review section of this notice.

EFFECTIVE DATE: June 5, 2000.

FOR FURTHER INFORMATION CONTACT: Kathryn B. McCormick or Carole A. Showers, Office of Policy for Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW, Washington, DC 20230; telephone: (202) 482–1930 or (202) 482–3217, respectively.

SUPPLEMENTARY INFORMATION:

Statute and Regulations

Unless otherwise indicated, all citations to the Act are references to the provisions effective January 1, 1995, the effective date of the amendments made to the Act by the Uruguay Round Agreements Act ("URAA"). In addition, unless otherwise indicated, all citations to the Department regulations are to 19 CFR part 351 (1999). Guidance on methodological or analytical issues relevant to the Department's conduct of sunset reviews is set forth in the Department's Policy Bulletin 98.3—*Policies Regarding the Conduct of Five-year ("Sunset") Reviews of Antidumping and Countervailing Duty Orders; Policy Bulletin*, 63 FR 18871 (April 16, 1998) ("*Sunset Policy Bulletin*").

Background

On November 2, 1999, the Department initiated a sunset review of the antidumping duty order on silicon metal from Argentina (64 FR 59160), pursuant to section 751(c) of the Act. The Department received a notice of intent to participate on behalf of American Silicon Technologies ("AST"), Elkem Metals Company ("Elkem"), and Globe Metallurgical Inc.

("Globe") (collectively, "domestic interested parties"), within the applicable deadline (November 15, 1999) specified in 19 CFR 351.218(d)(1)(i). Domestic interested parties claimed interested-party status under section 771(9)(C) of the Act, as U.S. producers of a domestic like product.

On December 1, 1999, we received a complete substantive response from domestic interested parties, within the 30-day deadline specified in the *Sunset Regulations* under 19 CFR 351.218(d)(3)(i). Domestic interested parties claim that, in 1990, Elkem, Globe, and four other domestic producers filed the petition that resulted in the issuance of the antidumping duty order on silicon metal from Argentina (*see* December 1, 1999, Substantive Response of domestic interested parties at 2). Domestic interested parties also claim that at least one of them has actively participated in each of the administrative reviews conducted by the Department, as well as in a number of related appeals and remand proceedings. *Id.* at 3. Without a substantive response from respondent interested parties, the Department, pursuant to 19 CFR 351.218(e)(1)(ii)(C), determined to conduct an expedited, 120-day review of this order.

In accordance with section 751(c)(5)(C)(v) of the Act, the Department may treat a review as extraordinarily complicated if it is a review of a transition order (*i.e.*, an order in effect on January 1, 1995). This review concerns a transition order within the meaning of section 751(c)(6)(C)(ii) of the Act. Accordingly, on February 29, 2000, the Department determined that the sunset review of silicon metal from Argentina is extraordinarily complicated, and extended the time limit for completion of the final results of this review until not later than May 30, 2000, in accordance with section 751(c)(5)(B) of the Act.[1]

Scope of Review

The merchandise covered by sunset review is silicon metal containing at least 96.00 percent, but less than 99.99 percent of silicon by weight. Also covered by this review is silicon metal from Argentina containing between 89.00 and 96.00 percent silicon by weight but which contains a higher aluminum content than the silicon metal containing at least 96.00 percent but less than 99.99 percent silicon by weight (65 FR 5311, February 3, 2000). Silicon metal is currently provided for under subheadings 2804.69.10 and 2804.69.50 of the Harmonized Tariff Schedule ("HTS") as a chemical product, but is commonly referred to as a metal. Semiconductor-grade silicon (silicon metal containing by weight not less than 99.99 percent of silicon and provided for in subheading 2804.61.00 of the HTS) is not subject to this review. Although the HTS numbers are provided for convenience and customs purposes, the written description remains dispositive.

Analysis of Comments Received

All issues raised in the case and rebuttal briefs by parties to this sunset review are addressed in the "Issues and Decision Memorandum" ("Decision Memo") from Jeffrey A. May, Director, Office of Policy, Import Administration, to Troy H. Cribb, Acting Assistant Secretary for Import Administration, dated May 30, 2000, which is hereby adopted by this notice. The issues discussed in the Decision Memo include the likelihood of continuation or recurrence of dumping and the magnitude of the margin likely to prevail were the order revoked. Parties can find a complete discussion of all issues raised in this review and the corresponding recommendations in the Decision Memo, which is on file in the Central Records Unit, room B–099, of the main Commerce building.

In addition, a complete version of the Decision Memo can be accessed directly on the Web at www.ita.doc.gov/import_admin/records/frn. The paper copy and electronic version of the Decision Memo are identical in content.

Final Results of Review

We determine that revocation of the antidumping duty order on silicon metal from Argentina would be likely to lead to continuation or recurrence of dumping at the following percentage weighted-average margins:

Manufacturer/exporters	Margin (percent)
Electrometalurgica Andina, S.A.I.C. ("Andina")	17.87
All Others	17.87

This notice also serves as the only reminder to parties subject to administrative protective orders ("APO") of their responsibility concerning the return or destruction of proprietary information disclosed under APO in accordance with 19 CFR 351.305. Timely notification of the return or destruction of APO materials or conversion to judicial protective order is hereby requested. Failure to comply with the regulations and terms of an APO is a violation which is subject to sanction.

