Aluminum Wire and Cable from China

Investigation Nos. 701-TA-611 and 731-TA-1428 (Final)

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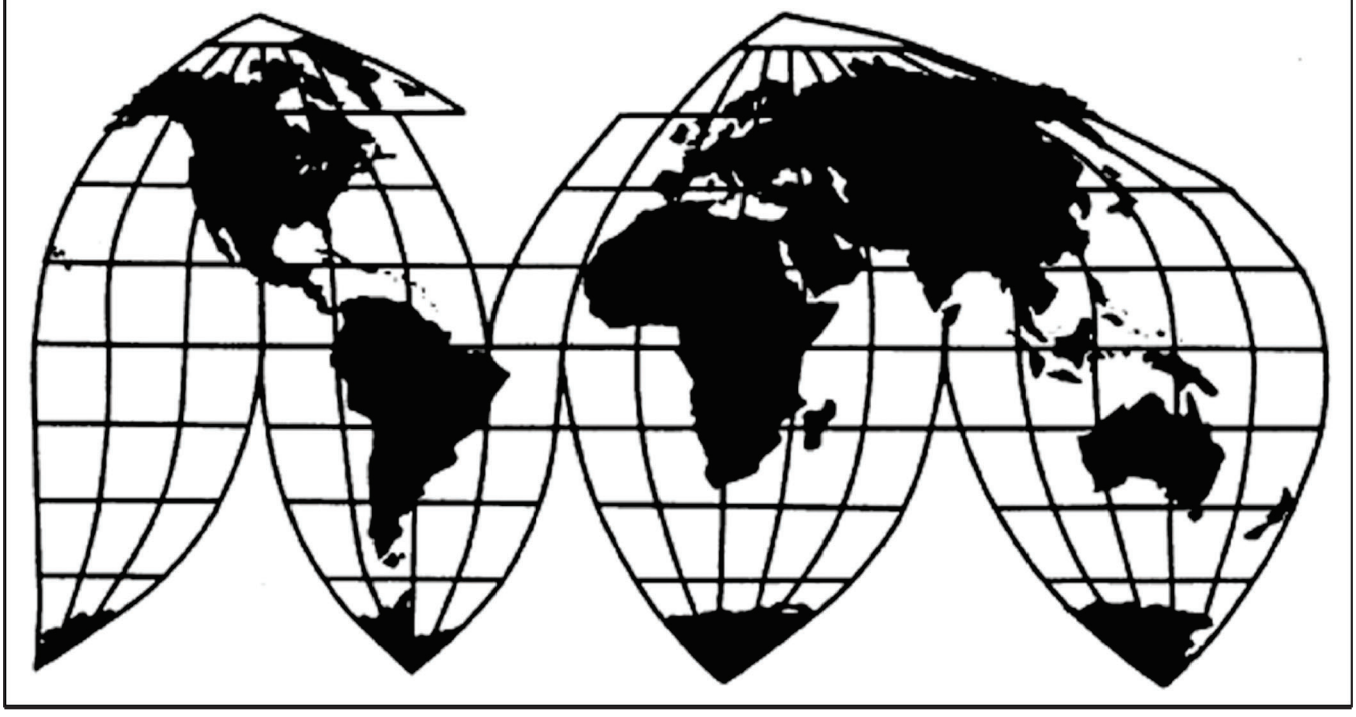

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UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation Nos. 701-TA-611 and 731-TA-1428 (Final)

Aluminum Wire and Cable from China

DETERMINATIONS

On the basis of the record[1] developed in the subject investigations, the United States International Trade Commission ("Commission") determines, pursuant to the Tariff Act of 1930 ("the Act"), that an industry in the United States is materially injured by reason of imports of aluminum wire and cable from China, provided for in subheading 8544.49.90 of the Harmonized Tariff Schedule of the United States, that have been found by the U.S. Department of Commerce ("Commerce") to be sold in the United States at less than fair value ("LTFV"), and to be subsidized by the government of China.

BACKGROUND

The Commission, pursuant to sections 705(b) and 735(b) of the Act (19 U.S.C. 1671d(b) and 19 U.S.C. 1673d(b)), instituted these investigations effective September 21, 2018, following receipt of petitions filed with the Commission and Commerce by Encore Wire Corporation, McKinney, Texas, and Southwire Company, LLC, Carrollton, Georgia. The final phase of the investigations was scheduled by the Commission following notification of preliminary determinations by Commerce that imports of aluminum wire and cable from China were subsidized within the meaning of section 703(b) of the Act (19 U.S.C. 1671b(b)) and sold at LTFV within the meaning of 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* on June 28, 2019 (84 FR 31101). The hearing was held in Washington, DC, on October 17, 2019, and all persons who requested the opportunity were permitted to appear in person or by counsel.

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

Views of the Commission

Based on the record in the final phase of these investigations, we determine that an industry in the United States is materially injured by reason of imports of aluminum wire and cable ("AWC") from China found by the U.S. Department of Commerce ("Commerce") to be sold in the United States at less than fair value ("LTFV") and to be subsidized by the government of China.

I. Background

Encore Wire Corporation ("Encore") and Southwire Company, LLC ("Southwire") (collectively "Petitioners"), U.S. producers of AWC, filed the petitions in these investigations on September 21, 2018.[1] Petitioners separately submitted prehearing briefs,[2] and jointly submitted a posthearing brief.[3] Representatives of both companies appeared at the hearing accompanied by counsel. Respondent Priority Wire and Cable, Inc. ("Priority"), an importer of subject merchandise, submitted comments on draft Commission questionnaires, but did not otherwise participate in these final phase investigations.[4] No other respondent party participated in these final phase investigations.

U.S. industry data are based on questionnaire responses of five firms, accounting for all known domestic production of AWC in 2018.[5] U.S. import data are based on questionnaire responses of 14 U.S. importers, accounting for the majority of U.S. imports of AWC from China and all other sources in 2018.[6] One foreign producer, Shanghai Cable Works Co. Ltd.,

[1] Confidential Report, Memorandum INV-RR-117 (Nov. 6, 2019) ("CR") at I-1; Public Report, *Aluminum Wire and Cable from China*, Inv. Nos. 701-TA-611 and 731-TA-1428 (Final), USITC Pub. 5001 (Dec. 2019) ("PR") at I-1.

[2] Encore's Prehearing Brief, EDIS Doc. 690905 (Oct. 10, 2019); Southwire's Prehearing Brief, EDIS Doc. 690957 (Oct. 10, 2019).

[3] Petitioners' Joint Posthearing Brief, EDIS Doc. 692230 (Oct. 25, 2019). Petitioners also jointly submitted final comments. *See* Petitioners' Joint Final Comments, EDIS Doc. 694585 (Nov. 20, 2019).

[4] Priority's Comments on Draft Questionnaires, EDIS Doc. 672021 (Apr. 2, 2019). Priority participated in the staff conference and submitted a postconference brief in the preliminary phase of these investigations.

[5] CR/PR at I-4 and III-1.

[6] CR/PR at I-4. Specifically, based on the pertinent Harmonized Tariff Schedule ("HTS") basket category, these 14 firms accounted for *** percent of total imports from China, *** percent of imports from all other sources, and *** percent of imports from all sources. *See* CR/PR at IV-1 n.3.

responded to the Commission's questionnaire; it accounted for approximately *** percent of production of AWC in China in 2018, and *** percent of subject imports in 2018.[7]

II. 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 subject merchandise, the Commission first defines the "domestic like product" and the "industry."[8] Section 771(4)(A) of the Tariff Act of 1930, as amended ("the Tariff Act"), defines the relevant domestic industry as the "producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product."[9] In turn, the Tariff Act defines "domestic like product" as "a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation."[10]

The decision regarding the appropriate domestic like product 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.[11] No single factor is dispositive, and the Commission may consider other factors it deems relevant based on the facts of a particular investigation.[12] The Commission looks for clear dividing lines among

[7] CR/PR at VII-3.

