UNITED STATES INTERNATIONAL TRADE COMMISSION

FERROVANADIUM FROM CHINA AND SOUTH AFRICA
Investigations Nos. 731-TA-986 and 987 (Final)

DETERMINATIONS AND VIEWS OF THE COMMISSION
(USITC Publication No. 3570, January 2003)

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DETERMINATIONS

On the basis of the record[1] developed in the subject investigations, the United States International Trade Commission (Commission) determines, pursuant to section 735(b) of the Tariff Act of 1930 (19 U.S.C. § 1673d(b)) (the Act), that an industry in the United States is materially injured by reason of imports from China and South Africa of ferrovanadium, provided for in subheading 7202.92.00 of the Harmonized Tariff Schedule of the United States, that have been found by the Department of Commerce (Commerce) to be sold in the United States at less than fair value (LTFV).

BACKGROUND

The Commission instituted these investigations effective November 26, 2001, following receipt of a petition filed with the Commission and Commerce by The Ferroalloys Association Vanadium Committee and its following members: Bear Metallurgical Co., Butler, PA; Shieldalloy Metallurgical Corp., Cambridge, OH; Gulf Chemical & Metallurgical Corp., Freeport, TX; U.S. Vanadium Corp., Danbury, CT; and CS Metals of Louisiana, Convent, LA. The final phase of the investigations was scheduled by the Commission following notification of preliminary determinations by Commerce that imports of ferrovanadium from China and South Africa were being sold at LTFV within the meaning of section 733(b) of the Act (19 U.S.C. § 1673b(b)). Notice of the scheduling of the final phase of the Commission's investigations and of a public hearing to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the *Federal Register* of July 29, 2002 (67 FR 49035). The hearing was held in Washington, DC, on November 22, 2002, and all persons who requested the opportunity were permitted to appear in person or by counsel.

By order of the Commission.

Marilyn R. Abbott
Secretary to the Commission

Issued:

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

VIEWS OF THE COMMISSION

Based on the record in these investigations, we determine that an industry in the United States is materially injured by reason of imports of ferrovanadium from China and South Africa that are sold in the United States at less than fair value ("LTFV").[1]

I. DOMESTIC LIKE PRODUCT

A. In General

In determining whether an industry in the United States is materially injured or threatened with material injury by reason of imports of the subject merchandise, the Commission first defines the "domestic like product" and the "industry."[2] Section 771(4)(A) of the Tariff Act of 1930, as amended ("the Act"), defines the relevant domestic industry as the "producers as a [w]hole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product."[3] In turn, 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 . . . ."[4]

The decision regarding the appropriate domestic like product(s) in an investigation is a factual determination, and the Commission has applied the statutory standard of "like" or "most similar in characteristics and uses" on a case-by-case basis.[5] No single factor is dispositive, and the Commission may consider other factors it deems relevant based on the facts of a particular investigation.[6] The Commission looks for clear dividing lines among possible like products and disregards minor variations.[7] Although the Commission must accept the determination of the Department of Commerce ("Commerce")

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[1] The record in these determinations closed on Tuesday, December 17, 2002. Pursuant to 19 U.S.C. § 1677m(g) and 19 C.F.R. § 207.30(b), for purposes of these determinations, we are disregarding new factual information not included in the record as follows: all references to *** contained on page 2 of respondents' final comments filed on Wednesday, December 18, 2002.

[2] 19 U.S.C. §1677(4)(A).

[3] 19 U.S.C. § 1677(4)(A).

[4] 19 U.S.C. § 1677(10).

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

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

[7] Nippon Steel, 19 CIT at 455; Torrington, 747 F. Supp. at 748-49. See also S. Rep. No. 96-249 at 90-91 (1979) (Congress has indicated that the like product standard should not be interpreted in "such a narrow fashion as to permit minor differences in physical characteristics or uses to lead to the conclusion that the product and article are not 'like' each other, nor should the definition of 'like product' be interpreted in such a fashion as to prevent consideration of an industry adversely affected by the imports under consideration.").

as to the scope of the imported merchandise that has been found to be subsidized or sold at LTFV, the Commission determines what domestic product is like the imported articles Commerce has identified.[8]

B. Product Description

Commerce's final determinations define the imported merchandise within the scope of these investigations as:

> all ferrovanadium, regardless of grade, chemistry, form, shape or size. Ferrovanadium is an alloy of iron and vanadium that is used chiefly as an additive in the manufacture of steel. The merchandise is commercially and scientifically identified as ferrovanadium. The scope of this investigation specifically excludes vanadium additives other than ferrovanadium, such as nitrided vanadium, vanadium-aluminum master alloys, vanadium chemicals, vanadium oxides, vanadium waste and scrap, and vanadium-bearing raw materials such as slag, boiler residues and fly ash. Merchandise under the following Harmonized Tariff Schedule of the United States ("HTSUS") item numbers 2850.00.2000, 8112.40.3000 and 8112.40.6000 is specifically excluded. Ferrovanadium is classified under HTSUS item number 7202.92.00. Although the HTSUS item number is provided for convenience and Customs purposes, the Department's written description of the scope of this proceeding remains dispositive.[9]

C. Past Investigations

In 1995, the Commission conducted an antidumping duty investigation regarding ferrovanadium and nitrided vanadium from Russia.[10] Unlike these present investigations, the scope of the 1995 investigation included nitrided vanadium, and the Commission found ferrovanadium and nitrided vanadium to be a single domestic like product and reached an affirmative determination.[11] However, in its five-year review of that antidumping duty order, the Commission determined that, because nitrided vanadium had not been produced in the United States since 1992 and there were no other significant

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[8] Hosiden Corp. v. Advanced Display Mfrs., 85 F.3d 1561, 1568 (Fed. Cir. 1996) (Commission may find single like product corresponding to several different classes or kinds defined by Commerce); Torrington, 747 F. Supp. at 748-752 (affirming Commission determination of six like products in investigations where Commerce found five classes or kinds).

[9] 66 Fed. Reg. 66398 (December 26, 2001); 67 Fed. Reg. 45083 and 45088 (July 8, 2002); 67 Fed. Reg. 59050 (September 19, 2002).

[10] Ferrovanadium and Nitrided Vanadium from Russia, Inv. No. 731-TA-702 (Final), USITC Pub. 2904 (June 1995) ("Original Russian Investigation").

[11] Original Russian Investigation, USITC Pub. 2904 at I-5 to I-8 & n.14.

changes in the nature, use and production of ferrovanadium and nitrided vanadium, the domestic like product consisted only of ferrovanadium.[12] [13]

D. Domestic Like Product

Petitioners[14] advocate a single domestic like product consisting of all grades of ferrovanadium.[15] Respondents,[16] however, argue that there should be two separate like products consisting of 45-percent grade ferrovanadium and 80-percent grade ferrovanadium.[17]

Based on the record evidence in these investigations, as discussed below, we find a single domestic like product consisting of ferrovanadium of all grades coextensive with the scope of these investigations.

1. Physical Characteristics and Uses

Respondents argue that 45-percent grade and 80-percent grade ferrovanadium differ because they contain different proportions of chemical elements, with 45-percent grade possessing higher levels of impurities, rendering it unusable in some steel production.[18]

The record shows, however, that all grades of ferrovanadium share similar physical characteristics and uses. Ferrovanadium is used principally as an alloying agent in the production of steel and iron castings. Although the product subject to these investigations has a vanadium content ranging from about 40 percent to about 80 percent (by weight), in practice the product is sold in

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[12] Ferrovanadium and Nitrided Vanadium from Russia, Inv. No. 731-TA-702 (Review), USITC Pub. 3420 at 5 (May 2001) ("Russian Five-Year Review"). The Commission also reached an affirmative determination in the five-year review. Ferrovanadium and nitrided vanadium also were discussed in the context of a Commission report, Advice Concerning Possible Modifications to the U.S. Generalized System of Preferences, Inv. No. 332-383, USITC Pub. 3079 at 83-88 (Dec. 1997).

In the preliminary phase of these investigations, one South African respondent argued that the domestic like product should include nitrided vanadium. See, e.g., Conference Tr. at 79 (Stras). Again, because there is no domestic production of nitrided vanadium, it cannot be included in the domestic like product. CR/PR at I-3, n.9.

[13] Commissioner Bragg defined the domestic like product in the Russian Five-Year Review consistent with the scope of that review investigation – one like product encompassing ferrovanadium and nitrided vanadium as the Commission found in the original determination. Commissioner Bragg further noted that had she excluded nitrided vanadium from the definition of the domestic like product, she would nonetheless have reached an affirmative determination. See Russian Five-Year Review at 5 n.22.

[14] Petitioners are the Ferroalloys Association Vanadium Committee and its members: Bear Metallurgical Company ("Bear"), Shieldalloy Metallurgical Corporation ("Shieldalloy"), Gulf Chemical & Metallurgical Corporation ("Gulf"), U.S. Vanadium Corporation ("USV"), and CS Metals of Louisiana ("CS Metals").

[15] Petitioners' Prehearing Brief at 2-4; Hearing Transcript ("Tr.") at 41 (de Laurentiis).

[16] Respondents are Xstrata South Africa Limited ("Xstrata"), Glencore Ltd ("Glencore"), and Panzhihua Iron and Steel (Group) ("Panzhihua" or "Pangang"). Highveld Steel & Vanadium Corp., Ltd. ("Highveld"), who participated in the preliminary investigations, did not appear at the November 22, 2002 hearing or submit any briefs in these final phase investigations.

[17] Respondents raised this argument for the first time in their prehearing brief. Respondents' Prehearing Brief at 3; Respondents' Posthearing Brief at 9.

[18] Respondents' Prehearing Brief at 4-5; Respondents' Posthearing Brief at 10.

essentially two grades, one containing approximately 45-percent to 55-percent vanadium, and the other grade, 80-percent vanadium.[19]

Adding vanadium to steel improves the finished product's wear resistance, strength and hardness. The vanadium in both grades combines with some of the carbon and nitrogen in the steel (creating stable carbides and nitrides, respectively) at temperatures associated with the casting, rolling, and heat treatment of steels; these carbides and nitrides enhance steel properties, particularly hardness and strength.[20] Ferrovanadium is used to make high-strength-low-alloy ("HSLA") steels, which in turn are used in high-performance long-distance oil and gas pipelines, railway lines, structural steels used in building construction, and automobiles.[21] Purchasers were unanimous in reporting that they do not require different specifications of ferrovanadium according to end use, given that the vanadium content of steel, by weight, is extremely small: 0.02 percent to 0.10 percent of HSLA steels; up to about 5 percent of vanadium chromium tool steels; and a very small percent of carbon steel. Ferrovanadium is a tiny part of the cost of the steel products it is used to produce, with most purchasers estimating that it accounts for less than 2 percent of the total cost of the steel produced.[22]

Respondents also contend that 45-percent grade is outmoded in that it lacks an American Society for Testing and Materials ("ASTM") specification.[23] The record indicates, however, that the lack of an ASTM specification for a grade is not necessarily an indication that the product is of poor quality or that there is no demand for the product. There are many products produced and widely used that do not have an ASTM specification, including many grades of steel products.[24]

2. Interchangeability

Respondents argue that 45-percent grade and 80-percent grade ferrovanadium are not interchangeable because purchasers are unable to switch from 45-percent grade to 80-percent grade unless they make changes to their melt shop practices, due in part to the lower melting temperature of 45-percent grade compared to 80-percent grade ferrovanadium.[25]

While tool steel producers seem to prefer the 80-percent grade ferrovanadium and some minimills that continuously cast their products through small nozzles choose the 45-percent grade ferrovanadium,[26] the record reveals that many steel producers have the technical capability to use different grades of ferrovanadium. The user needs to know only the grade of ferrovanadium so that the

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[19] CR at I-3; PR at I-2 to I-3.