This five-year ("sunset") review and notice are published in accordance with sections 751(c), 752, and 777(i)(1) of the Act.

Dated: May 17, 2000.

Troy H. Cribb,

Acting Assistant Secretary for Import Administration.

[FR Doc. 00–14027 Filed 6–2–00; 8:45 am]

BILLING CODE 3510–DS–P

[1] *See Extension of Time Limit for Final Results of Expedited Five-Year Reviews*, 65 FR 11761 (March 6, 2000).

DEPARTMENT OF COMMERCE

International Trade Administration

[A–570–806]

Silicon Metal From the People's Republic of China; Final Results of Expedited Sunset Review of Antidumping Duty Order

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

ACTION: Notice of final results of expedited sunset review of silicon metal from the People's Republic of China.

SUMMARY: On November 2, 1999, the Department of Commerce ("the Department") initiated a sunset review of the antidumping duty order on silicon metal from the People's Republic of China ("PRC") (64 FR 59160) pursuant to section 751(c) of the Tariff Act of 1930, as amended ("the Act"). On the basis of a notice of intent to participate and an adequate substantive response filed on behalf of domestic interested parties and inadequate response (in this case, no response) from respondent interested parties, the Department determined to conduct an expedited review. As a result of this review, the Department finds that revocation of the antidumping duty order would likely lead to continuation or recurrence of dumping at the levels indicated in the Final Results of Review section of this notice.

ADDRESSES: June 5, 2000.

FOR FURTHER INFORMATION CONTACT: Kathryn B. McCormick or Carole A. Showers, Office of Policy for Import Administration, International Trade Administration, United States Department of Commerce, 14th Street and Constitution Avenue, NW, Washington, DC 20230; telephone: (202) 482–1930 or (202) 482–3217, respectively.

SUPPLEMENTARY INFORMATION:

Statute and Regulations

Unless otherwise indicated, all citations to the Act are references to the provisions effective January 1, 1995, the effective date of the amendments made to the Act by the Uruguay Round Agreements Act ("URAA"). In addition, unless otherwise indicated, all citations to the Department regulations are to 19 CFR part 351 (1999). Guidance on methodological or analytical issues relevant to the Department's conduct of sunset reviews is set forth in the Department's Policy Bulletin 98.3—*Policies Regarding the Conduct of Five-year ("Sunset") Reviews of Antidumping and Countervailing Duty Orders; Policy Bulletin*, 63 FR 18871 (April 16, 1998) ("*Sunset Policy Bulletin*").

Background

On November 2, 1999, the Department initiated a sunset review of the antidumping duty order on silicon metal from the PRC (64 FR 59160), pursuant to section 751(c) of the Tariff Act of 1930, as amended ("the Act"). The Department received a notice of intent to participate on behalf of American Silicon Technologies ("AST"), Elkem Metals Company ("Elkem"), and Globe Metallurgical Inc. ("Globe") (collectively, "domestic interested parties"), within the applicable deadline (November 15, 1999) specified in 19 CFR 351.218(d)(1)(i). Domestic interested parties claimed interested-party status under section 771(9)(C) of the Act, as U.S. producers of a domestic like product.

On December 1, 1999, we received a complete substantive response from domestic interested parties, within the 30-day deadline specified in the *Sunset Regulations* under 19 CFR 351.218(d)(3)(i). Domestic interested parties claim that, in 1990, Elkem, Globe, and four other domestic producers filed the petition that resulted in the issuance of the antidumping duty order on silicon metal from the PRC (*see* December 1, 1999, Substantive Response of domestic interested parties at 2). Domestic interested parties also claim that at least one of them has actively participated in each of the administrative reviews conducted by the Department, as well as in the new shipper review rescinded on July 28, 1999. *Id.* at 3. Without a substantive response from respondent interested parties, the Department, pursuant to 19 CFR 351.218(e)(1)(ii)(C), determined to conduct an expedited, 120-day review of this order.

In accordance with section 751(c)(5)(C)(v) of the Act, the Department may treat a review as extraordinarily complicated if it is a review of a transition order (*i.e.*, an order in effect on January 1, 1995). This review concerns a transition order within the meaning of section 751(c)(6)(C)(ii) of the Act. Accordingly, on February 29, 2000, the Department determined that the sunset review of silicon metal from the PRC is extraordinarily complicated, and extended the time limit for completion of the final results of this review until not later than May 30, 2000, in accordance with section 751(c)(5)(B) of the Act.[1]

Scope of Review

The merchandise covered by this review is silicon metal containing at least 96.00 percent, but less than 99.99 percent of silicon by weight. Also covered by this review is silicon metal containing between 89.00 and 96.00 percent silicon by weight but which contains a higher aluminum content than the silicon metal containing at least 96.00 percent but less than 99.99 percent silicon by weight (58 FR 27542, May 10, 1993). Silicon metal is currently provided for under subheadings 2804.69.10 and 2804.69.50 of the Harmonized Tariff Schedule ("HTS") as a chemical product, but is commonly referred to as a metal. Semiconductor-grade silicon (silicon metal containing by weight not less than 99.99 percent of silicon and provided for in subheading 2804.61.00 of the HTS) is not subject to this order. Although the HTS numbers are provided for convenience and customs purposes, the written description remains dispositive.