[8] 19 U.S.C. § 1677(4)(A).

[9] 19 U.S.C. § 1677(4)(A).

[10] 19 U.S.C. § 1677(10).

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

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

possible like products and disregards minor variations.[13] Although the Commission must accept Commerce's determination as to the scope of the imported merchandise that is subsidized or sold at LTFV,[14] the Commission determines what domestic product is like the imported articles Commerce has identified.[15]

B. Product Description

Commerce has defined the scope of the imported merchandise under investigation as follows:

> {A}luminum wire and cable, which is defined as an assembly of one or more electrical conductors made from 8000 Series Aluminum Alloys (defined in accordance with ASTM B800), Aluminum Alloy 1350 (defined in accordance with ASTM B230/B230M or B609/B609M), and/or Aluminum Alloy 6201 (defined in accordance with ASTM B398/B398M), provided that: (1) At least one of the electrical conductors is insulated; (2) each insulated electrical conductor has a voltage rating greater than 80 volts and not exceeding 1,000 volts; and (3) at least one electrical conductor is stranded and has a size not less than 16.5 thousand circular mil (kcmil) and not greater than 1,000 kcmil. The assembly may: (1) Include a grounding or neutral conductor; (2) be clad with aluminum, steel, or other base metal; or (3) include a steel support center wire, one or more connectors, a tape shield, a jacket or other covering, and/or filler materials.

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

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

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

> Most aluminum wire and cable products conform to National Electrical Code (NEC) types THHN, THWN, THWN-2, XHHW-2, USE, USE-2, RHH, RHW, or RHW-2, and also conform to Underwriters Laboratories (UL) standards UL-44, UL-83, UL-758, UL-854, UL-1063, UL-1277, UL-1569, UL-1581, or UL-4703, but such conformity is not required for the merchandise to be included within the scope.
>
> The scope of the investigation specifically excludes aluminum wire and cable products in lengths less than six feet, whether or not included in equipment already assembled at the time of importation.
>
> The merchandise covered by the investigation is currently classifiable under subheading 8544.49.9000 of the Harmonized Tariff Schedule of the United States (HTSUS). Products subject to the scope may also enter under HTSUS subheading 8544.42.9090. The HTSUS subheadings are provided for convenience and customs purposes. The written description of the scope of the investigation is dispositive."[16]

AWC products are insulated electrical conductors, manufactured to meet industry standards and electrical codes. AWC is used in the transmission and distribution of electricity, using aluminum's relatively high thermal and electrical conductivities to transmit electrical power in industrial and commercial applications, as well as in some residential applications.[17]

C. Domestic Like Product Analysis

In the preliminary determinations, the Commission defined a single domestic like product consisting of AWC, coextensive with the scope of the investigations.[18] It found that all AWC shared the same basic physical characteristics and uses, was manufactured in the same

[16] *Aluminum Wire and Cable from the People's Republic of China: Final Affirmative Determination of Sales at Less Than Fair Value*, 84 Fed. Reg. 58134, 58136 (Dep't Commerce Oct. 30, 2019); *Aluminum Wire and Cable from the People's Republic of China: Final Affirmative Countervailing Duty Determination*, 84 Fed. Reg. 58137, 58138 (Dep't Commerce Oct. 30, 2019).

[17] *See generally* CR/PR at I-9-12.

[18] *Aluminum Wire and Cable from China*, Inv. Nos. 701-TA-611 and 731-TA-1428 (Preliminary), USITC Pub. 4843 at 8 (Nov. 2018) ("Preliminary Determinations").

production facilities by the same employees using common production processes, and that AWC made to a particular specification was interchangeable.[19]

In the final phase of these investigations, Petitioners argue that the Commission should again define a single domestic like product coextensive with the scope of the investigations.[20] The record in this final phase contains no new information concerning the characteristics and uses of AWC,[21] and no party has argued for a definition of the domestic like product different from that adopted in the preliminary phase.[22] Accordingly, we define a single domestic like product consisting of AWC, coextensive with the scope of the investigations.

III. Domestic Industry

The domestic industry is defined as the domestic "producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product."[23] 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.

There are no related party or other domestic industry issues in these investigations.[24] Accordingly, and in light of our definition of the domestic like product, we define the domestic industry to include all five U.S. producers of AWC.[25]

[19] Preliminary Determinations, USITC Pub. 4843 at 8. By contrast, the Commission found that copper wire and cable had distinct physical characteristics from AWC due to the differences in raw materials and production processes used. *Id*. at 7-8.

[20] Encore's Prehearing Brief at 6-8; Southwire's Prehearing Brief at 5-7.

[21] *See generally* CR/PR at I-9-14.

[22] CR/PR at I-15.

[23] 19 U.S.C. § 1677(4)(A).

[24] No U.S. producers of AWC are related to exporters or importers of subject merchandise, nor do any domestic producers import subject merchandise. *See* CR/PR at III-2.

[25] These producers are: Encore, Southwire, Nexans Group ("Nexans"), Prysmian Group ("Prysmian") and Cerro Wire LLC ("Cerro"). *See* CR/PR at Table III-1.

IV. Material Injury by Reason of Subject Imports[26]

Based on the record in the final phase of these investigations, we find that an industry in the United States is materially injured by reason of imports of AWC from China that Commerce has found to be sold in the United States at LTFV and to be subsidized by the government of China.

A. Legal Standards

In the final phase of antidumping and countervailing duty investigations, the Commission determines whether an industry in the United States is materially injured or threatened with material injury by reason of the imports under investigation.[27] In making this determination, the Commission must consider the volume of subject imports, their effect on prices for the domestic like product, and their impact on domestic producers of the domestic like product, but only in the context of U.S. production operations.[28] The statute defines "material injury" as "harm which is not inconsequential, immaterial, or unimportant."[29] In assessing whether the domestic industry is materially injured by reason of subject imports, we consider all relevant economic factors that bear on the state of the industry in the United States.[30] 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."[31]

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[26] Pursuant to section 771(24) of the Tariff Act, imports from a subject country of merchandise corresponding to the domestic like product that account for less than 3 percent of all such merchandise imported into the United States in the most recent 12-month period for which data are available preceding the filing of the petition shall generally be deemed negligible. 19 U.S.C. § 1677(24)(A)(i). The exceptions to this general provision are not pertinent here.

Subject imports from China accounted for 61.4 percent of total U.S. imports of AWC in the 12-month period (September 2017 to August 2018) preceding the filing of the petitions. *See* CR/PR at Table IV-3. Because subject imports from China exceed the applicable statutory negligibility threshold, we find that they are not negligible.

[27] 19 U.S.C. §§ 1671d(b), 1673d(b). The Trade Preferences Extension Act of 2015, Pub. L. 114-27, amended the provisions of the Tariff Act pertaining to Commission determinations of material injury and threat of material injury by reason of subject imports in certain respects.

[28] 19 U.S.C. § 1677(7)(B). The Commission "may consider such other economic factors as are relevant to the determination" but shall "identify each {such} factor ... and explain in full its relevance to the determination." 19 U.S.C. § 1677(7)(B).