[20] CR at I-3; PR at I-3.

[21] CR at I-4; PR at I-3.

[22] CR at I-3, II-7; PR at I-3, II-4.

[23] Respondents' Prehearing Brief at 5-6.

[24] CR at I-11 to I-12; PR at I-7 to I-8.

[25] Respondents' Prehearing Brief at 5-8; Respondents' Posthearing Brief at 10-11. At the hearing, respondents stated that testimony by a Glencore representative (Mr. Young) at the preliminary conference regarding switching between grades of ferrovanadium should be discounted because Mr. Young is a salesperson, not a metallurgist, and has no first-hand knowledge of the effort or expense required to make the switch. They noted that Mr. Young also testified that switching from one grade to another requires a melt shop change, and does not mean that such products are interchangeable, and that there are steel products that cannot be produced using 45-percent grade ferrovanadium. Moreover, according to respondents, nearly all steel producers use only one grade of ferrovanadium, and there is not a routine switching between grades by users. Hearing Tr. at 124-125 (O'Connell).

[26] CR at I-4; PR at I-3.

steelmaking process and ingredients can be adjusted accordingly.[27] In these final phase investigations, six purchasers reported purchasing both 45-percent and 80-percent grade ferrovanadium during the period of investigation ("POI").[28] Purchasers *** indicated that they could switch between 45-percent grade and 80-percent grade with no adjustments to their melting processes. Purchaser *** reported that it could use either grade if it made appropriate adjustments for ***.[29] While respondents argue that there is no interchangeability between 45-percent grade and 80-percent grade product because of melt shop changes that are necessary to switch from 45-percent grade to 80-percent grade, the record indicates that such melt shop changes are not required in every instance and that the two grades are in fact substitutable.[30]

3. Channels of Distribution

Respondents argue that, although both grades are sold to steel mills and iron foundries, they are sold through separate channels of distribution because only one distributor reported selling both 45-percent and 80-percent grade ferrovanadium.[31] Although suppliers of 45-percent and 80-percent grade may differ, the record evidence shows that the majority of ferrovanadium production is sold directly to steel mills and iron foundries in the United States. To a lesser extent, some product is sold to distributors who may repackage the material or blend ferrovanadium from different lots.[32]

4. Customer Perceptions

Respondents argue that a bag containing 45-percent grade with 25 pounds of vanadium weighs about 55.5 pounds while a bag containing 80-percent grade with the same amount of vanadium weighs only 31 pounds; thus, the 45-percent grade packages are larger and require more inventory space as well as higher transportation costs.[33]

Ferrovanadium is usually packed in bags or small drums containing 10 to 25 pounds of vanadium, although a limited number of consumers accept ferrovanadium packed in 500-pound drums. Most ferrovanadium is sold in lumps with an upper size range of approximately 2 inches. These lumps are commonly added to the molten steel after it has been poured from the steelmaking furnace into a ladle.[34]

The record shows that some purchasers did note a preference for 80-percent grade over 45-percent grade ferrovanadium because one can of 80-percent grade weighs less than 45-percent grade and thus is easier to handle during the production process. As indicated earlier in the discussion on interchangeability, however, purchasers reported that they can use either 45-percent grade or 80-percent grade in their production.[35]

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[27] Preliminary Determination, USITC Pub. 3483 at 6.

[28] CR at II-1; PR at II-1.

[29] CR at II-1 to II-2, n.2; PR at II-1, n.2; Petitioners' Final Comments at 1-2.

[30] Respondents' Prehearing Brief at 5-7; Respondents' Posthearing Brief at 10-11.

[31] Respondents' Prehearing Brief at 8.

[32] CR at I-5; PR at I-4.

[33] Respondents' Prehearing Brief at 5.

[34] CR at I-5; PR at I-4.

[35] CR at II-1 to II-2, n.2; PR at II-1, n.2.

5. Common Manufacturing Facilities, Production Processes, and Production Employees

Respondents contend that there are differences in the production processes of 45-percent grade and 80-percent grade ferrovanadium in that Shieldalloy uses the silicothermic process to produce 45-percent grade and Bear uses the aluminothermic process to produce 80-percent grade.[36]

The aluminothermic and silicothermic processes are the two most common methods of ferrovanadium production in the United States. Shieldalloy generally uses a modified silicothermic reduction process using vanadium-bearing iron slag alone or in combination with other vanadium-bearing materials such as petroleum residues and fly ash in combination with aluminum, silicon and carbon to produce ferrovanadium containing about 42 to 48 percent vanadium by weight. Molten ferrovanadium that results from this process is poured into molds, crushed to size, and packaged. Shieldalloy has the capability, however, to produce a range of grades of ferrovanadium and is not limited to the 45-percent grade.[37] Bear is a toll converter with the vast majority of its production on behalf of Gulf and USV. It makes vanadium pentoxide into ferrovanadium using an aluminothermic process whereby a mixture of vanadium pentoxide, aluminum, iron scrap, and flux is charged into a magnesite-lined vessel and the reactants are ignited electrically. However, Bear's process results in ferrovanadium with a vanadium content that is not limited to 80 percent, but may be adjusted between 42-percent and 80-percent.[38]

6. Price

Respondents argue that 45-percent grade is *** than 80-percent grade ferrovanadium.[39] In the pricing data collected by the Commission, U.S. product 1 (40-60 grade) is *** U.S. product 2 (78-82 grade) in 13 of 14 quarters during the POI; however, in all but one of those quarters, ***.[40] Generally, ferrovanadium is sold on the basis of pounds of contained vanadium.[41] The record further indicates that, while certain industry publications seem to report only the price of 80-percent grade ferrovanadium, they do in fact solicit pricing data from Shieldalloy and the price of 45-percent grade is therefore reflected in the published prices.[42]

7. Conclusion

On balance, we find that 45-percent grade and 80-percent grade ferrovanadium do not constitute separate like products. In past investigations, when the Commission has considered alleged distinctions among types of products, it has looked for clear dividing lines in terms of characteristics and uses of the various products.[43] If the Commission has been unable to find clear dividing lines between products within the scope of the investigation, the Commission generally has found that the continuum of products

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[36] Respondents' Prehearing Brief at 9-11.

[37] CR at I-4 to I-5; PR at I-3 to I-4; Hearing Tr. at 28 (Carter).

[38] CR at I-5; PR at I-5.

[39] Respondents' Prehearing Brief at 11-12; Respondents' Posthearing Brief at 12.

[40] CR at V-8, n.13; PR at V-5, n.13.

[41] CR at I-5; PR at I-4.

[42] Hearing Tr. at 30-31 (Carter); CR at I-10, n.29; PR at I-7, n.29.

[43] See Nippon Steel, Slip Op. 95-57 at 11; Torrington, 747 F. Supp. At 748-49.

comprised a single domestic like product.[44] Based on the record in these investigations, ferrovanadium of all grades is interchangeable and shares physical characteristics and uses. All grades of ferrovanadium contain varying levels of vanadium and are used as an alloy in the production of steel. Purchasers have reported that they are able to use 45-percent and 80-percent grade ferrovanadium interchangeably. While the two major domestic producers use different manufacturing processes, Bear can produce both 45-percent and 80-percent grade ferrovanadium, and Shieldalloy has the capability to produce grades other than the 45-percent grade. The evidence further indicates at most minor differences in price and some overlap in distribution channels for 45-percent and 80-percent grade product.[45] Based on the record evidence, we do not find that any of the six factors indicate such clear dividing lines as to warrant a finding of separate like products.[46]

II. DOMESTIC INDUSTRY[47]

In defining the domestic industry, the Commission's general practice has been to include in the industry all of the domestic production of the like product, whether toll-produced, captively consumed, or sold in the domestic merchant market.[48] Based on our finding of a single domestic like product, we find that the domestic industry consists of Bear, Shieldalloy, and International Specialty Alloys ("ISA"). During the POI, Bear and ISA toll-produced ferrovanadium for other firms under tolling agreements, and

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[44] The Commission has stated that it "normally does not find separate like products based on different grades of chemicals or mineral products." See e.g., Bulk Acetylsalicylic Acid (Aspirin) from China, Inv. No. 731-TA-828, USITC Pub. 3314 at 5-6 (June 2000).

[45] The respondents were given an opportunity but filed no comments to the draft questionnaires and therefore did not request that the Commission collect data on the issue of separate like products. Respondents raised the issue of two separate like products for the first time in their prehearing brief. The Commission, in promulgating rule 207.20(b), 19 C.F.R. § 207.20(b), explicitly indicated that parties should make arguments that would require data collection at the time they submitted comments on draft questionnaires, rather than later in the investigation, noting that it is often impracticable to obtain industry data at a later date. See 61 Fed. Reg. 37818, 37826 (July 22, 1996) (Notice of Final Rulemaking). See also General Motors Corp. v. United States, 827 F. Supp. 774, 781 (Ct. Int'l Trade 1993) ("The parties were given an adequate opportunity to comment on the questionnaires . . . It was not until their prehearing brief . . .that they first raised arguments concerning [a need for later data]. Given the lateness of the plaintiff's allegations, ITC's decision not to conduct a supplemental investigation was reasonable.").

[46] We also note that it is not completely evident that respondents have articulated clear dividing lines among all grades of ferrovanadium covered by the scope of these investigations. Even though respondents have argued for two groups of like products, *i.e.*, 45-percent grade and 80-percent grade ferrovanadium, they have not clarified how the Commission should treat other grades of ferrovanadium in its like product analysis. Respondents claim that their argument regarding separate like products of 45-percent grade and 80-percent grade really constitute midpoints for products with lower and higher vanadium content, respectively. See Hearing Tr. at 154-156 (Weigel). However, respondents do not specify an actual dividing line between these various grades of ferrovanadium.

[47] Commissioner Miller does not join in this section of the Commission's Views. See Separate Views of Commissioner Marcia E. Miller on Domestic Industry and Material Injury.

[48] See United States Steel Group v. United States, 873 F. Supp. 673, 681-84 (CIT 1994), aff'd, 96 F.3d 1352 (Fed. Cir.1996).

Shieldalloy produced ferrovanadium for sale to unrelated third-party customers.[49] None of the parties disputed that Bear, Shieldalloy and ISA are domestic producers.[50]

[49] CR at III-2; PR at III-1.

[50] Based on its questionnaire response, ISA *** performed *** toll production of ferrovanadium of *** pounds for Glencore in ***. CR at III-1 and III-3; PR at III-1.

Petitioners, however, argue that the Commission should include tollees Gulf and USV in the domestic industry. Gulf and USV are both domestic producers of vanadium pentoxide, which is an upstream product used almost exclusively to produce ferrovanadium.[51] Under toll agreements, Bear converts this vanadium pentoxide into ferrovanadium for these two firms. Gulf and USV each retain title to the finished product throughout the conversion process and sell the finished product to their customers.[52] Petitioners argue that Gulf and USV should be included in the domestic industry based on their substantial production-related activities in the United States, including large capital investments, technical expertise, value added, employment levels, and domestically produced and sourced raw materials.[53] Gulf and USV retain title to and bear all risks associated with the production and conversion of vanadium pentoxide into ferrovanadium. ***.[54] Gulf controls 49.5 percent of Bear's stock.[55] Petitioners contend that the supply of vanadium pentoxide by Gulf and USV to Bear is distinguishable from prior investigations in which the Commission found that companies which supply raw materials and pay fabrication fees were not members of the domestic industry.[56] In particular, petitioners argue that the vanadium pentoxide supplied by Gulf and USV to Bear is not raw material, but the key intermediate product for the production of ferrovanadium.[57] Respondents contend that tollees Gulf and USV should be excluded from the domestic industry or industries because they produce only vanadium pentoxide, a product not covered by the scope of these investigations.[58]

We do not include tollees USV and Gulf in the domestic industry. While we recognize that these firms' ferrovanadium-related production and other activities are substantial, these firms produce an intermediate product, vanadium pentoxide, but do not actually produce the domestic like product. The Commission is required under the statute to define the domestic industry for a particular domestic like product as the domestic producers of that domestic like product.[59] Vanadium pentoxide is not included in the scope of these investigations, and petitioners denied that vanadium pentoxide should be included in the domestic like product in the preliminary phase of these investigations.[60] The ferrovanadium-related activities in which Gulf and USV engage are therefore insufficient to warrant treating them as domestic

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[51] Hearing Tr. at 44 (Bunting and Orr).