Analysis of Comments Received

All issues raised in the case and rebuttal briefs by parties to this sunset review are addressed in the "Issues and Decision Memorandum" ("Decision Memo") from Jeffrey A. May, Director, Office of Policy, Import Administration, to Troy H. Cribb, Acting Assistant Secretary for Import Administration, dated May 30, 2000, which is hereby adopted by this notice. The issues discussed in the attached Decision Memo include the likelihood of continuation or recurrence of dumping and the magnitude of the margin likely to prevail were the order revoked. Parties can find a complete discussion of all issues raised in this review and the corresponding recommendations in this public memorandum which is on file in the Central Records Unit, room B–099, of the main Commerce building.

In addition, a complete version of the Decision Memo can be accessed directly on the Web at www.ita.doc.gov/import•admin/records/frn. The paper copy and electronic version of the Decision Memo are identical in content.

Final Results of Review

We determine that revocation of the antidumping duty order on silicon metal from the PRC would be likely to lead to continuation or recurrence of dumping at the following percentage weighted-average margin:

Manufacturer/exporters	Margin (percent)
All Chinese producers/exporters	139.49

This notice also serves as the only reminder to parties subject to administrative protective orders ("APO") of their responsibility concerning the return or destruction of proprietary information disclosed under APO in accordance with 19 CFR 351.305. Timely notification of the return or destruction of APO materials or conversion to judicial protective order is hereby requested. Failure to comply with the regulations and terms of an APO is a violation which is subject to sanction.

This five-year ("sunset") review and notice are in accordance with sections 751(c), 752, and 777(i)(1) of the Act.

Dated: May 30, 2000.

Troy H. Cribb,

Acting Assistant Secretary for Import Administration.

[FR Doc. 00–14028 Filed 6–2–00; 8:45 am]

BILLING CODE 3510–DS–P

[1] *See Extension of Time Limit for Final Results of Expedited Five-Year Reviews*, 65 FR 11761 (March 6, 2000).

INTERNATIONAL TRADE COMMISSION

[Investigations Nos. 731–TA–470–472 and 671–673 (Review)]

Silicon Metal From Argentina, Brazil, and China and Silicomanganese From Brazil, China, and Ukraine

AGENCY: United States International Trade Commission.

ACTION: Scheduling of full five-year reviews concerning the antidumping duty orders on silicon metal from Argentina, Brazil, and China; the antidumping duty orders on silicomanganese from Brazil and China; and the suspended investigation on silicomanganese from Brazil.

SUMMARY: The Commission hereby gives notice of the scheduling of full reviews pursuant to section 751(c)(5) of the Tariff Act of 1930 (19 U.S.C. 1675(c)(5)) (the Act) to determine whether revocation of the antidumping duty orders on silicon metal from Argentina, Brazil, and China; the antidumping duty orders on silicomanganese from Brazil and China; and termination of the suspended investigation on silicomanganese from Ukraine would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time. The Commission has determined to exercise its authority to extend the review period by up to 90 days pursuant to 19 U.S.C. 1675(c)(5)(B). For further information concerning the conduct of these reviews and rules of general application, consult the Commission's Rules of Practice and Procedure, part 201, subparts A through E (19 CFR part 201), and part 207, subparts A, D, E, and F (19 CFR part 207).

EFFECTIVE DATE: August 8, 2000.

FOR FURTHER INFORMATION CONTACT: Olympia DeRosa Hand (202–205–3182), Office of Investigations, U.S. International Trade Commission, 500 E Street SW, Washington, DC 20436. Hearing-impaired persons can obtain information on this matter by contacting the Commission's TDD terminal on 202–205–1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202–205–2000. General information concerning the Commission may also be obtained by accessing its internet server (*http://www.usitc.gov*).

SUPPLEMENTARY INFORMATION: [12]

Background

On February 3, 2000, the Commission determined that responses to its notice of institution of the subject five-year reviews were such that full reviews pursuant to section 751(c)(5) of the Act should proceed (65 F.R. 7891, February 16, 2000). A record of the Commissioners' votes, the Commission's statement on adequacy, and any individual Commissioner's statements are available from the Office of the Secretary and at the Commission's web site.

Participation in the Reviews and Public Service List

Persons, including industrial users of the subject merchandise and, if the merchandise is sold at the retail level, representative consumer organizations, wishing to participate in these reviews as parties must file an entry of appearance with the Secretary to the Commission, as provided in section 201.11 of the Commission's rules, by 45 days after publication of this notice. A party that filed a notice of appearance following publication of the Commission's notice of institution of the reviews need not file an additional notice of appearance. The Secretary will maintain a public service list containing the names and addresses of all persons, or their representatives, who are parties to the reviews.