[29] 19 U.S.C. § 1677(7)(A).

[30] 19 U.S.C. § 1677(7)(C)(iii).

[31] 19 U.S.C. § 1677(7)(C)(iii).

Although the statute requires the Commission to determine whether the domestic industry is "materially injured or threatened with material injury by reason of" unfairly traded imports,[32] it does not define the phrase "by reason of," indicating that this aspect of the injury analysis is left to the Commission's reasonable exercise of its discretion.[33] In identifying a causal link, if any, between subject imports and material injury to the domestic industry, the Commission examines the facts of record that relate to the significance of the volume and price effects of the subject imports and any impact of those imports on the condition of the domestic industry. This evaluation under the "by reason of" standard must ensure that subject imports are more than a minimal or tangential cause of injury and that there is a sufficient causal, not merely a temporal, nexus between subject imports and material injury.[34]

In many investigations, there are other economic factors at work, some or all of which may also be having adverse effects on the domestic industry. Such economic factors might include nonsubject imports; changes in technology, demand, or consumer tastes; competition among domestic producers; or management decisions by domestic producers. The legislative history explains that the Commission must examine factors other than subject imports to ensure that it is not attributing injury from other factors to the subject imports, thereby inflating an otherwise tangential cause of injury into one that satisfies the statutory material injury threshold.[35] In performing its examination, however, the Commission need not isolate

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[32] 19 U.S.C. §§ 1671d(a), 1673d(a).

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

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

[35] Uruguay Round Agreements Act Statement of Administrative Action (SAA), H.R. Rep. 103-316, vol. I at 851-52 (1994) ("{T}he Commission must examine other factors to ensure that it is not attributing injury from other sources to the subject imports."); S. Rep. 96-249 at 75 (1979) (the Commission "will consider information which indicates that harm is caused by factors other than less-than-fair-value imports."); H.R. Rep. 96-317 at 47 (1979) ("in examining the overall injury being experienced by a domestic industry, the ITC will take into account evidence presented to it which demonstrates that the harm attributed by the petitioner to the subsidized or dumped imports is attributable to such other factors;" those factors include "the volume and prices of nonsubsidized imports or imports sold at fair

the injury caused by other factors from injury caused by unfairly traded imports.[36] Nor does the "by reason of" standard require that unfairly traded imports be the "principal" cause of injury or contemplate that injury from unfairly traded imports be weighed against other factors, such as nonsubject imports, which may be contributing to overall injury to an industry.[37] It is clear that the existence of injury caused by other factors does not compel a negative determination.[38]

Assessment of whether material injury to the domestic industry is "by reason of" subject imports "does not require the Commission to address the causation issue in any particular way" as long as "the injury to the domestic industry can reasonably be attributed to the subject imports."[39] The Commission ensures that it has "evidence in the record" to "show that the harm occurred 'by reason of' the LTFV imports," and that it is "not attributing injury from other

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value, contraction in demand or changes in patterns of consumption, trade restrictive practices of and competition between the foreign and domestic producers, developments in technology and the export performance and productivity of the domestic industry"); *accord Mittal Steel*, 542 F.3d at 877.

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

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

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

[39] *Mittal Steel*, 542 F.3d at 876, 878; *see also id.* at 873 ("While the Commission may not enter an affirmative determination unless it finds that a domestic industry is materially injured 'by reason of' subject imports, the Commission is not required to follow a single methodology for making that determination ... {and has} broad discretion with respect to its choice of methodology.") *citing United States Steel Group v. United States*, 96 F.3d 1352, 1362 (Fed. Cir. 1996) and S. Rep. 96-249 at 75. In its decision in *Swiff-Train v. United States*, 793 F.3d 1355 (Fed. Cir. 2015), the Federal Circuit affirmed the Commission's causation analysis as comporting with the Court's guidance in *Mittal*.

sources to the subject imports." [40] The Federal Circuit has examined and affirmed various Commission methodologies and has disavowed "rigid adherence to a specific formula."[41]

The question of whether the material injury threshold for subject imports is satisfied notwithstanding any injury from other factors is factual, subject to review under the substantial evidence standard.[42] Congress has delegated this factual finding to the Commission because of the agency's institutional expertise in resolving injury issues.[43]

B. Conditions of Competition and the Business Cycle

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

1. Demand Conditions

AWC is generally used to conduct electrical power in residential, industrial, and commercial applications.[44] U.S. demand for AWC is accordingly driven by construction activity.[45] Private construction spending increased by 13 percent over the period of investigation (January 2016 to June 2019).[46] Most responding U.S. producers and importers reported that U.S. demand for AWC had increased since the beginning of the period of investigation, while a plurality of responding purchasers reported that demand for AWC had fluctuated.[47]

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[40] *Mittal Steel*, 542 F.3d at 873 (quoting from *Gerald Metals*, 132 F.3d at 722), 877-79. We note that one relevant "other factor" may involve the presence of significant volumes of price-competitive nonsubject imports in the U.S. market, particularly when a commodity product is at issue. In appropriate cases, the Commission collects information regarding nonsubject imports and producers in nonsubject countries in order to conduct its analysis.

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

[42] We provide in our discussion below a full analysis of other factors alleged to have caused any material injury experienced by the domestic industry.

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

[44] CR/PR at I-9.

[45] CR/PR at II-1. The other demand drivers for AWC are electricity usage and overall economic activity. *Id*.

[46] CR/PR at II-9.

[47] CR/PR at Table II-5.

Apparent U.S. consumption of AWC increased by 10.2 percent between 2016 and 2018, from 430.3 million pounds in 2016 to 466.8 million pounds in 2017 and 473.9 million pounds in 2018. It was 236.0 million pounds in January-June ("interim") 2018, and higher, at 241.0 million pounds, in interim 2019.[48]

2. Supply Conditions

The domestic industry was the dominant supplier of AWC to the U.S. market throughout the period of investigation, although its market share declined. Specifically, the domestic industry's market share fell from 73.5 percent in 2016 to 70.0 percent in 2017 and 69.4 percent in 2018. It was 71.7 percent in interim 2018 and lower, at 70.8 percent, in interim 2019.[49]

As previously mentioned, the domestic industry consists of five firms: Encore, Nexans, Cerro, Prysmian, and Southwire.[50] Prysmian and Southwire collectively accounted for *** percent of domestic production in 2018,[51] and an industry hearing witness described Southwire as a leading U.S. producer of AWC.[52] The domestic industry's capacity grew from 2016 to 2018, and exceeded apparent U.S. consumption throughout the period of investigation.[53]

Subject imports' share of apparent U.S. consumption increased from *** percent in 2016 to 17.6 percent in 2017 and 18.0 percent in 2018. It was 17.7 percent in interim 2018 and lower, at 9.8 percent, in interim 2019.[54]

Nonsubject imports' share of apparent U.S. consumption increased from *** percent in 2016 to 12.5 percent in 2017 and 12.6 percent in 2018. It was 10.6 percent in interim 2018 and, higher, at 19.4 percent, in interim 2019.[55] The largest sources of nonsubject imports during the period of investigation included Ecuador, Mexico, and Turkey.[56]

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[48] CR/PR at Tables IV-5 and C-1.

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

[50] CR/PR at Table III-1. Prysmian reported ***. *Id*. ***. *See* CR/PR at III-3.

[51] CR/PR at Table III-1. Prysmian and Southwire accounted for *** and *** percent of domestic production in 2018, respectively. *Id*.

[52] Hearing Transcript, p. 24 (Asher).