[52] CR at III-4 to III-5; PR at III-3.

[53] Petitioners' Prehearing Brief at 6; Petitioners' Posthearing Brief at 6.

[54] Petitioners' Prehearing Brief at 6-12.

[55] CR at III-5, n.14; PR at III-5, n.14.

[56] Certain Welded Large Diameter Line Pipe From Japan, Inv. No. 731-TA-919 (Final) and Furfuryl Alcohol From China and Thailand, Inv. Nos. 731-TA-703 and 705 (Review).

[57] Petitioners' Prehearing Brief at 6-7, n.23.

[58] Respondents' Prehearing Brief at 12-14.

[59] 19 U.S.C. § 1677(4)(A); see also, e.g., Russian Five-Year Review, USITC Pub. 3420 at 6-7. In previous cases, we found that merely supplying raw materials and paying a fabrication fee do not constitute sufficient production activities to include tollees in the domestic industry. See, e.g., Certain Welded Large Diameter Line Pipe from Japan, Inv. No. 731-TA-919 (Final), USITC Pub. 3464 at 10 n.53 (Nov. 2001) (while toll producers that engage in sufficient production-related activity are included in the domestic industry, tollees "that merely supply raw materials and pay a fabrication fee" are not); Furfuryl Alcohol from China and Thailand, Invs. Nos. 731-TA-703 and 705 (Review), USITC Pub. 3412 at 6 n.23 (Apr. 2001); Sweaters Wholly or in Chief Weight of Manmade Fibers from Hong Kong, the Republic of Korea and Taiwan, Invs. Nos. 731-TA-448 to 450 (Final), USITC Pub. 2312 at 24-26 & nn.68-69 (Sept. 1990).

[60] Conference Tr. at 44; Petitioners' Postconference Brief at 15.

producers given that they do not engage in production of the domestic like product. Accordingly, consistent with our definition of the domestic like product, we define a single domestic industry

consisting of the sole U.S. producers of ferrovanadium, i.e., Bear, Shieldalloy, and ISA. However, as discussed below, we find it appropriate to consider the condition of USV and Gulf in our assessment of the impact of subject imports on the domestic industry.

III. CUMULATION[61]

A. In General

For purposes of evaluating the volume and price effects for a determination of material injury by reason of the subject imports, section 771(7)(G)(i) of the Act requires the Commission to assess cumulatively the volume and effect of imports of the subject merchandise from all countries as to which petitions were filed and/or investigations self-initiated by Commerce on the same day, if such imports compete with each other and with domestic like products in the U.S. market.[62] In assessing whether subject imports compete with each other and with the domestic like product,[63] the Commission has generally considered four factors, including:

(1) the degree of fungibility between the subject imports from different countries and between imports and the domestic like product, including consideration of specific customer requirements and other quality related questions;
(2) the presence of sales or offers to sell in the same geographic markets of subject imports from different countries and the domestic like product;
(3) the existence of common or similar channels of distribution for subject imports from different countries and the domestic like product; and
(4) whether the subject imports are simultaneously present in the market.[64]

While no single factor is necessarily determinative, and the list of factors is not exclusive, these factors are intended to provide the Commission with a framework for determining whether the subject imports compete with each other and with the domestic like product.[65] Only a "reasonable overlap" of competition is required.[66]

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[61] The statutory provision for negligible imports, 19 U.S.C. § 1677(24), does not apply in these investigations because subject imports from South Africa and China each account for more than three percent of the volume of all ferrovanadium imported into the United States in the most recent twelve-month period for which data are available preceding the filing of the petition. See CR/PR at Table IV-2.

[62] 19 U.S.C. § 1677(7)(G)(i). There are four exceptions to the cumulation provision, none of which applies to these investigations. See id. at 1677(7)(G)(ii).

[63] The SAA expressly states that "the new section will not affect current Commission practice under which the statutory requirement is satisfied if there is a reasonable overlap of competition." SAA at 848, citing Fundicao Tupy, S.A. v. United States, 678 F. Supp. 898, 902 (Ct. Int'l Trade 1988), aff'd, 859 F.2d 915 (Fed. Cir. 1988).

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

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

[66] See Goss Graphic System, Inc. v. United States, 33 F. Supp. 2d 1082, 1087 (Ct. Int'l Trade 1998) ("cumulation does not require two products to be highly fungible"); Mukand Ltd. v. United States, 937 F. Supp. 910, 916 (Ct. Int'l Trade 1996); Wieland Werke, 718 F. Supp. at 52 ("Completely overlapping markets are not required.").

The conditions for cumulating the subject imports have been satisfied. The petition was filed with respect to all subject imports on the same day, and, based on the record in the final phase of these investigations, we find that there is a reasonable overlap of competition among the subject imports, and between the subject imports and the domestic like product. Petitioners argue that the Commission should cumulate all subject imports from China and South Africa for purposes of its final determination.[67] Respondents did not brief the issue of cumulation in their written submissions, but asserted at the hearing that 45-percent grade product should not be cumulated with 80-percent grade product. Respondents, however, conceded that 80-percent grade ferrovanadium from China and South Africa should be cumulated.[68]

First, there is at least a moderate level of fungibility between domestic ferrovanadium and the subject imports and among imports from China and South Africa.[69] U.S. producers, tollees and importers reported that subject imports and the domestic like product are always or frequently interchangeable.[70] Purchasers generally described U.S., subject, and nonsubject ferrovanadium as comparable in purchasing factors such as availability, price, delivery time, and packaging. Seven purchasers reported that U.S. and Chinese ferrovanadium are used in the same applications while eleven purchasers stated that U.S. and South African ferrovanadium are used in the same applications. The majority of purchasers indicated that they did not order ferrovanadium specifically from just one source.[71]

Available data indicate that 80-percent grade ferrovanadium is sold by USV and Gulf as well as by importers of Chinese and South African product.[72] Although respondents have argued that there are differences in product mix from the subject countries because imports from South Africa consist of only 80-percent grade product while imports from China include both 45-percent and 80-percent grade product,[73] the record evidence, as discussed above, generally shows that purchasers buy their ferrovanadium requirements from all subject countries as well as U.S. suppliers and that ferrovanadium from these sources is interchangeable. We note that purchaser responses do not indicate that 45-percent

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[67] Petitioners' Prehearing Brief at 15.

[68] Hearing Tr. at 182 (Bruno).

[69] Questionnaire responses indicate that U.S. producers and tollees believe that differences other than price between products from the United States, subject and nonsubject countries, are "never" important in the domestic sale of ferrovanadium while importers reported that differences other than price are "sometimes" or "never" important in the sale of ferrovanadium in the United States. CR at II-12, Table II-5; PR at II-8, Table II-5.

[70] CR at II-12 to II-13, Table II-6; PR at II-8, Table II-6. Importer *** noted that some U.S. steel producers use only 45-percent grade ferrovanadium, available only from Shieldalloy, and thus will not purchase subject ferrovanadium. It added that some U.S. producers prefer nitrided vanadium, and that even with the same grade ferrovanadium, the amounts of other elements can differ and affect purchaser preferences. However, few other ferrovanadium sellers or purchasers noted these kinds of differences. CR at II-13; PR at II-8 to II-9.

[71] CR at II-13 to II-14, Table II-7; PR at II-9, Table II-7. When asked if certain grades of ferrovanadium are available from only a single source, the majority of responding purchasers responded "no." CR at II-14; PR at II-9.

[72] CR at II-1; PR at II-1.

[73] Hearing Tr. at 112 (Weigel).

grade product is supplied by only Chinese producers and not South African producers.[74] Therefore, in light of the interchangeability of 45-percent and 80-percent grade product from all subject countries and

[74] We note that respondents raised their cumulation arguments for the first time in response to a question by Chairman Okun at the November 22, 2002, hearing. See Hearing Tr. at 182 (Bruno). Due to the lateness of respondents' cumulation arguments, the Commission did not request data regarding the product mix of imports (45-percent grade vs. 80-percent grade) from China and South Africa in its questionnaires. Respondents had the opportunity to raise this issue by commenting on the draft questionnaires. See infra note 45.

the United States, we find that imports from China and South Africa are sufficiently fungible with each other as well as with the domestic like product to warrant cumulation.

Second, the record indicates that subject imports from China and South Africa and ferrovanadium produced in the United States are sold in the same geographic markets throughout the United States.[75]

Third, questionnaire responses indicate that subject imports from China and South Africa and domestically produced ferrovanadium were all sold in the U.S. market during each year of the POI. According to the data on pricing product 1 (40-60 percent grade), subject imports of ferrovanadium from China for pricing product 1 were sold in the U.S. market in three quarters of 1999 and in each quarter of 2000, 2001, and interim 2002, as was U.S. product. According to the data on pricing product 2 (78-82 percent grade), subject imports from China for pricing product 2 were sold in each quarter of 1999, 2000, 2001, and interim 2002, as was U.S. product. Subject imports of ferrovanadium from South Africa for pricing product 2 were sold in the U.S. market in each quarter in 1999, 2000, 2001, and interim 2002, along with U.S. product.[76]

Finally, the record shows that ferrovanadium (whether from subject countries or produced domestically) is sold primarily to end users, namely steel companies and iron foundries.[77]

We therefore find that a reasonable overlap of competition exists among the subject imports and between subject imports and the domestic like product. Consequently, we cumulate subject imports from China and South Africa for the purpose of analyzing whether the domestic industry is materially injured by reason of the subject imports.

IV. MATERIAL INJURY BY REASON OF LESS THAN FAIR VALUE IMPORTS [78] [79]

In the final phase of antidumping duty investigations, the Commission determines whether an industry in the United States is materially injured by reason of the imports under investigation.[80] In making this determination, the Commission must consider the volume of imports, their effect on prices for the domestic like product, and their impact on domestic producers of the domestic like product, but only in the context of U.S. production operations.[81] The statute defines "material injury" as "harm which is not inconsequential, immaterial, or unimportant."[82] In assessing whether the domestic industry is materially injured by reason of subject imports, we consider all relevant economic factors that bear on

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[75] Domestic producers and tollees reported that *** percent of their ferrovanadium shipments occurred within 101 to 1,000 miles, followed by *** percent of shipments that occurred within 100 miles and *** percent of shipments that occurred at distances over 1,000 miles. Five non-producer importers of subject merchandise reported that about 73.2 percent of their shipments occurred within 100 miles, followed by 22.6 percent of shipments that occurred within 101 to 1,000 miles, and 4.3 percent of shipments that occurred at distances over 1,000 miles. CR at V-1; PR at V-1.

[76] CR/PR at Tables V-1, V-2.

[77] CR at II-1; PR at II-1.

[78] Commissioner Miller does not join in this section of the Commission's Views. See Separate Views of Commissioner Marcia E. Miller on Domestic Industry and Material Injury.

[79] All quantities of ferrovanadium cited in these Views are in units of pounds of contained vanadium.