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

Pursuant to section 207.7(a) of the Commission's rules, the Secretary will make BPI gathered in these reviews available to authorized applicants under the APO issued in the reviews, provided that the application is made by 45 days after publication of this notice. Authorized applicants must represent interested parties, as defined by 19 U.S.C. 1677(9), who are parties to the reviews. A party granted access to BPI following publication of the Commission's notice of institution of the reviews need not reapply for such access. A separate service list will be maintained by the Secretary for those parties authorized to receive BPI under the APO.

Staff Report

The prehearing staff report in the reviews will be placed in the nonpublic record on October 24, 2000, and a public version will be issued thereafter, pursuant to section 207.64 of the Commission's rules.

Hearing

The Commission will hold a hearing in connection with the reviews beginning at 9:30 a.m. on November 14, 2000, at the U.S. International Trade Commission Building. Requests to appear at the hearing should be filed in writing with the Secretary to the Commission on or before November 7, 2000. A nonparty who has testimony that may aid the Commission's deliberations may request permission to present a short statement at the hearing. All parties and nonparties desiring to appear at the hearing and make oral presentations should attend a prehearing conference to be held at 9:30 a.m. on November 9, 2000, at the U.S. International Trade Commission Building. Oral testimony and written materials to be submitted at the public hearing are governed by sections 201.6(b)(2), 201.13(f), 207.24, and 207.66 of the Commission's rules. Parties must submit any request to present a portion of their hearing testimony *in camera* no later than 7 days prior to the date of the hearing.

Written Submissions

Each party to the reviews may submit a prehearing brief to the Commission. Prehearing briefs must conform with the provisions of section 207.65 of the Commission's rules; the deadline for filing is November 2, 2000. Parties may also file written testimony in connection with their presentation at the hearing, as provided in section 207.24 of the Commission's rules, and posthearing briefs, which must conform with the provisions of section 207.67 of the Commission's rules. The deadline for filing posthearing briefs is November 22, 2000; witness testimony must be filed no later than three days before the hearing. In addition, any person who has not entered an appearance as a party to the reviews may submit a written statement of information pertinent to the subject of the reviews on or before November 22, 2000. On January 5, 2001, the Commission will make available to parties all information on which they have not had an opportunity to comment. Parties may submit final comments on this information on or before January 9, 2001, but such final comments must not contain new factual information and must otherwise comply with section 207.68 of the Commission's rules. All written submissions must conform with the provisions of section 201.8 of the Commission's rules; any submissions that contain BPI must also conform with the requirements of sections 201.6, 207.3, and 207.7 of the Commission's rules. The Commission's rules do not authorize filing of submissions with the Secretary by facsimile or electronic means. The Commission has determined to waive rule 207.3(c) in order to permit the filing of public versions of posthearing briefs in these reviews on November 27, 2000.

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

Authority: These reviews are being conducted under authority of title VII of the Tariff Act of 1930; this notice is published pursuant to section 207.62 of the Commission's rules.

Issued: August 8, 2000.

By order of the Commission.

Donna R. Koehnke,

Secretary.

[FR Doc. 00–20530 Filed 8–11–00; 8:45 am]

BILLING CODE 7020–02–U

EXPLANATION OF COMMISSION DETERMINATIONS ON ADEQUACY

in

Silicon Metal from Argentina, Brazil, and China, Inv. Nos. 731-TA-470-472 (Review)
and
Silicomanganese from Brazil, China, and Ukraine, Inv. Nos. 731-TA-671-673 (Review)

On February 3, 2000, the Commission determined that it should proceed to full reviews in the subject five-year reviews pursuant to section 751(c)(5) of the Tariff Act of 1930, as amended (19 U.S.C. § 1675(c)(5)). The Commission, in consultation with the Department of Commerce, grouped these reviews because they involve similar domestic like products. *See* 19 U.S.C. § 1675(c)(5)(D); 63 *Fed. Reg.* 29372, 29374 (May 29, 1998).

***Silicon Metal from Argentina, Brazil, and China,* Inv. Nos. 731-TA-470-472 (Review)**

With respect to *Silicon Metal from Argentina* and *Silicon Metal from Brazil*, Inv. Nos. 731-TA-470-471 (Review), the Commission determined that both domestic and respondent interested party group responses to the notice of institution were adequate and voted to conduct full reviews. As pertains to domestic interested parties, the Commission received a joint response containing company-specific information on behalf of three domestic producers of silicon metal accounting for the majority of U.S. production of silicon metal, as well as a response from unions representing all silicon metal workers in the United States. As pertains to respondent interested parties, the Commission received responses from the sole Argentine producer of silicon metal as well as from six Brazilian producers and exporters accounting for nearly all Brazilian production and exports to the United States. The Commission also received responses from an importer and end user of silicon metal from Brazil and from a Brazilian trade/business association, seven of whose 19 members are Brazilian producers and exporters of silicon metal.