[53] CR/PR at Table C-1. The domestic industry's capacity was slightly lower in interim 2019 than in interim 2018. *See* CR/PR at Table III-4.

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

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

[56] CR/PR at II-6.

3. Substitutability and Other Conditions

We find that the domestic like product and subject imports are highly substitutable.[57] The record reflects that AWC types are standardized across the industry, and that all AWC of a given type is interchangeable, irrespective of manufacturer.[58] Most responding U.S. producers (four of five), importers (eight of ten) and purchasers (four of five) reported that the domestic like product and subject imports are either "always" or "frequently" interchangeable.[59] Further, most responding purchasers reported that the domestic like product and subject imports are "comparable" across 17 of 18 purchasing factors.[60]

Price is an important factor in purchasing decisions for AWC. Ten of 11 responding purchasers rated price as a "very important" factor in their purchasing decisions for AWC, with the remaining purchaser rating it as "somewhat important."[61] More purchasers ranked "price/cost" as among the top three factors they consider in their purchasing decisions for AWC than any other factor.[62] Moreover, six of 11 responding purchasers reported that they usually or always purchase the lowest-priced AWC.[63]

Prices for AWC are publicly available in supplier-issued price lists, which tend to be very similar across the industry. Volume and other discounts are commonly applied to list prices such that the final net price, where competition occurs for sales, includes these discounts. Petitioners state that purchasers routinely quote competing supplier discounts during negotiations in an attempt to secure larger discounts, resulting in a market with highly transparent pricing.[64] A majority of sales of both the domestic like product and subject imports are made through spot sales.[65]

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[57] CR/PR at II-12.

[58] CR/PR at I-12. *See also* Hearing Transcript, p. 24 (Asher) ("AWC products are produced to industry-wide standards. That means that a given AWC product is interchangeable, regardless of whether the supplier is Southwire, Encore or a Chinese importer.").

[59] CR/PR at Table II-11

[60] CR/PR at Table II-10. Two purchasers described the domestic like product as superior to Chinese product in delivery time. *Id*.

[61] CR/PR at Table II-8.

[62] CR/PR at Table II-7. Specifically, "price/cost" was a top three factor for 10 purchasers, followed by "quality" and "availability/supply", which were each named as among the top three factors by eight purchasers. *Id*.

[63] CR/PR at II-14.

[64] CR/PR at V-6.

[65] CR/PR at Table V-3. For the domestic like product, *** percent of U.S. commercial shipments in 2018 were made through spot sales, *** percent through long-term contracts, *** percent through short-term contracts, and *** percent through annual contracts. *Id*. For subject imports, *** percent of

The principal substitute product for AWC is copper wire and cable, as both AWC and copper wire and cable can deliver electricity. Substitution is limited, however, by local building ordinances and/or project specifications that may require one product over the other, as well as copper's heavier weight and greater cost relative to aluminum.[66]

Raw materials accounted for approximately 71 percent of the cost of goods sold ("COGS") for AWC during the period of investigation.[67] The major raw material used to produce AWC is aluminum wire rod. U.S. producers either produce their own aluminum wire rod from primary aluminum and alloying materials, or they purchase wire rod, which can be made from a combination of primary aluminum and aluminum alloy scrap.[68] The price of aluminum sheet scrap increased by *** percent from January 2016 to June 2018, then declined by *** percent from June 2018 to August 2019, with an overall decline of *** percent over the period of investigation.[69] The price of primary aluminum, as measured by the London Metal Exchange, increased by *** percent from January 2016 to May 2018, then decreased by *** percent from May 2018 to August 2019, with an overall increase of *** percent over the period of investigation.[70]

The President issued a proclamation imposing a ten percent tariff on imports of certain aluminum products under Section 232 of the Trade Expansion Act of 1962 ("Section 232 tariffs")[71] in March 2018.[72] The Section 232 tariffs apply to aluminum wire rod, but not to AWC.[73] All responding U.S. producers reported that the Section 232 tariffs contributed to increases in their raw material costs.[74]

The United States Trade Representative ("USTR") imposed a 25 percent tariff on products from China entering under HTS subheading 8544.49.90, a category including AWC (without connectors), under Section 301 of the Trade Act of 1974 ("Section 301 tariffs")[75] in July

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sales in 2018 were made through spot sales, *** percent through short-term contracts, and *** percent through annual contracts. *Id.*

[66] CR/PR at II-11.

[67] CR/PR at Table VI-I.

[68] CR/PR at V-1.

[69] CR/PR at V-1.

[70] CR/PR at V-2.

[71] 19 U.S.C. § 1862.

[72] CR/PR at I-7 and E-3; *Adjusting Imports of Aluminum into the United States*, Presidential Proclamation 9704, March 8, 2018, 83 Fed. Reg. 11619 (Executive Office of the President Mar. 15, 2018).

[73] CR/PR at I-7 and E-3; *Adjusting Imports of Aluminum into the United States*, Presidential Proclamation 9704, March 8, 2018, 83 Fed. Reg. 11619 (Executive Office of the President Mar. 15, 2018).

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

[75] 19 U.S.C. § 2411.

2018.[76] USTR imposed a 10 percent Section 301 tariff on products from China entering under HTS subheading 8544.42.9090, a category including AWC (with connectors), in September 2018,[77] escalating this duty rate to 25 percent in June 2019.[78] AWC without connectors was excluded from Section 301 tariffs in September 2019,[79] and AWC with connectors was excluded the following month.[80]

C. Volume of Subject Imports

Section 771(7)(C)(i) of the Tariff Act provides that the "Commission shall consider whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States, is significant."[81]

The quantity of subject imports rose from 66.3 million pounds in 2016 to 92.6 million pounds in 2017, and then declined to 85.0 million pounds in 2018.[82] The market share of subject imports increased from *** percent in 2016 to 17.6 percent in 2017 and 18.0 percent in

[76] CR/PR at I-7-9 and E-4; *Notice of Action and Request for Public Comment Concerning Proposed Determination of Action Pursuant to Section 301: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation*, 83 Fed. Reg. 28710 (USTR Jun. 20, 2018).

[77] CR/PR at I-7-9 and E-4; *Notice of Modification of Section 301 Action: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation*, 83 Fed. Reg. 47974 (USTR Sep. 21, 2018).

[78] CR/PR at I-7-9 and E-4; *Additional Implementing Modification to Section 301 Action: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation*, 84 Fed. Reg. 26930 (USTR Jun. 10, 2019).

[79] CR/PR at I-7-9; *Notice of Product Exclusions: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property and Innovation*, 84 Fed. Reg. 49564 (USTR Sept. 20, 2019).

[80] CR/PR at I-7-9; *Notice of Product Exclusions: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation*, 84 Fed. Reg. 57803 (USTR Oct. 28, 2019).

[81] 19 U.S.C. § 1677(7)(C)(i).

[82] CR/PR at Table IV-2. Subject import quantity was 41.5 million pounds in interim 2018 and 5.9 million pounds in interim 2019. *Id*. Petitioners contend that the filing of the petitions in September 2018 caused subject imports to recede from the U.S. market. *See* Joint Posthearing Brief at I-7-8. We agree, although we acknowledge that the Section 301 tariffs on AWC from China, which came into effect at roughly the same time that the petitions in these investigations were filed, may also have played a role in reducing subject import volumes in interim 2019. We therefore accord reduced weight to the interim 2019 data in making our material injury determinations. *See* 19 U.S.C. § 1677(7)(I).