[80] 19 U.S.C. § 1673d(b).

[81] 19 U.S.C. § 1677(7)(B)(i). The Commission "may consider such other economic factors as are relevant to the determination" but shall "identify each [such] factor . . . [a]nd explain in full its relevance to the determination." 19 U.S.C. § 1677(7)(B). See also, Angus Chemical Co. v. United States, 140 F.3d 1478 (Fed. Cir. 1998).

[82] 19 U.S.C. § 1677(7)(A).

the state of the industry in the United States.[83] No single factor is dispositive, and all relevant factors are considered "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[84]

For the reasons discussed below, we determine that the domestic industry is materially injured by reason of cumulated subject imports from China and South Africa found to be sold in the United States at LTFV.

A. Conditions of Competition

The following conditions of competition are pertinent in our analysis to these investigations.

1. Demand and Supply

Ferrovanadium is used primarily by the steel industry to improve the strength-to-weight ratio and other properties of steel products, especially in HSLA steel where it can impart useful properties without the cost or additional chemistry of using alloys. *** reported that demand grew during the period examined due in part to the development of thin slab casting. U.S. producers and tollees generally reported that ferrovanadium demand had declined in 2001 due to falling steel production, but they noted that demand may have regained some ground in 2002. Importers generally agreed that U.S. ferrovanadium demand follows steel production and thought that the steel section 201 tariffs would increase ferrovanadium demand.[85] Apparent U.S. consumption was relatively steady at 13.0 million pounds in 1999 and 2000, but then decreased to 11.9 million pounds in 2001. Apparent U.S. consumption was 6.4 million pounds in interim 2002 compared to 6.3 million pounds in interim 2001.[86]

Greater competition among European ferrovanadium suppliers results in lower prices, which then affect prices in the United States.[87] Questionnaire responses reveal that producers and importers agreed that worldwide prices for ferrovanadium can have an effect on U.S. prices. Producers generally stated that European ferrovanadium prices had been at lower levels than U.S. prices, and that this difference was encouraging other world suppliers to ship their product to the United States. Importers characterized the effect of international prices on U.S. prices as being driven by demand, due to market awareness of lower prices elsewhere.[88]

Five firms account for all U.S. production and shipments of ferrovanadium. Only three firms, Bear, Shieldalloy, and ISA, actually produce ferrovanadium in the United States. Two firms, Gulf and USV, produce only the intermediate product, vanadium pentoxide, which is toll converted by Bear into ferrovanadium for sale by Gulf and USV. In the U.S. market, ferrovanadium is sold primarily to steel

[83] 19 U.S.C. § 1677(7)(C)(iii).

[84] Id.

[85] CR at II-5; PR at II-3.

[86] CR/PR at Table IV-5.

[87] Hearing Tr. at 126 (O'Connell).

[88] CR at V-5; PR at V-4.

companies and iron foundries.[89] Imports from China were distributed by at least five importers while imports from South Africa were sold principally by two importers.[90]

End-of-period inventories of the domestic industry increased from *** pounds in 1999 to *** pounds in 2000 and to *** pounds in 2001, and were higher in interim 2002 (*** pounds) than in interim

[89] CR at II-1 and III-1; PR at II-1 and III-1.

[90] CR at II-4; PR at II-2.

2001 (*** pounds).[91] U.S. importers' end-of-period inventories for subject imports decreased *** from *** pounds in 1999 to *** pounds in 2000, but then increased to *** pounds in 2001, and was *** pounds in interim 2001 compared to *** pounds in interim 2002.[92]

2. Commodity-Like Nature of Product

As noted earlier, ferrovanadium of all grades is interchangeable and shares the same physical characteristics and uses; virtually all ferrovanadium is used as an alloying agent in the production of steel. Steel producers have the technical capability to use different grades of ferrovanadium, and the user needs to know only the grade of ferrovanadium so that the steelmaking process and ingredients can be adjusted accordingly.[93]

Twenty end-user purchasers indicated that certification is required for 100 percent of purchases, citing mostly chemistry and process specifications. Qualifying a new supplier depends on quality of product, reliability in trial orders, ISO certification, and size consistency. No purchasers reported any suppliers failing certification since 1999. The record indicates that most purchasers bought ferrovanadium at the lowest price.[94]

3. Producers and Tollees

During the POI, domestic producers Bear and ISA toll-produced ferrovanadium for other firms under tolling agreements, and Shieldalloy produced product for sale to unrelated third-party customers. At its plant in Butler, PA, Bear toll converts raw materials, principally vanadium pentoxide, provided by companies such as Gulf and USV, into ferrovanadium. The vast majority of Bear's ferrovanadium production is performed on behalf of Gulf and USV.[95] Shieldalloy's production facility is located in Cambridge, OH. Unlike Bear and Chinese and South African producers, Shieldalloy does not use vanadium pentoxide as its principal raw material input. Instead, Shieldalloy produces ferrovanadium by a modified reduction process that is capable of utilizing any vanadium-bearing raw materials, such as, for example, petroleum residues, fly ash, hazardous spent catalysts, and iron slag.[96]

Gulf and USV do not produce ferrovanadium. Instead, each firm operates under a toll agreement whereby it supplies the raw material, vanadium pentoxide, to Bear, which then converts the raw material to ferrovanadium. Both Gulf and USV retain title to the finished product throughout the conversion process and sell the finished product to their customers. *** of Gulf and USV's 2001 shipments of ferrovanadium was produced under the respective toll agreement that each has with Bear.[97] U.S. producers and tollees have varying material costs, depending on the type of raw material used to produce

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[91] CR/PR at Table III-6.

[92] CR/PR at Table VII-3.

[93] Petitioners' Prehearing Brief at 19 (citing Preliminary Determination, USITC Pub. 3483 at 6-7, 11, 17).

[94] CR at II-11; PR at II-7.

[95] CR at III-2 to III-3; PR at III-2.

[96] CR at III-4; PR at III-2.

[97] CR at III-4 to III-5; PR at III-3.

ferrovanadium or vanadium pentoxide. Gulf primarily uses spent catalysts for its production of vanadium pentoxide, which it can obtain *** from oil refineries. USV reported that ***.[98] The total cost

[98] CR at V-1, n.1, PR at V-1, n.1.

of goods sold ("COGS") of domestic producers and tollees decreased from 1999 to 2001 because of the lower quantity of sales and decreased unit costs of raw materials.[99]

The domestic industry may experience injury in different ways, as acknowledged by the Commission in the preliminary phase of these investigations. The vast majority of Bear's production is sold into the market by its tollees, USV and Gulf; therefore, in the somewhat unique structure of this industry, market conditions affect Bear through these tollees. As ferrovanadium prices fall, Bear's tollees, USV and Gulf, become less profitable. As a result, *** reduces Bear's own profit. Reduced demand for ferrovanadium sold by USV and Gulf also reduces Bear's volume of toll conversion and its profits. Thus, although Bear is not directly exposed to market conditions, those conditions, and the health of Gulf and USV, have a very real effect on Bear's condition. Shieldalloy is directly exposed to the market, and therefore can be injured by falling sales volume and prices; it may also experience injury as a result of using raw materials purchased at higher prices to produce ferrovanadium sold at prices insufficient to cover its costs, due to the continuing decline of ferrovanadium prices during the POI.[100]

4. Nonsubject imports

Major nonsubject sources of imports include Austria, Belgium, Canada, and the Czech Republic. Nonsubject imports increased substantially in 2000 when compared to 1999, but returned to near 1999 levels in 2001. By quantity, nonsubject imports increased from 1.9 million pounds in 1999 to 3.0 million pounds in 2000, before declining to 2.2 million pounds in 2001. Nonsubject imports were 1.1 million pounds in interim 2001 compared with 2.3 million pounds in interim 2002.[101] Importer *** noted that new Australian ferrovanadium production has been recently added to the market.[102]

5. Substitutes

Ferrovanadium, like other additives to steel, imparts its own set of unique properties to the steel in which it is used. Substitution away from ferrovanadium to another material may change the physical properties of the steel produced. When a steel specification calls for a certain amount of vanadium, then no substitution away from vanadium is possible.[103]

Questionnaire responses reveal that there are several possible substitutes for ferrovanadium, but only in limited applications and only when ferrovanadium prices are relatively high. In general, substitution away from ferrovanadium is rare. The majority of purchasers responded in the negative when asked if there were other products that could be substituted for ferrovanadium in its end uses. A few purchasers identified ferrocolumbium and nitrided vanadium as a substitute; however, they noted that the degree of substitutability of these products for ferrovanadium was limited.[104]

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[99] CR at VI-5; PR at VI-3.

[100] Petitioners' Prehearing Brief at 23-24.

[101] CR at II-4; PR at II-3; CR/PR at Table IV-3.

[102] CR at II-4; PR at II-3.

[103] CR at II-6; PR at II-4.

[104] CR at II-5 to II-6; PR at II-3 to II-4.

6. Pricing and Distribution

Ferrovanadium typically is bought and sold on the basis of the weight of contained vanadium, and petitioners argue that the price is typically the same regardless of the grade.[105]

Producers/tollees and importers reported that prices are determined by transaction-by-transaction negotiations and by contracts for multiple shipments. When contracts for multiple shipments are used for long-term sales, formula pricing based on industry publications such as *Ryan's Notes* and *American Metal Market* is often used as a benchmark. Sixteen purchasers reported experience with using published prices as contract benchmarks. On spot trades, these industry publications also can have an influence, with other purchasers reporting that they used the published prices as negotiating guidelines. Because prices are often indexed to a published source, purchasers reported that prices change frequently; recent changes have been moderate compared to the period prior to 1999.[106]

Most ferrovanadium sold in the U.S. market is sold in lumps with an upper size range of approximately 2 inches. A significant portion of ferrovanadium sold to end users in the U.S. market is packaged in bags or cans that hold product with a contained weight of 10 to 25 pounds of vanadium, and the remainder is sold in bulk drums that typically contain a net weight of 500 pounds of vanadium. These lumps are commonly added to the molten steel after it has been poured from the steelmaking furnace into a ladle.[107] In virtually all cases, the packages are placed onto pallets or into pallet boxes to facilitate handling, storage and distribution.[108]

B. Volume of Subject Imports

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

By quantity, the volume of cumulated subject imports increased during the POI from 2.3 million pounds in 1999 to 2.5 million pounds in 2000 to 3.5 million pounds in 2001, before decreasing from 1.6 million pounds in interim 2001 to 0.5 million pounds in interim 2002.[110]

By quantity, the market share of subject imports increased from 17.8 percent in 1999 to 19.4 percent in 2000 and to 29.2 percent in 2001; between interim periods, the market share of subject imports decreased from 26.3 percent to 8.1 percent of domestic consumption. Comparatively, the market share of nonsubject imports, by quantity, increased from 15.0 percent in 1999 to 23.0 percent in 2000, then

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[105] Hearing Tr. at 19-20 (Jones); Petitioners' Prehearing Brief at 25.

[106] CR at V-3; PR at V-3.

[107] CR at I-5; PR at I-4.

[108] Petition at 13; Conference Tr. at 15-16 (Young).

[109] 19 U.S.C. § 1677(7)(C)(i).