With respect to *Silicon Metal from China*, Inv. No. 731-TA-472 (Review), the Commission determined that the domestic interested party group response was adequate. The Commission received a joint response containing company-specific information on behalf of three domestic producers of silicon metal accounting for the majority of U.S. production of silicon metal, as well as a response from unions representing all silicon metal workers in the United States. Because no respondent interested party responded to the notice of institution, the Commission determined that the respondent interested party group response was inadequate. The Commission further determined to conduct a full review, however, because conducting a full review would promote administrative efficiency in light of the Commission's decision to conduct full reviews with respect to *Silicon Metal from Argentina* and *Silicon Metal from Brazil.*

***Silicomanganese from Brazil, China, and Ukraine*, Inv. Nos. 731-TA-671-673 (Review)**

With regard to *Silicomanganese from Brazil* and *Silicomanganese from Ukraine*, Inv. Nos. 731-TA-671 and 673 (Review), the Commission determined that both domestic and respondent interested party group responses to the notice of institution were adequate and voted to conduct full reviews. Regarding domestic interested parties, the Commission received a response from the sole domestic producer of silicomanganese and the union representing silicomanganese workers in the United States. Regarding respondent interested parties, the Commission received responses from two Brazilian producers that account for a substantial portion of Brazilian production and nearly all subject imports,

and Ukrainian producers accounting for all Ukrainian production. The Commission also received responses from the Ukraine Ministry of Industrial Policy and from Ronly Holdings, Ltd., an exporter of subject merchandise from Ukraine.

With regard to *Silicomanganese from China*, Inv. No. 731-TA-672 (Review), the Commission determined that the domestic interested party group response was adequate. The Commission received a response from the sole domestic producer of silicomanganese and the union representing silicomanganese workers in the United States. Because no respondent interested party responded to the notice of institution, the Commission determined that the respondent interested party group response was inadequate. The Commission further determined to conduct a full review, however, because conducting a full review would promote administrative efficiency in light of the Commission's decision to conduct full reviews with respect to *Silicomanganese from Brazil* and *Silicomanganese from Ukraine*.

APPENDIX B

LIST OF WITNESSES WHO APPEARED AT THE COMMISSION'S HEARING

CALENDAR OF PUBLIC HEARING

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

Subject:	Silicon Metal from Argentina, Brazil, and China
Invs. Nos.:	731-TA-470-472 (Review)
Date and Time:	November 14, 2000 - 1:45 p.m.

Sessions were held in connection with these investigations in the Main Hearing Room, 500 E Street, SW, Washington, DC.

In Support of the Continuation of the Orders:

Verner, Liipfert, Bernhard, McPherson and Hand, Chartered
Washington, DC
on behalf of

U.S. producers and unions

Geir I. Kvernmo, Director, Marketing and Sales, Elkem Metals Company

William J. Klinefelter, Legislative and Political Director, United Steelworkers of America, AFL-CIO

Kenneth R. Button, Senior Vice President, Economic Consulting Services Incorporated

William D. Kramer)--Verner, Liipfert, Bernhard, McPherson and Hand, Chartered
Jessie M. Brooks)--Verner, Liipfert, Bernhard, McPherson and Hand, Chartered
Dale Hershey)--Eckert, Seamans, Cherin & Mellott, LLC

In Support of the Continuation of the Orders:--Continued

Akin, Gump, Strauss, Hauer & Feld, LLP
Washington, DC
on behalf of

Globe Metallurgical Incorporated ("Globe")

J. Marlin Perkins, Vice President, Sales, North America

Valerie A. Slater)--Akin, Gump, Strauss, Hauer & Feld, LLP
Bernd G. Janzen)--Akin, Gump, Strauss, Hauer & Feld, LLP
Edward T. Dangel, III)--Dangel & Fine LLP
Michael K. Mattchen)--Dangel & Fine LLP

In Support of the Revocation of the Orders:

Dorsey & Whitney LLP
Washington, DC
on behalf of

Brazilian Producers

James B. May, Global Silicon Product Line Manager,
Dow Corning Corporation

Robert P. Krasa, Vice President and General Manager, Semiconductor and
Silicon-Based Intermediated Business, Dow Corning Corporation

Bob McHale, Vice President, Metal Procurement, Alcoa

Adelmo Melgaco, Executive Director, ABRAFE

James A. Langenfeld, Economist, LECG, Incorporated

Daniel W. Klett, Economist, Capital Trade

Philippe M. Bruno)–OF COUNSEL
Victor Mroczka)

In Support of the Revocation of the Orders:--Continued

White & Case LLP
Washington, DC
on behalf of

Argentine Producers

A. Manuel Garcia–OF COUNSEL
Tomas Leonard

Garvey, Schubert & Barer
Washington, DC
on behalf of

Chinese Producers

Kai Yao, President

William E. Perry–OF COUNSEL

APPENDIX C

SUMMARY DATA

Table C-1
Silicon metal: Summary data concerning the U.S. market, 1997-99, January-June 1999, and January-June 2000

(Quantity=gross short tons, value=1,000 dollars, unit values, unit labor costs, and unit expenses are per gross short ton; period changes=percent, except where noted)