2018.[83] Subject imports gained *** percentage points of market share at the expense of the domestic industry, which lost 4.1 percentage points overall, between 2016 and 2018.[84]

In light of the foregoing, we find that the volume of subject imports and the increase in that volume are significant in absolute terms and relative to U.S. consumption.

D. Price Effects of the Subject Imports

Section 771(7)(C)(ii) of the Tariff 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.[85]

As discussed above in section IV.B.3, the record indicates that the domestic like product and subject imports are highly substitutable and that price is an important consideration in purchasing decisions for AWC.

The Commission collected quarterly pricing data from U.S. producers and importers for six AWC products shipped to unrelated U.S. customers during the period of investigation.[86] Five

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[83] CR/PR at Table IV-5. Subject imports' market share was 17.7 percent in interim 2018 and lower, at 9.8 percent, in interim 2019. *Id*.

[84] The domestic industry's share of apparent U.S. consumption declined from 73.5 percent in 2016 to 70.0 percent in 2017 and 69.4 percent in 2018. *See* CR/PR at Table IV-4.

[85] 19 U.S.C. § 1677(7)(C)(ii).

[86] CR/PR at V-9. The six pricing products are:

Product 1.-- Type SE (Style R) cables containing three 600 volt conductors made of Aluminum Alloy 8000 Series, plus a neutral/ground wire, with American Wire Gauge (AWG) sizes of 4/0, 4/0, 4/0, and 2/0, and excluding Sureseal and Powerglide.

Product 2.--"Sweetbriar" underground distribution cables containing two 600 volt conductors made of Aluminum Alloy 1350 Series, plus a neutral/ground wire, with American Wire Gauge (AWG) sizes of 4/0, 4/0, and 2/0, excluding Sureseal and Powerglide.

Product 3.-- Type XHHW wires rated at 600 volts, with the conductor made of Aluminum Alloy 8000 Series, with a size of 500 kcmil, excluding Sureseal and Powerglide.

U.S. producers and seven importers provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters.[87] The pricing data reported by these firms accounted for approximately *** percent of U.S. producers' U.S. shipments of AWC and *** percent of importers' U.S. shipments of subject imports in 2018.[88]

Between 2016 and 2018,[89] subject imports undersold the domestic like product in *** of *** quarterly comparisons, involving *** pounds of AWC, with an average underselling margin of *** percent.[90] In the remaining *** quarterly comparisons, involving *** pounds of AWC, subject imports were priced higher than the domestic like product, with an average overselling margin of 2.7 percent.[91]

Further, purchaser questionnaire responses confirm that the underselling by subject imports caused the domestic industry to lose sales. Specifically, four of 11 responding purchasers reported that price was a primary reason why they had purchased subject imports instead of the domestic like product.[92]

Given the above, and the high degree of substitutability between subject imports and the domestic like product and the importance of price in purchasing decisions, we find the underselling by subject imports to be significant.

Product 4.--"Wittenburg" underground distribution cables containing three 600 volt conductors made of Aluminum Alloy 1350 Series, plus a neutral ground wire, with American Wire Gauge (AWG) sizes of 2, 2, 2, and 2, and excluding Sureseal and Powerglide.

Product 5.-- Type SE (Style R) cables containing three 600 volt conductors made of Aluminum Alloy 8000 Series, plus a neutral/ground wire, with American Wire Gauge (AWG) sizes of 6, 6, 6, and 6, and excluding Sureseal and Powerglide.

Product 6.-- Type XHHW wires rated at 600 volts, with the conductor made of Aluminum Alloy 8000 Series, with a size of 250 kcmil, and excluding Sureseal and Powerglide.

[87] CR/PR at V-10.

[88] CR/PR at V-10.

[89] As stated above, because of the pendency of these investigations, and the related drop in subject import volumes in interim 2019, we accord greater weight to the data from 2016 to 2018 for our price effects analysis. *See* 19 U.S.C. § 1677(7)(I).

[90] Derived from CR/PR Tables V-4-9. Of the *** quarterly comparisons comprising all periods examined (including interim 2019), subject imports undersold the domestic like product in *** quarters, with an average margin of underselling of *** percent. *See* CR/PR at Table V-11.

[91] Derived from CR/PR Tables V-4-9. Of the *** quarterly comparisons comprising all periods examined (including interim 2019), subject imports oversold the domestic like product in *** quarters, with an average margin of overselling of *** percent. *See* CR/PR at Table V-11.

[92] CR/PR at V-25. Additionally, two responding purchasers reported that U.S. producers had reduced prices to compete with lower priced subject imports. *Id*.

We have also considered price trends for the domestic like product and subject imports over the period of investigation, which were mixed. U.S. producers' prices were lower for two pricing products (***), higher for three (***) and the same for one (***) when first quarter 2016 pricing data are compared to fourth quarter 2018 pricing data.[93] Subject import prices for all six pricing products were higher in the fourth quarter of 2018 than in the first quarter of 2016.[94]

We have also considered whether subject imports have prevented price increases which otherwise would have occurred, to a significant degree. As discussed above, apparent consumption increased by 10.2 percent overall from 2016 to 2018,[95] and raw material costs for AWC rose over the same period.[96] These conditions should have permitted the domestic industry to have raised its prices in order to take advantage of a growing market and to cover its rising costs. This did not occur. As previously discussed, the domestic industry's pricing trends were mixed over this period, with prices for several products either remaining flat or declining. Moreover, the domestic industry's net sales average unit value ("AUV") rose less than its unit COGS during this period,[97] and its COGS to net sales ratio increased by 5.2 percentage points from 2016 to 2018.[98] We find that competition from significant and increasing quantities of lower priced subject imports prevented the domestic industry from increasing prices in an expanding market.

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[93] CR/PR at Tables V-4-9. U.S. producers' prices were lower for four products (***), higher for one (***), and the same for one (***) when first quarter 2016 pricing data are compared to second quarter 2019 pricing data. *Id*.

[94] CR/PR at Tables V-4-9. Importers' prices for subject imports were higher in the second quarter of 2019 than in the first quarter of 2016 for five of the six pricing products. *Id*.

[95] *See* section IV.B.1 above and CR/PR at Tables IV-5 and C-1. Most U.S. producers and importers reported an increase in demand. *See* CR/PR at II-5

[96] As previously discussed, aluminum costs increased from 2016 to mid-2018, including for aluminum types used to make aluminum wire rod, the major raw material used in AWC. *See* section IV.B.3 above and CR/PR at V-1-2. The domestic industry's per-unit raw materials costs rose from $1.10 in 2016 to $1.17 in 2017 and to $1.42 in 2018. *See* CR/PR at Table VI-1.

[97] CR/PR at Table C-1. Specifically, the domestic industry's net sales AUV increased by 12 cents per pound between 2016 and 2018, whereas its unit COGS increased by 20 cents per pound over this period, driven mainly by an increase in unit raw material costs. *See* CR/PR at Table VI-2. By contrast, the domestic industry's net sales AUV was 9 cents per pound higher in interim 2019 than in interim 2018, whereas its unit COGS was 0.3 cents per pound lower. *Id*.

[98] CR/PR at Table VI-1. Additionally, Southwire reported seven unsuccessful attempted price increases in 2018. *See* CR/PR at V-9 n.17. We note that this cost-price squeeze improved in interim 2019, as subject import volumes retreated from the U.S. market as a result of these investigations. Specifically, the domestic industry's ratio of COGS to net sales was 4.3 percentage points lower in interim 2019 than in interim 2018. *See* CR/PR at Table VI-1.