[110] CR/PR at Table IV-3. Subject import volume decreased dramatically after the filing of the petition, which occurred on November 26, 2001. We accord this volume change diminished weight in making our material injury determination because we find that it is related to the pendency of these investigations. CR/PR at Tables IV-3 and IV-4. 19 U.S.C.§ 1677(7)(I). The statute instructs the Commission to consider whether changes in volume, price effects, or impact are related to the pendency of the investigations. If the Commission determines that such changes are related to the pendency of the investigations, it has discretion under the statute to reduce the weight accorded to such information.

decreased to 18.1 percent in 2001, losing market share to subject imports. Between interim periods, nonsubject import market share increased from 17.8 percent to 36.4 percent.[111]

The market share of U.S. shipments for domestic producers and tollees declined progressively from 67.2 percent in 1999 to 57.6 percent in 2000 to 52.8 percent in 2001, and was 55.9 percent in interim 2001 compared to 55.5 percent in interim 2002.[112]

In these final determinations, we find the volume and increase in volume of cumulated subject imports, both in absolute terms and relative to apparent domestic consumption in the United States, to be significant.[113]

C. Price Effects of the Subject Imports

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

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

The record in these investigations indicates that domestically produced ferrovanadium and subject imports are generally substitutable, and that price is the key factor in purchasing decisions.[115] The parties agree that price is very important in purchasing decisions, given the commodity-like nature of the subject product. Although purchasers require that 100 percent of their ferrovanadium be certified for chemistry and process specifications, they reported no difficulties qualifying their suppliers since 1999.[116]

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[111] CR/PR at Table IV-5. Total domestic consumption, by quantity, remained relatively steady at 13.0 million pounds in 1999 and 2000, before decreasing to 11.9 million pounds in 2001. From interim periods 2001 to 2002, total domestic consumption increased slightly from 6.3 million pounds to 6.4 million pounds. We combine the U.S. shipments of both domestic producers and tollees in calculating U.S. market share because Bear's toll production of ferrovanadium is sold commercially by tollees Gulf and USV. CR/PR at Table IV-5; CR at III-2 to III-3, III-10; PR at III-1 to III-2, III-5.

[112] CR/PR at Table IV-5.

[113] Commissioner Bragg finds the volume of subject imports to be significant relative to domestic production as well as to apparent U.S. consumption. In particular, Commissioner Bragg notes that in 1999 the total volume of subject imports was equivalent to *** percent of domestic production, while the 77.8 percent increase in subject import volume between 1999 and 2000, in and of itself, was equivalent to roughly *** percent of domestic production in 2000. Although the total volume of subject imports declined in 2001, that volume was equivalent to *** percent of domestic production in 2001. Commissioner Bragg finds that, in the context of flat or declining demand over the POI, the significance of subject import volume relative to domestic production is evidenced by the roughly *** percent increase in end-of-period inventories for the domestic industry between 1999 and 2000, as well as the roughly *** percent increase in end-of-period inventories in 2001. See CR/PR at Table C-1.

[114] 19 U.S.C. § 1677(7)(C)(ii).

[115] CR at II-9 to II-15, PR at II-6 to II-10.

[116] Petitioners' Prehearing Brief at 21-23; Respondents' Posthearing Brief at 1, n.1; CR at II-9 to II-11; PR at II-6 to II-8.

Product-specific price comparison data were mixed but indicated mostly overselling. For pricing product one, out of 13 quarterly comparisons of weighted-average delivered selling prices, subject imports undersold U.S. product in five quarters but oversold U.S. product in eight quarters.[117] For pricing product two, out of 28 quarterly comparisons of weighted-average delivered selling prices, subject imports undersold U.S. product in five quarters but oversold the U.S. product in 23 quarters.[118] Based on these pricing data, we do not find underselling to be significant in these investigations.

Prices for both the domestic like product and the subject merchandise declined over the POI.[119] The price decline was much more steep than the drop in apparent consumption over the POI.[120] In light of the highly substitutable nature of the products and the increasing volume of subject imports, we find that subject imports depressed domestic prices to a significant degree, even though there was insufficient evidence of consistent underselling. With the exception of interim 2002, which we discount due to the pendency of these investigations,[121] subject imports increased market share at the expense of the domestic industry, even while domestic producers themselves reduced prices in an unsuccessful effort to retain market share.[122] Our conclusion regarding price depression also is given support by the confirmed lost sales and revenue allegations of the domestic industry.[123] Despite the reduction of subject import volume in interim 2002 during the pendency of these investigations, U.S. prices still have not recovered due to the overhang of significant end-of-period inventories held by U.S. importers of subject merchandise in 2001 and interim period 2002. The significant decline in such inventories from interim 2001 to interim 2002 indicates that U.S. importers were aggressively selling significant volumes of inventories of their product in the U.S. market and continuing to put downward pressure on U.S. ferrovanadium prices, even while subject import volume fell in interim 2002.[124]

Respondents argue that other causes such as world prices, nonsubject imports, and *** caused the price declines.[125] While prices may tend to equalize across countries over time, we must consider whether subject, unfairly traded imports are causing price depression in the United States. As discussed above, the record indicates that the increasing volumes of highly substitutable subject imports have played a significant role in driving down prices in the United States; this is clearly price depression in the U.S. market, regardless of what prices are in other markets. The record also indicates that subject

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[117] CR/PR at Table V-1.

[118] CR/PR at Table V-2.

[119] CR/PR at Tables V-1 and V-2.

[120] The unit sales value of U.S.-produced ferrovanadium declined by *** percent from 1999 to 2001 while U.S. apparent consumption decreased by 8.3 percent over the same period. CR/PR at Table C-1.

[121] 19 U.S.C. § 1677(7)(I).

[122] CR/PR at Table IV-5, C-1 and C-2. In response to questioning by Commissioner Bragg during the hearing, Petitioners testified that a fairly high level of capacity utilization is necessary for U.S. producers to cover fixed costs economically, and that domestic firms made a strategic decision to reduce prices in order to maintain sales volumes in the face of competition from subject imports. Hearing Tr. at 54-56 (Jones, Carter, Orr, Bunting).

[123] CR at V-16 to V-22; PR at V-6 to V-7.

[124] The end-of-period inventories for subject imports declined from *** pounds in 1999 to *** pounds in 2000 before increasing to *** pounds in 2001 and were *** pounds in interim 2001 compared to *** pounds in interim 2002. CR/PR at Table VII-3.

[125] Respondents' Prehearing Brief at 22-28.

imports had significant price depressing effects, notwithstanding the presence of nonsubject imports in the U.S. market. Subject imports gained far more market share over the POI than nonsubject imports[126] and, except for interim 2002 (after the petition had been filed), had a lower average unit value than nonsubject imports.[127] As for respondents' argument that domestic price competition has been ***,[128] we acknowledge that *** U.S.-produced ferrovanadium during the POI. Nonetheless, the fact remains that increasing subject imports captured market share at the expense of both U.S. producers and tollees, and the purchaser data are inconclusive regarding price leadership.[129] We also note that *** market share was *** than subject imports'.[130]

Therefore, we find that prices have been depressed to a significant degree by the subject imports.

D. Impact of the Subject Imports

In examining the impact of the subject imports on the domestic industry, we consider all relevant economic factors that bear on the state of the industry in the United States.[131] These factors include output, sales, inventories, capacity utilization, market share, employment, wages, productivity, profits, cash flow, return on investment, ability to raise capital, and research and development. No single factor

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[126] CR/PR at Table IV-5. In 2001, when subject import volume was at its peak for the POI, subject import market share was 29.2 percent, compared to 18.1 percent for nonsubject imports. From 2000 to 2001, subject import volume increased by 37.1 percent, while nonsubject import volume fell by 28.2 percent. CR/PR at Table IV-3.

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

[128] Respondents' Prehearing Brief at 27; Respondents' Posthearing Brief at 8.

[129] CR/PR at Tables III-3 and IV-5. Seven purchasers felt that there was no price leader in the U.S. ferrovanadium market while six purchasers cited Shieldalloy as the price leader and two cited USV as having led prices in both upward and downward directions. Three other purchasers cited Gulf as a price leader. One purchaser cited importers Larson Sales and Considar as price leaders. One purchaser commented that U.S. product was priced higher than Chinese ferrovanadium while two purchasers said that U.S. and Chinese ferrovanadium prices were comparable. Three purchasers noted that U.S. ferrovanadium was more expensive than South African ferrovanadium while three other purchasers said that U.S. and South African product were priced the same. Three purchasers reported that U.S. ferrovanadium was priced more expensively than nonsubject ferrovanadium. CR at V-5 to V-6; PR at V-3 to V-4.

[130] As noted earlier, total domestic consumption was 13.0 million pounds in 1999 and 2000, 11.9 million pounds in 2001, 6.3 million pounds in interim 2001, and 6.4 million pounds in interim 2002. CR/PR at Table IV-4. *** volume of U.S. shipments was *** pounds, *** pounds, *** pounds, *** pounds, and *** pounds in 1999, 2000, 2001, interim 2001, and interim 2002, respectively. CR/PR at Table III-4. Calculating *** data as a share of apparent consumption, *** accounted for *** percent of apparent consumption in 1999, 2000, 2001, interim 2001, and interim 2002, respectively. See, e.g., CR/PR at Tables III-4 and IV-4. Subject imports accounted for 17.8, 19.4, 29.2, 26.3, and 8.1 percent of apparent consumption in 1999, 2000, 2001, interim 2001, and interim 2002, respectively. CR/PR at Table IV-5. *** share of apparent consumption is *** in each year and period ***, which we discount due to the pendency of these investigations.

[131] 19 U.S.C. § 1677(7)(C)(iii). See also SAA at 851, 885 ("In material injury determinations, 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 also may demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports." Id. at 885.).

is dispositive and all relevant factors are considered "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[132] [133] [134]

We find that subject imports have adversely impacted the domestic industry. As the volume of subject imports increased, the industry's condition worsened as evidenced by declines in a number of performance indicators. Domestic producers' commercial shipments remained steady at *** pounds in 1999 and 2000 before falling to *** pounds in 2001, and declined from *** pounds in interim 2001 to *** pounds in interim 2002.[135] As a result of declining sales, domestic producers' end-of-period inventories climbed from *** pounds in 1999 to *** pounds in 2000 to *** pounds in 2001, and increased from *** pounds in interim 2001 to *** pounds in interim 2002.[136] [137]

The domestic industry's production capacity increased *** from *** pounds in 1999 to *** pounds in 2000 and 2001, and was *** pounds in interim 2001 and interim 2002. However, domestic producers decreased production from *** pounds in 1999 to *** pounds in 2000 to *** pounds in 2001, while remaining at *** pounds during interim 2001 and interim 2002. Overall, domestic production declined *** percent from 1999 to 2001.[138] The domestic industry's capacity utilization dropped from *** percent in 1999 to *** percent in 2000 to *** percent in 2001, and declined from *** percent in interim 2001 to *** percent in interim 2002. The domestic industry's average number of production workers also declined throughout the POI.[139]

The domestic industry sustained *** throughout the POI. Although Bear and Shieldalloy's financial condition *** from 1999 to 2000 with a *** of $*** in 2000 (compared to a *** in 1999) due to *** in the cost of goods sold (COGS),[140] the domestic industry's operating *** then increased with

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[132] 19 U.S.C. § 1677(7)(C)(iii). See also SAA at 851, 885; Live Cattle from Canada and Mexico, Inv. Nos. 701-TA-386, 731-TA-812-813 (Preliminary), USITC Pub. 3155 (Feb. 1999) at 25 n.148.

[133] The statute instructs the Commission to consider the "magnitude of the dumping margin" in an antidumping proceeding as part of its consideration of the impact of imports. 19 U.S.C. § 1677(7)(C)(iii) (V). In its final determinations, Commerce found the following dumping margins: For South Africa, a final weighted margin of 116.00 percent for Xstrata, Highveld and all others; for China, a final weighted antidumping margin for Panzhihua of 13.03 percent and a country-wide rate of 66.71 percent. Notice of Final Determination of Sales at Less Than Fair Value: Ferrovanadium from the Republic of South Africa, 67 Fed. Reg. 71136, 71137 (November 29, 2002), and Notice of Final Determination of Sales at Less Than Fair Value: Ferrovanadium from the People's Republic of China, 67 Fed. Reg. 71137, 71140 (November 29, 2002).