	Reported data					Period changes			
				January-June					Jan.-June
Item	1997	1998	1999	1999	2000	1997-99	1997-98	1998-99	1999-00
U.S. consumption quantity:									
Amount	338,951	320,683	329,786	165,658	179,223	-2.7	-5.4	2.8	8.2
Producers' share (1)	61.0	64.5	61.7	62.9	56.8	0.7	3.5	-2.8	-6.1
Importers' share (1):									
Argentina	0.0	(2)	0.0	0.0	0.0	0.0	(3)	(3)	0.0
Brazil	3.2	2.0	4.3	3.2	5.8	1.1	-1.2	2.3	2.6
China	0.9	1.0	1.0	1.0	1.0	0.1	0.0	0.1	(3)
Subtotal	4.1	2.9	5.3	4.2	6.8	1.2	-1.2	2.4	2.6
Other sources	34.9	32.6	33.0	32.9	36.3	-1.9	-2.3	0.4	3.5
Total imports	39.0	35.5	38.3	37.1	43.2	-0.7	-3.5	2.8	6.1
U.S. consumption value:									
Amount	519,337	458,509	426,073	216,543	216,095	-18.0	-11.7	-7.1	-0.2
Producers' share (1)	61.8	67.6	65.2	66.1	61.6	3.4	5.8	-2.4	-4.5
Importers' share (1):									
Argentina	0.0	(2)	0.0	0.0	0.0	0.0	(3)	(3)	0.0
Brazil	3.3	1.8	4.0	3.0	6.1	0.8	-1.5	2.2	3.1
China	0.6	0.6	0.7	0.7	0.7	0.0	-0.1	0.1	(3)
Subtotal	3.9	2.4	4.7	3.6	6.8	0.8	-1.6	2.3	3.1
Other sources	34.3	30.0	30.1	30.3	31.6	-4.2	-4.3	0.1	1.3
Total imports	38.2	32.4	34.8	33.9	38.4	-3.4	-5.8	2.4	4.5
U.S. imports from:									
Argentina:									
Quantity	0	44	0	0	0	(4)	(4)	-100.0	(4)
Value	0	61	0	0	0	(4)	(4)	-100.0	(4)
Unit value	(4)	$1,406	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Brazil:									
Quantity	10,795	6,341	14,268	5,324	10,411	32.2	-41.3	125.0	95.5
Value	17,010	8,251	17,203	6,425	13,083	1.1	-51.5	108.5	103.6
Unit value	$1,576	$1,301	$1,206	$1,207	$1,257	-23.5	-17.4	-7.3	4.2
Ending inventory quantity	***	***	***	***	***	***	***	***	***
China:									
Quantity	3,214	3,058	3,324	1,673	1,812	3.4	-4.9	8.7	8.3
Value	3,373	2,559	2,885	1,471	1,522	-14.5	-24.1	12.7	3.5
Unit value	$1,050	$837	$868	$879	$840	-17.3	-20.3	3.7	-4.4
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Subtotal:									
Quantity	14,009	9,442	17,592	6,997	12,222	25.6	-32.6	86.3	74.7
Value	20,383	10,872	20,088	7,895	14,606	-1.5	-46.7	84.8	85.0
Unit value	$1,455	$1,151	$1,142	$1,128	$1,195	-21.5	-20.9	-0.8	5.9
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Other sources:									
Quantity	118,250	104,453	108,852	54,463	65,130	-7.9	-11.7	4.2	19.6
Value	178,206	137,765	128,344	65,530	68,311	-28.0	-22.7	-6.8	4.2
Unit value	$1,507	$1,319	$1,179	$1,203	$1,049	-21.8	-12.5	-10.6	-12.8
Ending inventory quantity	***	***	***	***	***	***	***	***	***
All sources:									
Quantity	132,259	113,895	126,444	61,460	77,353	-4.4	-13.9	11.0	25.9
Value	198,589	148,637	148,432	73,426	82,917	-25.3	-25.2	-0.1	12.9
Unit value	$1,502	$1,305	$1,174	$1,195	$1,072	-21.8	-13.1	-10.0	-10.3
Ending inventory quantity	***	***	***	***	***	***	***	***	***

Table continued on next page.

Table C-1--Continued
Silicon metal: Summary data concerning the U.S. market, 1997-99, January-June 1999, and January-June 2000

(Quantity=gross short tons, value=1,000 dollars, unit values, unit labor costs, and unit expenses are per gross short ton; period changes=percent, except where noted)