The record in this case reflects significant underselling by subject imports and that increasing quantities of these imports prevented the domestic industry from obtaining price increases that otherwise would have occurred, to a significant degree. We consequently find that the subject imports have had significant price effects.

E. Impact of the Subject Imports[99]

Section 771(7)(C)(iii) of the Tariff Act provides that in examining the impact of subject imports, the Commission "shall evaluate all relevant economic factors which have a bearing on the state of the industry."[100] These factors include output, sales, inventories, capacity utilization, market share, employment, wages, productivity, gross profits, net profits, operating profits, cash flow, return on investment, return on capital, ability to raise capital, ability to service debts, research and development, and factors affecting domestic prices. No single factor is dispositive and all relevant factors are considered "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[101]

The domestic industry experienced increases in capacity, production, U.S. shipments, net sales quantity, and most employment indicators between 2016 and 2018,[102] but those

[99] 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 determination of sales at LTFV, Commerce found dumping margins of 58.51 to 63.47 percent for imports of AWC from China. *Aluminum Wire and Cable from the People's Republic of China: Final Affirmative Determination of Sales at Less Than Fair Value*, 84 Fed. Reg. 58134, 58135 (Dep't Commerce Oct. 30, 2019). Commerce also computed weighted-average dumping margins adjusted for export subsidies ranging from 47.83 to 52.79 percent. *Id*. We take into account in our analysis the fact that Commerce has made final findings that all subject producers in China are selling subject imports in the United States at LTFV. In addition to this consideration, our impact analysis has considered other factors affecting domestic prices. Our analysis of the significant underselling and price effects of subject imports, described in both the price effects discussion and below, is particularly probative to an assessment of the impact of the subject imports.

[100] 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.").

[101] 19 U.S.C. § 1677(7)(C)(iii). This provision was amended by the Trade Preferences Extension Act of 2015, Pub. L. 114-27.

[102] As with our analyses of the subject imports' volume and price effects, we have focused our impact analysis on calendar year 2016 to 2018 data. *See* 19 U.S.C. § 1677(7)(I).

increases were at levels below the 10.2 percent increase in apparent U.S. consumption during this period.[103] At the same time, its financial performance declined sharply.

The domestic industry's capacity rose by 1.8 percent between 2016 and 2018, increasing from 519.4 million pounds in 2016 to 529.0 million pounds in 2017 and then decreasing slightly to 528.8 million pounds in 2018.[104] Production increased by 7.6 percent, from 346.8 million pounds in 2016 to 366.7 million pounds in 2017 and 373.0 million pounds in 2018.[105] Capacity utilization increased by 3.8 percentage points, from 66.8 percent in 2016 to 69.3 percent in 2017 and 70.5 percent in 2018.[106]

The domestic industry's U.S. shipments increased by 4.0 percent between 2016 and 2018, from 316.4 million pounds in 2016 to 326.7 million pounds in 2017 and 329.0 million pounds in 2018.[107] Its end-of-period inventories decreased by 1.1 percent, first increasing from 38.9 million pounds in 2016 to 41.7 million pounds in 2017, before decreasing to 38.5 million pounds in 2018.[108] The domestic industry's market share, as discussed above, declined by 4.1 percentage points, from 73.5 percent in 2016 to 70.0 percent in 2017 and 69.4 percent in 2018.[109]

Employment rose by 0.6 percent between 2016 and 2018, increasing from 1,709 production-related workers ("PRWs") in 2016 to 1,734 PRWs in 2017, then declining to 1,720 PRWs in 2018.[110] Hours worked declined by 1.2 percent, dropping from 4.4 million hours in 2016 to 4.3 million hours in 2017 and 2018.[111] Wages paid rose by 7.8 percent, increasing from

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

[104] CR/PR at Tables III-4 and C-1. Capacity was 264.4 million pounds in interim 2018 and slightly lower, at 264.3 million pounds, in interim 2019. *Id.*

[105] CR/PR at Tables III-4 and C-1. Production was 194.8 million pounds in interim 2018 and lower, at 190.6 million pounds, in interim 2019. *Id.*

[106] CR/PR at Tables III-4 and C-1. Capacity utilization was 73.7 percent in interim 2018 and slightly lower, at 72.1 percent, in interim 2019. *Id.*

[107] CR/PR at Tables III-6 and C-1. The domestic industry's U.S. shipments were 169.2 million pounds in interim 2018 and slightly higher, at 170.6 million pounds, in interim 2019. *Id*.

[108] CR/PR at Tables III-7 and C-1. The domestic industry's end-of-period inventories were 48.8 million pounds in interim 2018 and 38.7 million pounds in interim 2019. *Id.*

[109] CR/PR at Tables IV-5 and C-1. Domestic producers' share of apparent U.S. consumption was 71.7 percent in interim 2018 and 70.8 percent in interim 2019. *Id*.

[110] CR/PR at Tables III-8 and C-1. Employment was 1,739 PRWs in interim 2018 and higher, at 1,747 PRWs, in interim 2019. *Id.*

[111] CR/PR at Tables III-8 and C-1. Hours worked were 2.3 million hours in interim 2018 and lower, at 2.2 million hours, in interim 2019. *Id.*

$90.9 million in 2016 to $93.4 million in 2017 and $98.0 million in 2018.[112] Productivity increased by 8.9 percent, from 79.6 pounds per hour in 2016 to 85.2 pounds per hour in 2017 and 86.6 pounds per hour in 2018.[113]

The domestic industry's net sales quantity increased by 6.2 percent, from 354.1 million pounds in 2016 to 363.9 million pounds in 2017 and 376.2 million pounds in 2018.[114] Revenues increased by 13.2 percent between 2016 and 2018, from $654.5 million in 2016 to $695.6 million in 2017 and $741.1 million in 2018.[115] As discussed above in section IV.D, from 2016 to 2018 revenues rose less rapidly than costs. As a result, gross profit declined by 20.7 percent, from $112.6 million in 2016 to $96.0 million in 2017 and $89.3 million in 2018.[116] Operating income fell by 54.0 percent, declining from $42.6 million in 2016 to $32.6 million in 2017 and $19.6 million in 2018.[117] The industry's operating income margin declined by 3.9 percentage points, from 6.5 percent in 2016 to 4.7 percent in 2017 and 2.6 percent in 2018.[118] Net income fell by 74.4 percent, from $34.9 million in 2016 to $28.0 million in 2017 and $8.9 million in 2018.[119] Capital expenditures decreased from $*** in 2016 to $*** in 2017 and then increased to $*** in 2018.[120] The domestic industry incurred research and development ("R&D") expenses of $*** in 2016, $*** in 2017, and $*** in 2018.[121]

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[112] CR/PR at Tables III-8 and C-1. Wages paid were $50.4 million in interim 2018 and higher, at $51.4 million, in interim 2019. *Id.*

[113] CR/PR at Tables III-8 and C-1. Productivity was 86.6 pounds per hour in interim 2018 and lower, at 85.3 pounds per hour, in interim 2019. *Id.*

[114] CR/PR at Tables VI-1 and C-1. Net sales quantity was 187.8 million pounds in interim 2018 and higher, at 190.4 million pounds, in interim 2019. *Id*.