[134] Commissioner Bragg notes that she does not ordinarily consider the magnitude of the margin of dumping to be of particular significance in evaluating the effects of subject imports on domestic producers. See Separate and Dissenting Views of Commissioner Lynn M. Bragg in Bicycles from China, Inv. No. 731-TA-731 (Final), USITC Pub. 2968 (June 1996).

[135] CR/PR at Table C-2. We note that Bear, as a toller of ferrovanadium, had *** level of commercial sales of ferrovanadium during the POI. CR at III-10; PR at III-5; CR/PR at Table III-3.

[136] CR/PR at Table C-2.

[137] As noted, Commissioner Bragg finds that the significance of subject import volume relative to domestic production is evidenced by the significant impact subject imports had in causing inventory levels for the domestic industry to increase over the POI. See supra n.113.

[138] CR/PR at Table C-2.

[139] The number of production related workers fell from *** in 1999 to *** in 2000 to *** in 2001, and from *** in interim 2001 to *** in interim 2002. CR/PR at Table C-2.

[140] Unit COGS for Bear and Shieldalloy are as follows: $*** per pound in 1999; $*** per pound in 2000; $*** per pound in 2001; $*** per pound in interim 2001; and $*** per pound in interim 2002. CR/PR at Table F-3.

.[141] The domestic industry's *** in 2001 coincided with the dramatic increase in subject import volume in 2001.[142] Despite a decrease in COGS that helped the domestic industry *** in 2000, U.S. ferrovanadium prices fell faster than the domestic industry's declines in COGS.[143] Unit net sales value of ferrovanadium continually fell during the POI, from $ per pound in 1999 to $*** per pound in 2000 to $*** per pound in 2001, and from $*** per pound in interim 2001 to $*** per pound in interim 2002.[144]

As noted previously, we attribute the domestic producers' continued performance declines in interim 2002 to the release of the significant increases in subject import inventories held by U.S. importers through the end of 2001, even while actual subject import volume declined after the filing of the petition. The end-of-period inventories for subject imports declined *** from *** pounds in 1999 to *** pounds in 2000 before nearly doubling to *** pounds in 2001, and decreased from *** pounds in interim 2001 to *** pounds in interim 2002. The *** end-of-period inventories of subject merchandise held by importers in 2001 coupled with the significant decline in subject inventories between interim periods indicate that subject inventories continued to exert downward pressure on U.S. ferrovanadium prices and impede U.S. shipments by the domestic industry, even as subject import volume slowed in 2002.[145]

Bear's results on its tolling operations also showed *** declines in net quantity tolled, tolling revenue, and ***. Net quantities of ferrovanadium tolled by Bear declined from *** pounds in 1999 to *** pounds in 2000 and *** pounds in 2001, and was *** pounds in interim 2002 compared to *** pounds in interim 2001. Bear's net tolling revenue decreased from *** in 1999 to *** in 2000 and *** in 2001, and was *** in interim 2002 compared with *** in interim 2001. Bear's *** fell from *** in 1999 to *** in 2000 and *** in 2001, and was a *** in interim 2002 compared to *** in interim 2001.[146]

Thus, the record shows there have been significant increases in the volume and market share of the subject imports and that subject imports had a significant depressing effect on domestic prices. Large volumes of subject imports and depressed prices in the U.S. market led to severe financial declines and a deterioration in the overall condition of the domestic industry during the POI. Accordingly, we find that the subject imports are having a significant adverse impact on the domestic industry.

This conclusion is further confirmed by consideration of the performance of Bear's tollees, Gulf and USV. Such consideration is consistent with the statutory requirement to "evaluate all relevant economic factors . . . within the context of the business cycle and conditions of competition that are distinctive to the affected industry." As noted above, Bear is dependent on its tollees for raw materials and revenue, and financial difficulties of USV and Gulf in turn affect Bear. Further, the vast majority of commercial sales of Bear's production of ferrovanadium is reflected in the financial data of USV and Gulf. With respect to the tollees, while Gulf's shipments increased from 1999 to 2001, by *** pounds contained vanadium, USV's shipments fell by ***, *** of contained vanadium, during the same

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[141] CR/PR at Table F-3.

[142] CR/PR at Tables IV-3 and IV-5.

[143] The domestic industry's ratio of COGS to net sales was *** percent in 1999, *** percent in 2000, *** percent in 2001, *** percent in interim 2001, and *** percent in interim 2002. CR/PR at Table F-3.

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

[145] CR/PR at Table VII-3.

[146] CR/PR at Table F-1.

period.[147] With respect to profitability, the *** and worsened from 1999 to 2001. USV had ***.[148] Gulf had ***.[149]

CONCLUSION

For the foregoing reasons, we determine that an industry in the United States is materially injured by reason of imports of ferrovanadium from China and South Africa that are sold in the United States at less than fair value.

[147] CR/PR at Table III-4. The U.S. market share held by U.S. producers and tollees, as a percentage of total apparent U.S. consumption, declined from 67.2 percent in 1999 to 57.6 percent in 2000 to 52.8 percent in 2001 and from 55.9 percent in interim 2001 to 55.5 percent in interim 2002. CR/PR at Table IV-5.

[148] CR/PR at Table VI-6.

[149] CR/PR at Table VI-4.

SEPARATE VIEWS OF COMMISSIONER MARCIA E. MILLER ON DOMESTIC INDUSTRY AND MATERIAL INJURY

I concur with the majority's affirmative determination, and I join in the majority's views with respect to the domestic like product and cumulation. Although I concur with the majority's views that Shieldalloy, Bear, and International Specialty Alloys ("ISA")[1] are part of the domestic industry, I also determine, consistent with my views in the preliminary phase of this investigation and in the recent sunset review of ferrovanadium from Russia,[2] that tollees Gulf and USV[3] engage in sufficient production-related activity to be included in the domestic industry. I therefore write separately to express my views on the definition of the domestic industry and on my finding of material injury by reason of the less than fair value ("LTFV") subject imports.

I. DOMESTIC INDUSTRY AND RELATED PARTIES

Section 771(4)(A) of the Act defines the relevant industry as the domestic "producers as a [w]hole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product."[4] 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.[5]

None of the parties disputed that Shieldalloy, Bear, and ISA are domestic producers. The petitioners argue that tollees Gulf and USV should also be included in the domestic industry and that this position would be consistent with the Commission's finding in the original determination on ferrovanadium from Russia.[6] The respondents urge the Commission not to include the tollees in the domestic industry, consistent with the majority's position in the preliminary phase, noting generally that "supplying raw materials and paying a fabrication fee do not make the tollees part of the domestic industries."[7]

In deciding whether a firm qualifies as a domestic producer, the Commission generally analyzes the overall nature of a firm's production-related activities in the United States with respect to production of the domestic like product. It generally considers six factors:

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[1] ISA's questionnaire response indicates it toll produced *** pounds of ferrovanadium for Glencore ***. Because it produced this *** quantity of ferrovanadium during *** of the period examined, its data are not consolidated with the data of the other domestic producers. CR at III-3.

[2] *Ferrovanadium From China and South Africa,* Inv. Nos. 731-TA-986 and 987 (Preliminary), USITC Pub. 3484 at 19-22 (Jan. 2002) ("Separate Views of Commissioner Marcia E. Miller on Domestic Industry and Material Injury"); *Ferrovanadium and Nitrided Vanadium From Russia*, Inv. No. 731-TA-702 (Review), USITC Pub. 3420 at 21-22 (May 2001) ("Separate Views of Commissioner Marcia E. Miller on the Definition of the Domestic Industry").

[3] USV, or U.S. Vanadium Corporation, is a U.S. subsidiary of Strategic Metals Corporation, or "Stratcor."

[4] 19 U.S.C. § 1677(4)(A).

[5] *See, e.g., United States Steel Group v. United States*, 873 F. Supp. 673, 682-83 (Ct. Int'l Trade 1994), *aff'd*, 96 F.3d 1352 (Fed. Cir. 1996).

[6] Petitioners' Posthearing Brief at 5-6; Petitioners' Prehearing Brief at 4-12.

[7] Respondents' Prehearing Brief at 12-16.

(1) source and extent of the firm's capital investment;
(2) technical expertise involved in U.S. production activities;
(3) value added to the product in the United States;
(4) employment levels;
(5) quantity and type of parts sourced in the United States; and
(6) any other costs and activities in the United States directly leading to production of the like product.

No single factor is determinative and the Commission may consider any other factors it deems relevant.[8] The Commission has not included tollees in the domestic industry in cases where the tollee merely supplied the raw material and paid a fabrication fee to the toller, and did not itself produce the raw material.[9] Those cases, however, are distinguishable from the instant case where the tollees not only produce a substantial portion of the raw material supplied to the toller, but also meet a number of the other criteria demonstrating sufficient production-related activity in the United States.

Gulf in 2001 produced *** percent of the vanadium pentoxide, the intermediate product or raw material input, that Bear converted into ferrovanadium on Gulf's behalf.[10] Gulf owns 49.5 percent of the common stock of toll producer Bear and continues to engage in long-term tolling agreements with Bear.[11] The original cost of Gulf's investment in fixed assets related to the production of vanadium pentoxide, the intermediate product, was *** in 1999.[12] Gulf employs approximately *** workers in the production of vanadium pentoxide.[13] Vanadium pentoxide accounts for between *** percent and *** percent of the cost of the ferrovanadium sold by Gulf.[14] Gulf remains owner of the vanadium it supplies to toller Bear and assumes the financial risk of sale of the domestic like product.[15] Gulf negotiates the sales of ferrovanadium, arranges for shipping the product from Bear to Gulf's customers, and instructs Bear on how to package the toll-converted ferrovanadium, prepare the bill of lading, and load the trucks. In 2001 Gulf accounted for *** percent of domestic commercial shipments of ferrovanadium produced in the United States.[16]

USV converted vanadium pentoxide into ferrovanadium until 1994 and is still capable of making ferrovanadium at its Niagara Falls facility. It estimates it would take approximately one month and cost less than *** for USV to resume production of ferrovanadium at an annual production capacity of approximately *** pounds.[17] It continues to produce vanadium pentoxide, the intermediate product.

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[8] *Certain Pipe and Tube from Argentina, Brazil, Canada, India, Korea, Mexico, Singapore, Taiwan, Thailand, Turkey, and Venezuela*, Inv. Nos. 701-TA-253 (Review) and 731-TA-132, 252, 271, 273, 276, 277, 296, 409, 410, 532-534, 536, and 537 (Review), USITC Pub. 3316 at 16, n.77 (July 2000).

[9] *See, e.g., Furfuryl Alcohol From China and Thailand*, Inv. Nos. 731-TA-703 and 705 (Review), USITC Pub. 3412 at 6 (April 2001).

[10] Gulf's Questionnaire Response at 12, III-8.

[11] CR/PR at VI-1.

[12] CR/PR at Table VI-8.

[13] CR/PR at Table III-7.

[14] CR/PR at Table III-7, n.1.

[15] CR at III-5; PR at III-3; Petitioners' Prehearing Brief at 8.

[16] CR at III-2; PR at III-1.

[17] Petitioners' Posthearing Brief at "Answers to Questions Posed by the Commission and Staff," p. 13.