	Reported data					Period changes			
				January-June					Jan.-June
Item	1997	1998	1999	1999	2000	1997-99	1997-98	1998-99	1999-00
U.S. producers':									
Average capacity quantity	225,690	234,099	236,857	119,952	110,769	4.9	3.7	1.2	-7.7
Production quantity	213,010	213,274	209,117	107,009	106,744	-1.8	0.1	-1.9	-0.2
Capacity utilization (1)	94.4	91.1	88.3	89.2	96.4	-6.1	-3.3	-2.8	7.2
U.S. shipments:									
Quantity	206,692	206,788	203,342	104,198	101,870	-1.6	(2)	-1.7	-2.2
Value	320,748	309,872	277,641	143,117	133,178	-13.4	-3.4	-10.4	-6.9
Unit value	$1,552	$1,499	$1,365	$1,374	$1,307	-12.0	-3.4	-8.9	-4.8
Export shipments:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	11,174	10,982	9,151	8,056	9,679	-18.1	-1.7	-16.7	20.1
Inventories/total shipments (1)	5.3	5.2	4.4	3.8	4.6	-1.0	-0.1	-0.9	0.9
Production workers	816	816	770	771	719	-5.6	0.0	-5.6	-6.7
Hours worked (1,000s)	1,936	1,801	1,750	911	835	-9.6	-7.0	-2.8	-8.3
Wages paid ($1,000s)	31,474	31,829	32,174	16,440	15,626	2.2	1.1	1.1	-5.0
Hourly wages	$16.26	$17.67	$18.39	$18.05	$18.71	13.1	8.7	4.0	3.7
Productivity (gross short tons 1000/hrs.)	110.0	118.4	119.5	117.5	127.8	8.6	7.6	0.9	8.8
Unit labor costs	$147.76	$149.24	$153.86	$153.63	$146.39	4.1	1.0	3.1	-4.7
Net sales:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Cost of goods sold (COGS)	***	***	***	***	***	***	***	***	***
Gross profit or (loss)	***	***	***	***	***	***	***	***	***
SG&A expenses	***	***	***	***	***	***	***	***	***
Operating income or (loss)	***	***	***	***	***	***	***	***	***
Capital expenditures	***	***	***	***	***	***	***	***	***
Unit COGS	***	***	***	***	***	***	***	***	***
Unit SG&A expenses	***	***	***	***	***	***	***	***	***
Unit operating income or (loss)	***	***	***	***	***	***	***	***	***
COGS/sales (1)	***	***	***	***	***	***	***	***	***
Operating income or (loss)/ sales (1)	***	***	***	***	***	***	***	***	***

(1) "Reported data" are in percent and "period changes" are in percentage points.
(2) Less than 0.05 percent.
(3) Less than 0.05 percentage points absolute difference.
(4) Not applicable.

Note.--Financial data are reported on a fiscal year basis and may not necessarily be comparable to data reported on a calendar year basis. Because of rounding, figures may not add to the totals shown. Unit values and shares are calculated from the unrounded figures.

Source: Compiled from data submitted in response to Commerce questionnaries and offical statistcs of the U.S. Department of Commerce.

APPENDIX D

RESPONSES OF PRODUCERS, IMPORTERS, FOREIGN PRODUCERS, AND PURCHASERS CONCERNING THE SIGNIFICANCE OF THE ANTIDUMPING DUTY ORDERS AND THE LIKELY EFFECTS OF REVOCATION

U.S. PRODUCERS' COMMENTS REGARDING THE EFFECTS OF THE ANTIDUMPING DUTY ORDERS AND THE LIKELY EFFECTS OF REVOCATION

The Commission requested producers to describe any anticipated changes in their operations or organization relating to the production of silicon metal in the future if the existing antidumping duty orders were revoked. (Question II-4)

* * * * * * *

The Commission requested producers to describe the significance of the existing antidumping orders on their production capacity, production, U.S. shipments, inventories, purchases, and employment. (Question II-14)

* * * * * * *

The Commission asked producers whether they anticipated changes in their production capacity, production, U.S. shipments, inventories, purchases, or employment relating to the production of silicon metal if the antidumping duty orders were revoked. (Question II-15)

* * * * * * *

The Commission asked U.S. producers to describe the significance of the existing antidumping duty orders on their revenues, costs, profits, cash flow, capital expenditures, research and development expenditures, and asset values relating to the production of silicon metal. (Question III-8)

* * * * * * *

The Commission asked U.S. producers to describe any anticipated changes in their revenues, costs, products, cash flow, capital expenditures, research and development expenditures, or asset values relating to the production of all silicon metal in the future if the antidumping orders on imports from Argentina, Brazil, and China were revoked. (Question III-9)

* * * * * * *

U.S. IMPORTERS' COMMENTS REGARDING THE EFFECTS OF THE ANTIDUMPING DUTY ORDERS AND THE LIKELY EFFECTS OF REVOCATION

The Commission requested importers to describe any anticipated changes in their operations or organization relating to the importation of silicon metal from Argentina, Brazil, and China if the existing antidumping duty orders were revoked. (Question II-4)

Nine importers responded no to this question. The following are the responses from the other importers.

* * * * * * *

The Commission requested importers to describe the significance of the existing antidumping duty orders covering imports of silicon metal from Argentina, Brazil, and China in terms of their effect on their firm's imports, U.S. shipments of imports, and inventories. (Question II-8)

Three importer responses indicated that there have been no effects. The other importers' responses follow.

* * * * * * *

The Commission requested importers to describe any anticipated changes in their imports, U.S. shipments of imports, or inventories of silicon metal in the future if the existing antidumping duty orders were revoked. (Question II-9)

Six importers indicated no anticipated changes. Other responses appear below.