[115] CR/PR at Tables VI-1 and C-1. Revenues were $354.4 million in interim 2018 and higher, at $377.1 million, in interim 2019. *Id.*

[116] CR/PR at Tables VI-1 and C-1. Gross profit was $38.9 million in interim 2018 and higher, at $57.7 million, in interim 2019. *Id.*

[117] CR/PR at Tables VI-1 and C-1. Operating income was $5.0 million in interim 2018 and higher, at $23.4 million, in interim 2019. *Id.*

[118] CR/PR at Tables VI-1 and C-1. The operating margin was 1.4 percent in interim 2018 and 6.2 percent in interim 2019. *Id.*

[119] CR/PR at Tables VI-1 and C-1. The domestic industry had a net loss of $440,000 in interim 2018 and net income of $19.5 million in interim 2019. *Id.*

[120] CR/PR at Tables VI-5 and C-1. Capital expenditures were $*** in interim 2018 and $*** in interim 2019. *Id*. Notwithstanding the increase in reported capital expenditures during the period, all five domestic producers reported that the subject imports had negative effects on investment, and two producers provided examples of specific investment projects that were cancelled or postponed. *See* CR/PR at Tables VI-7-8.

[121] CR/PR at Table VI-5. R&D expenses were $*** in interim 2018 and $*** in interim 2018. *Id*.

The significant and increasing volume of lower priced subject imports prevented the domestic industry from fully benefitting from the substantial increase in U.S. demand for AWC from 2016 to 2018. The domestic industry lost sales to subject imports, which significantly undersold the domestic like product. Consequently, the domestic industry saw increases in its production and U.S. shipments that were less than they would have been otherwise, in the context of the 10.2 percent increase in apparent U.S. consumption during that period.

Further, because of the price-suppressing effects of the subject imports, the domestic industry was unable to charge prices to fully recover its costs, which caused its revenues to be less than they would have been otherwise. Reflecting these foregone revenues, the domestic industry's gross profit, operating income, operating income margins and net income all fell from 2016 to 2018.

In our analysis of the impact of subject imports on the domestic industry, we have taken into account whether there are other factors that may have had an adverse impact on the industry during the period of investigation to ensure that we are not attributing injury from other factors to the subject imports. In this respect, we have examined the role of nonsubject imports. While nonsubject imports gained market share over the period of investigation,[122] they were generally priced higher than the domestic like product, as well as subject imports.[123] Consequently, nonsubject imports cannot explain the price effects we have attributed to subject imports. Moreover, the domestic industry improved in several key respects after subject imports began to retreat from the market after the filing of the petitions in these investigations, notwithstanding the increasing presence of nonsubject imports.[124] This supports our conclusion that the injury the domestic industry experienced during the period of investigation is attributable to subject imports, and not to nonsubject imports.

We have also considered the role of the domestic industry's export pricing, given that the domestic industry's export shipment AUVs declined from 2017 to 2018, coincident with

[122] The market share of nonsubject imports increased from *** percent in 2016 to 12.5 percent in 2017 and 12.6 percent in 2018. It was 10.6 percent in interim 2018 and higher, at 19.4 percent, in interim 2019. *See* CR/PR at Table IV-5.

[123] CR/PR at Table D-4 (providing overselling/underselling information on pricing products from Mexico and Turkey vis-à-vis pricing products from China and the United States). While we view AUV data with caution because differences in AUVs may reflect differences in product mix, available AUV data indicate that nonsubject imports from Mexico, Turkey, and other sources had higher AUVs than subject imports. *See* CR/PR at Table IV-2.

[124] For example, the domestic industry's gross profit, net income, operating income and operating margins, all of which had declined between 2016 and 2018, were significantly better in interim 2019 than in interim 2018. *See* CR/PR at Table VI-1.

declines in the domestic industry's financial indicators.[125] However, the trends in the domestic industry's export shipment AUVs during 2018 cannot account for the adverse impact on the domestic industry caused by the lost sales specifically attributable to subject imports, which undersold the domestic like product. Further, *** accounted for the majority of export shipments over the period of investigation,[126] and its financial performance was not significantly different in 2018 compared to 2017.[127] This indicates that the domestic industry's 2018 export shipment AUVs cannot explain its negative financial performance that year.

We therefore conclude that the subject imports have had a significant impact on the domestic industry.

V. Conclusion

For the reasons stated above, we determine that an industry in the United States is materially injured by reason of subject imports of AWC from China that are sold in the United States at LTFV and subsidized by the government of China.

[125] CR/PR at Table C-1.
[126] CR/PR at III-7.
[127] CR/PR at Table VI-4.

Part I: Introduction

Background

These investigations result from petitions filed with the U.S. Department of Commerce ("Commerce") and the U.S. International Trade Commission ("USITC" or "Commission") by Encore Wire Corporation ("Encore"), McKinney, Texas, and Southwire Company, LLC ("Southwire"), Carrollton, Georgia, on September 21, 2018, alleging that an industry in the United States is materially injured and threatened with material injury by reason of subsidized and less-than-fair-value ("LTFV") imports of aluminum wire and cable ("AWC")[1] from China. The following tabulation provides information relating to the background of these investigations.[2] [3]

Effective date	Action
September 21, 2018	Petitions filed with Commerce and the Commission; institution of the Commission's investigations
October 11, 2018	Commerce's notice of initiation
November 5, 2018	Commission's preliminary determinations
April 8, 2019	Commerce's preliminary countervailing duty determination (84 FR 13886)
June 5, 2019	Commerce's preliminary antidumping duty determination (84 FR 26069); scheduling of final phase of Commission investigations (84 FR 31101, June 28, 2019)
October 17, 2019	Commission's hearing
October 30, 2019	Commerce's final countervailing and antidumping duty determinations (84 FR 58137 and 84 FR 58134, October 30, 2019)
November 20, 2019	Commission's vote
December 16, 2019	Commission's views

[1] See the section entitled "The Subject Merchandise" in Part I of this report for a complete description of the merchandise subject in this proceeding.

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

[3] A list of witnesses appearing at the hearing is presented in appendix B of this report.

Statutory criteria

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

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

Section 771(7)(C) of the Act (19 U.S.C. § 1677(7)(C)) further provides that--[4]

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

[4] Amended by PL 114-27 (as signed, June 29, 2015), Trade Preferences Extension Act of 2015.

In addition, Section 771(7)(J) of the Act (19 U.S.C. § 1677(7)(J)) provides that—[5]

(J) EFFECT OF PROFITABILITY.—The Commission may not determine that there is no material injury or threat of material injury to an industry in the United States merely because that industry is profitable or because the performance of that industry has recently improved.

Organization of report

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

Market summary

AWC is generally used for electrical power in residential, industrial, and commercial applications.[6] The leading U.S. producers of AWC are ***. The leading U.S. importer of AWC from China is ***. Leading importers of product from nonsubject countries (primarily Mexico and Turkey) include ***.

[5] Amended by PL 114-27 (as signed, June 29, 2015), Trade Preferences Extension Act of 2015.
[6] Petition, p. 8.

Apparent U.S. consumption of AWC totaled approximately 473.9 million pounds ($937.4 million) in 2018. Currently, five firms are known to produce AWC in the United States. U.S. producers' U.S. shipments of AWC totaled 329.0 million pounds ($654.2 million) in 2018, and accounted for 69.4 percent of apparent U.S. consumption by quantity and 69.8 percent by value. U.S. shipments of imports from subject sources totaled 85.3 million pounds ($166.4 million) in 2018 and accounted for 18.0 percent of apparent U.S. consumption by quantity and 17.8 percent by value. U.S. shipments of imports from nonsubject sources totaled 59.6 million pounds ($116.7 million) in 2018 and accounted for 12.6 percent of apparent U.S. consumption by quantity and 12.5 percent by value.