Vanadium pentoxide accounts for between *** percent and *** percent of the total cost of the ferrovanadium sold by USV.[18] USV produces vanadium pentoxide at its ***. The original cost of USV's *** in 1999, a significant investment in capital assets.[19] Additionally, in 1999 Stratcor, USV's parent, became a *** percent joint venture partner in CS Metals, a new *** facility for vanadium pentoxide production in Louisiana,[20] and during the period examined CS Metals supplied *** of its production of vanadium pentoxide to USV. USV provided an ***.[21] [22] During the period examined USV supplied Bear with vanadium pentoxide produced by USV and by its affiliate that Bear converted into ferrovanadium based on long-term toll-processing agreements.[23] Approximately *** people are employed in the production of vanadium pentoxide for USV.[24] USV, like Gulf, maintains title to the contained vanadium it supplies Bear and assumes the risk of sale of the ferrovanadium produced.[25] It arranges for shipment of the ferrovanadium from Bear to USV's customers and instructs Bear on how to package the ferrovanadium, prepare the bill of lading, and load the trucks. In 2001, USV accounted for *** percent of domestic shipments of ferrovanadium produced in the United States.[26]

Because both Gulf and USV have made *** investments in assets related to the production of vanadium pentoxide,[27] the intermediate product, retain title to and bear all risks related to the vanadium pentoxide they produce and the ferrovanadium produced on their behalf, contribute technical expertise and labor to the ultimate production of the like product, and contribute *** to the value added to the product, it is appropriate to include them in the domestic industry. While Bear, the toller for Gulf and USV, accounted for *** percent of the reported production of ferrovanadium in the United States in 2001 and virtually *** of the production of ferrovanadium from vanadium pentoxide, Bear's commercial sales of ferrovanadium are less than *** percent of its production.[28] Because over *** percent of Bear's ferrovanadium production is on behalf of and sold commercially by Gulf and USV, not including them in the domestic industry would omit nearly *** of the commercial sales of ferrovanadium produced in the United States. To have a clear understanding of the impact of subject imports on the domestic industry, as required by the statute, it is necessary to consider the operations of those domestic firms that represent such a significant share of U.S. commercial shipments of ferrovanadium. I also view the inclusion of Gulf and USV in the domestic industry in this investigation as consistent with the reasoning employed by

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[18] CR/PR at Table III-7, n.1.

[19] CR/PR at Table VI-8, n.3.

[20] CR/PR at II-1, n.1; CR at III-4, n.13; PR at III-3, n.13.

[21] Petition, vol. 1 at 21-22.

[22] During the third quarter of 2002, Stratcor sold its interest in CS Metals, ***. Petitioners' Prehearing Brief at 11, n.45.

[23] CR at VI-2; PR at VI-1-2.

[24] CR/PR at Table III-7.

[25] CR at III-5; PR at III-3.

[26] CR at III-2; PR at III-1.

[27] The vast majority of vanadium pentoxide (90-95 percent) produced in the United States is used to make ferrovanadium, and all U.S. vanadium pentoxide production in the United States is accounted for by Gulf, USV, and CS Metals, USV's affiliate during the period examined. Hearing Tr. at 151-152.

[28] CR at III-2; PR at III-1; CR/PR at Tables VI-3, F-1.

the Commission in the original determination on ferrovanadium from Russia and with my domestic industry finding in the sunset review of that case.[29]

I also find that appropriate circumstances do not exist to exclude any domestic producers as related parties under the statute.[30] The only domestic producer to fall within the related parties provision is USV, based on both the fact that its parent, Stratcor, directly controls Vametco, a South African producer of ferrovanadium, *** during the period of investigation. ***[31] Despite the ***, it does not appear appropriate to exclude USV as a related party. USV maintains that it ***.[32] The record therefore does not indicate that USV currently is benefitting from its relationship with a South African producer or that it is shielded substantially from the effects of import competition. Accordingly, inclusion of USV in the domestic industry does not present a distorted picture for my analysis of the domestic industry.

For all the foregoing reasons, I find that the domestic industry consists of Shieldalloy, Bear, ISA, Gulf, and USV.

II. MATERIAL INJURY BY REASON OF LTFV SUBJECT IMPORTS

In the final phase of antidumping duty investigations, the Commission determines whether an industry in the United States is materially injured by reason of the imports under investigation.[33] In making this determination, the Commission must consider the volume of imports, their effect on prices for the domestic like product, and their impact on domestic producers of the domestic like product, but only in the

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[29] *Ferrovanadium and Nitrided Vanadium From Russia*, Inv. No. 731-TA-712 (Final), USITC Pub. 2904 at 12 (June 1995); USITC Pub. 3420 at 21-22.

[30] Section 771(4)(B) of the Act allows the Commission, if appropriate circumstances exist, to exclude from the domestic industry producers that are related to an exporter or importer of subject merchandise or which are themselves importers. 19 U.S.C. § 1677(4)(B). The primary factors the Commission has examined in deciding whether appropriate circumstances exist to exclude a related party include: (1) the percentage of domestic production attributable to the importing producer; (2) the reason the U.S. producer has decided to import the product subject to investigation, *i.e.*, whether the firm benefits from the LTFV sales or subsidies or whether the firm must import in order to enable it to continue production and compete in the U.S. market; and (3) the position of the related producers vis-a-vis the rest of the industry, *i.e.*, whether inclusion or exclusion of the related party will skew the data for the rest of the industry. *See, e.g., Torrington Co. v. United States*, 780 F. Supp. 1161, 1168 (Ct. Int'l Trade 1992), *aff'd mem.*, 991 F.2d 809 (Fed. Cir. 1993). The Commission has also considered the ratio of import shipments to U.S. production for related producers and whether the primary interests of the related producers lie in domestic production or in importation. *See, e.g., Melamine Institutional Dinnerware from China, Indonesia, and Taiwan*, Inv. Nos. 731-TA-741-743 (Final), USITC Pub. 3016 at 14, n.81 (Feb. 1997). Exclusion of a producer under the related parties provision is within the Commission's discretion based upon the facts presented in each case. *Sandvik AB v. United States*, 721 F. Supp. 1322, 1331-32 (Ct. Int'l Trade 1989), *aff'd mem.*, 904 F.2d 46 (Fed. Cir. 1990).

[31] CR/PR at IV-1, n.3.

[32] CR/PR at IV-1.

[33] 19 U.S.C. § 1673d(b).

context of U.S. production operations.[34] The statute defines "material injury" as "harm which is not inconsequential, immaterial, or unimportant."[35] In assessing whether the domestic industry is

[34] 19 U.S.C. § 1677(7)(B)(i). The Commission "may consider such other economic factors as are relevant to the determination" but shall "identify each [such] factor . . . [a]nd explain in full its relevance to the determination." 19 U.S.C. § 1677(7)(B). *See also, Angus Chemical Co. v. United States*, 140 F.3d 1478 (Fed. Cir. 1998).

[35] 19 U.S.C. § 1677(7)(A).

materially injured by reason of subject imports, the Commission considers all relevant economic factors that bear on the state of the industry in the United States.[36] No single factor is dispositive, and all relevant factors are considered "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[37]

A. Conditions of Competition

I find the following conditions of competition relevant to my analysis.

Ferrovanadium sold in the United States is used primarily for steel-making, and demand for steel therefore drives demand for ferrovanadium.[38] *** reported that demand grew during the period examined due in part to the development of thin slab casting.[39] U.S. producers generally reported that demand had been down in 2001, due to declining steel production, but appeared to have regained some ground in 2002.[40] Importers generally agreed that U.S. ferrovanadium demand follows steel production.[41] Apparent U.S. consumption decreased overall by 8.3 percent from 1999 to 2001, but showed small increases from 1999 to 2000 and between the interim periods (first half of 2001 and first half of 2002).[42]

Ferrovanadium is a commodity product, and different grades compete against each other for sales. The record indicates that certain purchasers have the technical capability to use any grade of ferrovanadium and may switch grades on the basis of price.[43]

Ferrovanadium is bought and sold on the basis of the weight of contained vanadium.[44] There is a high degree of substitutability between the subject imports and the domestic like product, and price is an important factor in purchasing decisions.[45] U.S. producers reported that approximately *** of their sales are by contract, and the remainder are spot sales. Sales by importers are also a mix of contract and spot sales, although more heavily weighted toward spot sales.[46] Even when sold by contract, however, contracts for multiple shipments often use formula pricing that is keyed to published prices, based on spot sales, in such publications as *Ryan's Notes* and *American Metals Market*.[47] Producers and importers agreed that world prices can have an effect on U.S. prices. Producers stated that lower European prices for ferrovanadium, since at least 1999, were encouraging world suppliers to ship their product to the

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[36] 19 U.S.C. § 1677(7)(C)(iii).

[37] *Id*.

[38] CR at I-3, II-5; PR at I-2, II-3.

[39] CR at II-5; PR at II-3.

[40] CR at II-5; PR at II-3.

[41] CR at II-5; PR at II-3.

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

[43] CR at II-1-2, n.2; PR at II-1, n.2.

[44] CR at I-5; PR at I-4. All quantities of ferrovanadium cited in these views are in pounds of contained vanadium.

[45] CR at II-9-14; PR at II-6-9.

[46] CR/PR at V-3-4.

[47] CR/PR at V-3.

United States.[48] Most U.S. sales of both domestically produced and imported ferrovanadium are directly to end users.[49]

[48] CR at V-5; PR at V-4.

[49] CR at I-5; PR at I-4.

Ferrovanadium is produced from vanadium-bearing raw materials, such as vanadium pentoxide. Raw material costs declined significantly from 1999 to 2001.[50] U.S. producers made investments in their plants and equipment during the period examined that allowed them to utilize lower cost raw materials and achieve lower cost of sales.[51]

The record indicates that, while there are several possible substitutes for ferrovanadium, including nitrided vanadium, substitution occurs only in limited applications and only when ferrovanadium prices are relatively high. Substitution away from ferrovanadium generally appears to be rare.[52]

U.S. producers' inventories increased toward the end of the period, from *** pounds in 1999 to *** pounds in 2000, to *** pounds in 2001, and were higher in interim 2002, at *** pounds, than in interim 2001, at *** pounds.[53] U.S. importers' end-of-period inventories of subject imports decreased *** from *** pounds in 1999 to *** pounds in 2000, but then increased significantly to *** pounds in 2001, and were *** pounds in interim 2002, as compared to *** pounds in interim 2001.[54]

Non-subject imports, primarily from Austria, Belgium, Canada, and the Czech Republic, increased their U.S. market share by quantity, from 15.0 percent in 1999 to 18.1 percent in 2001, and to 36.4 percent in interim 2002.[55] Imports from Russia virtually ceased after an antidumping duty order was imposed in July 1995, and there were no imports of ferrovanadium from Russia during the period of investigation.[56]

B. Volume

Section 771(C)(i) of the Act provides that the "Commission shall consider whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States, is significant."[57]

The volume of cumulated subject imports increased significantly, by 50.1 percent from 1999 to 2001, as apparent U.S. consumption began to decline, and then showed a decline between the interim periods (January-June 2001 and 2002), likely due to the pendency of the petition, which was filed on November 26, 2001.[58] The volume of cumulated subject imports increased from 2.3 million pounds in 1999, to 3.5 million pounds in 2001, and was 1.6 million pounds in interim 2001, as compared to 514,000 pounds in interim 2002. The volume of imports from nonsubject countries increased by 10.8 percent from 1999 to 2001, and then continued to increase between the interim periods.[59]

Cumulated subject imports steadily gained U.S. market share over the period, from 17.8 percent, by quantity, in 1999 to 19.4 percent in 2000, and to 29.2 percent in 2001, as U.S. producers' U.S. market

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[50] CR/PR at Table VI-2.

[51] CR at VI-12; PR at VI-4.

[52] CR at II-6; PR at II-4.

[53] CR/PR at Table III-6.