* * * * * * *

FOREIGN PRODUCERS' COMMENTS REGARDING THE EFFECTS OF THE ANTIDUMPING DUTY ORDERS AND THE LIKELY EFFECTS OF REVOCATION

The Commission requested foreign producers to indicate whether they anticipated any changes in their operations or organization relating to the production of silicon metal in the future if the existing antidumping duty orders were revoked, and if yes, to describe those changes. (Question II-3)

Eight foreign producers indicated no anticipated changes without additional explanations. Other responses appear below.

* * * * * * *

The Commission requested foreign producers to describe the significance of the existing antidumping duty orders covering imports of silicon metal from Argentina, Brazil, and China in terms of their effects on their firms' production capacity, production, home market shipments, exports to the United States and other markets, and inventories. (Question II-15)

* * * * * * *

The Commission requested foreign producers to describe any anticipated changes in their production capacity, production, home market shipments, exports to the United States and other markets, or inventories relating to the production of silicon metal in the future if the existing antidumping duty orders were revoked. (Question II-16)

Nine foreign producers indicated no anticipated changes without additional explanations. Other responses appear below.

* * * * * * *

U.S. PURCHASERS' COMMENTS REGARDING THE EFFECTS OF THE ANTIDUMPING DUTY ORDERS AND THE LIKELY EFFECTS OF REVOCATION

The Commission asked the purchasers to comment on the effect of the revocation of the antidumping orders on (1) the future activities of their firm and (2) the U.S. market as a whole. **(Question III-11)**

***

(1) "Increased available supply at a competitive price."
(2) "Unknown but likely will be the same as our firm."

***

(1) "No change - we are contracted for U.S. produced silicon."
(2) "Would immediately raise the price of silicon. Best estimate is that a shortage would develop."

***

(1) "None."
(2) "Not known."

***

(1) "If prices decrease, *** anticipates that it will increase purchase from Argentina, Brazil, and China. Lower cost raw materials will permit ***."
(2) "Lower prices for raw materials may drive demand for *** products."

***

(1) No answer.
(2) No answer.

***

(1) "Lower ingot prices - more competitive in world market."
(2) "Same as (1)."

***

(1) "The revocation of the anti-dumping duty orders will have no effect on the activities of our ***."
(2) "Unknown."

***

(1) "No effect."
(2) "N/A."

***

(1) "There will likely be increased supply of silicon metal - should help to decrease raw material cost."
(2) "None."

***

(1) "Revocation of the silicon antidumping orders for Argentina and China will have little or no effect on ***. Revocation of the antidumping order for Brazil would give *** more flexibility on our sources of supply of imported silicon metal. It would have little or no effect on our ***. *** expects to continue to buy about *** of our U.S. consumption from U.S. sources over the next 6 years."
(2) "*** expects the revocation of the antidumping orders would cause the U.S. market to become more consistent with the global silicon metal market after a stabilization period of about 1 year. Changes in the global market are driven by changes in supply and demand, particularly producer capacity utilization (refer to the 1999 CRU Industry Analysis for data)."

***

(1) "Unknown."
(2) "Unknown."

***

(1) "I will then test some material from Brazil. It should force the U.S. producers to keep their prices down and remain competitive in the market."
(2) "Reduction or containment of price increases."

***

(1) "Do not foresee any changes."
(2) "Not qualified to answer."

***

(1) "None."
(2) "Prices to secondary Al industry will decline 10/20%. Nominal change to silicate industry pricing."

***

(1) "It would not affect our firm. Since security of supply is most important to us we have *** in place."
(2) "The silicon market is depressed at this time so an increased availability from these three countries will put downward pressure on prices. We must compete with other materials such as *** so any reduction in costs would be welcomed by us."

***

(1) "If prices were to go low enough we might consider foreign purchasers."
(2) "Same as (1) above."

***

(1) "*** plants might look at purchasing from one of these countries using a broker. The *** facility has no plans at this time to change."
(2) "I would suspect that domestic producers' pricing would have to drop to remain competitive."

***

(1) "The revocation of antidumping duties will result in greater competition and reduced price of silicon metal."
(2) "Ultimately the consumer will benefit from lower prices whic(h) will be passed on to them."

***

(1) "No change."
(2) "Unknown."

APPENDIX E

COMPAS PRESENTATION

Silicon Metal

The following model estimates the effects of antidumping duty revocation using elasticities and market growth estimates from Part II, Commerce margins, market shares, and tariff and transportation costs obtained from Customs data for silicon metal. The results examine the potential changes in price, quantity, and revenue for various producers under the range of different elasticity scenarios. Only the impact of imports from Brazil is calculated because there were no imports from Argentina in 1999 and all imports from China in 1999 were under the TIB program. TIB imports from China are excluded from total U.S. consumption in this calculation.

Model inputs, silicon metal:

* * * * * * *

APPENDIX F

COMPARISON OF SALES OF SILICON METAL BY PRICING PRODUCT

Table F-1
Comparison of Elkem's and Globe's sales of silicon metal by pricing product,[1] 1997-99, January-June 1999, and January-June 2000

* * * * * * *