[54] CR/PR at Table VII-3.

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

[56] CR/PR at I-2; Official Commerce Import Statistics, 1999-2001; Jan.-June 2001-2002.

[57] 19 U.S.C. § 1677(7)(C)(I).

[58] I note that the Commission has discretion under the statute, 19 U.S.C. § 1677(7)(I), to reduce the weight accorded to data for the period after the filing of the petition if it determines that changes in the volume, price effects, or impact of imports that occurred since the filing of the petition are related to the pendency of the investigation.

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

share declined from 67.2 percent in 1999 to 57.6 percent in 2000, and to 52.8 percent in 2001.[60] Cumulated subject imports thus captured market share at the expense of domestic producers. Nonsubject imports' U.S. market share increased somewhat from 1999 to 2000, and then declined in 2001 as subject import market share increased substantially.[61] As subject imports receded from the market in the first half of 2002, due to the pendency of the petition, nonsubject imports' U.S. market share increased. U.S. producers saw a slight loss in U.S. market share when interim 2001 and interim 2002 are compared.[62]

As a percent of U.S. production, the volume of subject imports *** over the period, before showing a decline in interim 2002 after the petition was filed. The ratio of subject imports to U.S. production increased steadily from *** percent in 1999 to *** percent in 2000 to *** percent in 2001, and was *** percent in interim 2002 as compared to *** percent in interim 2001.[63]

I find that the volume of cumulated subject imports and the increase in that volume, both in absolute terms and relative to domestic consumption and production in the United States, are significant.

C. Price

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

(I) there has been significant price underselling by the imported merchandise as compared with the price of domestic like products of the United States, and
(II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.[64]

The pricing data generally show dramatic declines in both U.S. prices and those of the subject imports from 1999 to 2001.[65] The average unit values ("AUVs") of the subject imports and of U.S. producers' U.S. sales showed similar trends, and the AUVs of the subject imports were lower than those of the U.S. product in 1999 and 2000, and slightly higher in 2001.[66] The AUVs of the subject imports were also lower than those of the nonsubject imports, except in interim 2002.[67] While the use of AUVs in general may present product mix issues, that possibility is diminished in this case by the apparent substitutability and competition among different grades of ferrovanadium. Prices recovered somewhat in the second quarter of 2002 but never returned to their levels at the beginning of the period examined.

The pricing data show very few instances of underselling by subject imports,[68] and I do not find underselling to be significant.[69] In a commodity market in which price is an important purchasing factor

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

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

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

[63] Calculated from data in CR/PR at Table C-1.

[64] 19 U.S.C. § 1677(7)(C)(ii).

[65] CR/PR at Tables V-1, V-2.

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

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

[68] CR/PR at Tables V-1, V-2.

[69] Contrary to respondents' assertion (Hearing Tr. at 112-113), the lack or infrequency of underselling does not
(continued...)

and published prices are widely available, underselling may be less frequent as prices adjust to each other. In any event, the absence of significant underselling does not mean that there can be no adverse price effects by reason of the subject imports, and I do find an indication that subject imports depressed and suppressed U.S. prices during the period. As noted, U.S. prices and subject import prices declined throughout the period, and U.S. prices never returned to their levels at the beginning of the period. In addition, although U.S. producers' COGS declined significantly over the period as raw material costs dropped, U.S. producers' net sales values declined more steeply. From 1999 to 2001, unit COGS declined by *** percent,[70] while unit sales values declined by *** percent.[71] U.S. producers were thus not able to sell at prices sufficient to recover their costs, and I attribute this cost-price squeeze in large part to the significant and growing presence of the subject imports in the U.S. market. As subject import volumes surged in 2001, U.S. producers lowered their prices in an attempt to win sales and retain market share. While this effort may explain the infrequency of underselling, as U.S. prices fell in response to declining subject import prices, the effort was not completely successful in that subject imports, not U.S. producers, gained market share.

Indeed, staff confirmed several instances of sales lost by domestic producers to subject imports, which further indicate the adverse price effects of subject imports. Staff confirmed lost sales in the amount of $*** and *** pounds (out of more than $*** and *** pounds in lost sales alleged by domestic producers).[72] Staff also confirmed one lost revenue allegation in the amount of *** pounds, where the U.S. producer was forced to lower its price from *** per pound to *** per pound because of competition from subject imports.[73]

Although respondents argue that an oversupply of vanadium and a downturn in demand from the steel industry are the cause of the current weakness in world ferrovanadium prices,[74] and in U.S. prices as well, I do not find this argument persuasive. The record shows a clear correlation between the rising volume of subject imports at steadily declining prices, and the steady drop in U.S. prices despite few instances of underselling. Record evidence also indicates that European prices for ferrovanadium were lower than U.S. prices throughout the period,[75] which, as petitioners argued, would provide an incentive for suppliers to seek out the U.S. market. With respect to alleged oversupply on the world market, I note that the South African producers' capacity to produce ferrovanadium increased *** during the period to

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[69] (...continued)
compel a negative determination. *See, e.g., Allegheny Ludlum Corp. v. United States*, 287 F.3d 1365, 1374 (Fed. Cir. 2002) ("the falling prices of the imported merchandise would seem to support a finding of material injury to domestic producers, despite the fact that the subject imports were priced higher than corresponding domestic like products"); *Cemex, S.A. v. United States*, 790 F. Supp. 290, 298 (Ct. Int'l Trade 1992) ("To require findings of underselling would be inconsistent with the proposition that price suppression or depression is sufficient."); *Florex v. United States*, 705 F. Supp. 582, 593 (Ct. Int'l Trade 1989) ("Furthermore, injury need not be based on a finding of injury by specific price underselling. ITC may consider, as it did, the suppressive price effects of the unfairly traded imports.")

[70] Contrary to respondents' argument that Shieldalloy uses an outdated and costly production process (Respondents' Prehearing Brief at 29), the record shows that Shieldalloy's raw material and total COGS *** during the period examined. CR/PR at Table VI-5.

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

[72] CR/PR at Table V-5.

[73] CR/PR at Table V-6.

[74] CR at II-5, V-5; PR at II-3, V-3-4.

[75] CR/PR at Table D-2.

the point that both their capacity and production currently ***.[76] The record thus indicates that the negative price effects and, as explained below, the overall deterioration in the domestic industry's condition over the period were due to the increasing volume of subject imports.

[76] CR/PR at Tables VII-2, C-1.

I therefore find that the increased volume of subject imports has depressed and suppressed U.S. prices to a significant degree.

D. Impact

In examining the impact of the subject imports on the domestic industry, I consider all relevant economic factors that bear on the state of the industry in the United States.[77] These factors include output, sales, inventories, capacity utilization, market share, employment, wages, productivity, profits, cash flow, return on investment, ability to raise capital, and research and development. No single factor is dispositive and all relevant factors are considered "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[78] [79]

Most financial and other performance indicators of the domestic industry declined over the period as subject import volumes surged and the unit values of subject imports declined. U.S. producers lost market share, and their production quantity, U.S. shipments, net sales, and capacity utilization all declined, as the quantity of inventories began to rise. U.S. producers' U.S. market share, by quantity, declined by 14.5 percentage points from 1999 to 2001; their U.S. production quantity declined by *** percent, from *** pounds in 1999 to *** pounds in 2001; and their U.S. shipments, by quantity, fell by 28.0 percent, and, by value, by 45.7 percent from 1999 to 2001. U.S. producers' net sales also declined from 1999 to 2001, by *** percent in terms of quantity and *** percent in terms of value. U.S. producers' capacity utilization dropped from *** percent in 1999 to *** percent in 2001, and was lower in interim 2002 than in interim 2001. Inventories of both U.S. product and subject imports increased from 1999 to 2001, and the ratio of U.S. producers' inventories to total shipments grew by *** percentage points over the same period.[80]

By 2001, the U.S. producers' operating margin had fallen to a negative *** percent, from a negative *** percent in 1999, and was a negative *** percent in 2000.[81] The evidence shows that the decline in profitability largely resulted from lower volume and the decline in average unit sales values. Although COGS also declined over the period, particularly as a result of a drop in raw material costs, domestic prices fell more sharply, and producers were not able to make a profit. Given the commodity nature of the product and the price competition that exists between subject imports and the domestic product, the evidence indicates that declining subject import prices, although not always below U.S. prices, resulted in U.S. producers lowering and keeping their prices low to retain or regain market share.

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[77] 19 U.S.C. § 1677(7)(C)(iii). *See also* SAA at 851 and 885 ("In material injury determinations, 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 also may demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports." *Id.* at 885).

[78] 19 U.S.C. § 1677(7)(C)(iii). *See also* SAA at 851 and 885 and *Live Cattle from Canada and Mexico*, Inv. Nos. 701-TA-386 and 731-TA-812-813 (Preliminary), USITC Pub. 3155 at 25, n.148 (Feb. 1999).

[79] The statute instructs the Commission to consider the "magnitude of the dumping margin" in an antidumping proceeding as part of its consideration of the impact of imports. 19 U.S.C. § 1677(7)(C)(iii)(V). In its final determinations, Commerce found the following dumping margins: for South Africa, 116 percent; for China, 13.03 percent for Panzhihua and a country-wide rate of 66.71 percent. *Notice of Final Determination of Sales at Less Than Fair Value: Ferrovanadium from the Republic of South Africa*, 67 Fed. Reg. 71136, 71137 (Nov. 29, 2002); *Notice of Final Determination of Sales at Less Than Fair Value: Ferrovanadium from the People's Republic of China*, 67 Fed. Reg. 71137, 71140 (Nov. 29, 2002).

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

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

The industry continued to perform poorly in interim 2002, with little or no improvement in most financial indicators and continued declines in some indicators. The U.S. producers' operating margin was a negative *** percent in interim 2002.[82] I attribute in part the industry's continued poor performance in 2002, even after subject imports began to recede from the market due to the pendency of the petition, to the continued sale of competitively priced imports out of inventory. U.S. importers' inventories of subject imports had grown to *** pounds in 2001, from approximately *** pounds in each of the two preceding years; inventories of subject imports then dropped to *** pounds in interim 2002, as subject product was sold out of inventory.[83] The growing presence of nonsubject imports in the U.S. market toward the end of the period may have also contributed to the industry's worsening condition. As noted, the AUVs of nonsubject imports were generally higher than those of subject imports and were close to U.S. producers' average unit sales values during the period examined. However, nonsubject imports' AUVs were at their lowest in interim 2002 and were substantially below U.S. producers' average unit sales values.[84] The fact that nonsubject imports may have added to the industry's financial difficulties, particularly late in the period examined, does not, however, negate a finding that the industry experienced material injury by reason of the subject imports.

I therefore find that the increased volume of cumulated subject imports from China and South Africa, with their depressing and suppressing effects on U.S. prices, are having a significant adverse impact on the domestic industry.

CONCLUSION

For the reasons stated above, I determine that the domestic industry producing ferrovanadium is materially injured by reason of subject imports of ferrovanadium from China and South Africa that are sold in the United States at less than fair value.

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

[83] CR/PR at Table VII-3.

[84] Respondents argue that imports in the U.S. market have been "stable" and that the presence of nonsubject imports shows that the "U.S. market requires imports." Respondents' Posthearing Brief at 5. The record does not support this contention. U.S. producers' U.S. market share declined by 14.5 percentage points from 1999 to 2001; imports were therefore not stable, but increasing, and the increase during this period is attributable mainly to subject imports, whose market share grew by 11.3 percentage points from 1999 to 2001. Furthermore, U.S. capacity to produce ferrovanadium currently exceeds U.S. demand, but U.S. production and capacity utilization levels have been curtailed by the growth in subject imports. CR/PR at Table C-1.