Summary data and data sources

A summary of data collected in these investigations is presented in appendix C, table C-1. Except as noted, U.S. industry data are based on questionnaire responses of five firms that accounted for all U.S. production of AWC during 2018. U.S. imports are based on the questionnaire responses of 14 firms that accounted for the majority of U.S. imports of AWC from China and all other sources during 2018 under HTS statistical reporting number 8544.49.9000, a "basket" category.

Previous and related investigations

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

Nature and extent of subsidies and sales at LTFV

Subsidies

On October 30, 2019, Commerce published a notice in the *Federal Register* of its final determination of countervailable subsidies for producers and exporters of product from China.[7] Table I-1 presents Commerce's findings of subsidization of AWC in China.

[7] *Aluminum Wire and Cable From the People's Republic of China: Final Affirmative Countervailing Duty Determination*, 84 FR 58137, October 30, 2019.

Table I-1
AWC: Commerce's final subsidy determination with respect to imports from China

Entity	Final countervailable subsidy margin (percent)
Shanghai Silin Special Equipment Co., Ltd. ("Silin")	165.63
Changfeng Wire & Cable Co., Ltd	33.44
Shanghai Yang Pu Qu Gong	165.63
All others	33.44

Note: Commerce has assigned Silin's rate to each of the entities named as cross-owned in its affiliation questionnaire response: Jiangxi Silin International Cable Co., Ltd.

Source: *Aluminum Wire and Cable From the People's Republic of China: Final Affirmative Countervailing Duty Determination*, 84 FR 58137, October 30, 2019.

Sales at LTFV

On October 30, 2019, Commerce published a notice in the *Federal Register* of its final determination of sales at LTFV with respect to imports from China.[8] Table I-2 presents Commerce's dumping margins with respect to imports of AWC from China.

Table I-2
AWC: Commerce's final weighted-average LTFV margins with respect to imports from China

Exporter	Producer	Final dumping margin (percent)
Changfeng Wire & Cable Co., Ltd.	Changfeng Wire & Cable Co., Ltd.	58.51
Wuxi Jiangnan Cable Co., Ltd.	Wuxi Jiangnan Cable Co., Ltd.	58.51
All others		63.47

Note: "All others" includes the mandatory respondents, Huatong and Silin.

Source: *Aluminum Wire and Cable From the People's Republic of China: Final Affirmative Determination of Sales at Less Than Fair Value*, 84 FR 58134, October 30, 2019.

[8] *Aluminum Wire and Cable From the People's Republic of China: Final Affirmative Determination of Sales at Less Than Fair Value*, 84 FR 58134, October 30, 2019.

The subject merchandise

Commerce's scope

In the current proceeding, Commerce has defined the scope as follows:[9]

> The scope of the investigation covers aluminum wire and cable, which is defined as an assembly of one or more electrical conductors made from 8000 Series Aluminum Alloys (defined in accordance with ASTM B800), Aluminum Alloy 1350 (defined in accordance with ASTM B230/B230M or B609/B609M), and/or Aluminum Alloy 6201 (defined in accordance with ASTM B398/B398M), provided that: (1) At least one of the electrical conductors is insulated; (2) each insulated electrical conductor has a voltage rating greater than 80 volts and not exceeding 1,000 volts; and (3) at least one electrical conductor is stranded and has a size not less than 16.5 thousand circular mil (kcmil) and not greater than 1,000 kcmil. The assembly may: (1) Include a grounding or neutral conductor; (2) be clad with aluminum, steel, or other base metal; or (3) include a steel support center wire, one or more connectors, a tape shield, a jacket or other covering, and/or filler materials.
>
> Most aluminum wire and cable products conform to National Electrical Code (NEC) types THHN, THWN, THWN-2, XHHW-2, USE, USE-2, RHH, RHW, or RHW-2, and also conform to Underwriters Laboratories (UL) standards UL-44, UL-83, UL-758, UL-854, UL-1063, UL-1277, UL-1569, UL-1581, or UL-4703, but such conformity is not required for the merchandise to be included within the scope.
>
> The scope of the investigation specifically excludes aluminum wire and cable products in lengths less than six feet, whether or not included in equipment already assembled at the time of importation.
>
> The merchandise covered by the investigation is currently classifiable under subheading 8544.49.9000 of the Harmonized Tariff Schedule of the United States (HTSUS). Products subject to the scope may also enter under HTSUS subheading 8544.42.9090. The HTSUS subheadings are provided for convenience and customs purposes. The written description of the scope of the investigation is dispositive.

[9] Ibid.

Tariff treatment

Based upon Commerce's scope, information available to the Commission indicates that the merchandise subject to these investigations is provided for in Harmonized Tariff Schedule of the United States ("HTSUS" or "HTS") subheading 8544.49.90, which covers insulated electric conductors of various types, other than of copper, when they are for a voltage not exceeding 1,000 V and are not fitted with connectors. The subject products may also be imported under HTS subheading 8544.42.90 (specifically statistical reporting number 8544.42.9090, for similar electric conductors fitted with connectors, other than extension cords and conductors for telecommunications). The 2019 general rate of duty is 3.9 percent ad valorem for HTS subheading 8544.49.90 and 2.6 percent ad valorem for HTS subheading 8544.42.90.[10] Decisions on the tariff classification and treatment of imported goods are within the authority of U.S. Customs and Border Protection.

Section 232

HTS subheadings 8544.49.90 and HTS 8544.42.9090 were not included in the enumeration of the aluminum articles subject to the additional 10 percent ad valorem national-security duties under Section 232 of the *Trade Expansion Act of 1962*, as amended.[11]

Section 301

Effective July 6, 2018, products of China entering under HTS subheading 8544.49.90 were subject to an additional 25 percent ad valorem duty under Section 301 of the *Trade Act of 1974.*[12] On September 20, 2019, the Office of the U.S. Trade Representative ("USTR") granted an exclusion for certain products imported under HTS subheading 8544.49.90, including AWC.[13]

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[10] *HTSUS (2019) Revision 12*, USITC Publication No. 4949, September 2019, p. 85-81.

[11] *Imports of Aluminum Into the United States*, Presidential Proclamation 9704, March 8, 2018, 83 FR 11619, March 15, 2018. See U.S. notes 19(a) and 19(b), subchapter III of chapter 99. *HTSUS (2019) Revision 12*, USITC Publication No. 4949, September 2019, pp. 99-III-12, 99-III-13, 99-III-97. Further information on actions taken under Section 232 are provided in Appendix E Table E-1.

[12] *Notice of Action and Request for Public Comment Concerning Proposed Determination of Action Pursuant to Section 301: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation*, *Annexes A and B*, 83 FR 28710, June 20, 2018. See U.S. notes 20(a) and 20(b), subchapter III of chapter 99. *HTSUS (2019) Revision 12*, USITC Publication No. 4949, September 2019, pp. 99-III-13, 99-III-14, 99-III-17.

[13] The precise products covered by this exclusion include "insulated aluminum cables, not fitted with connectors, for a voltage exceeding 80 V but not exceeding 600 V (described in statistical reporting number 8544.49.9000). *HTSUS (2019) Revision 16*, USITC Publication No. 4991, November 2019, p. 99-III-77.

Effective September 24, 2018, products of China entering under HTS statistical reporting number 8544.42.9090 were subject to an additional initial 10 percent ad valorem duty.[14] [15] On October 28, 2019, USTR granted an exclusion for certain products imported under HTS statistical reporting number 8544.42.9090, which may include AWC.[16] This exclusion applies (retroactively) from September 24, 2018 to August 7, 2020.[17] Figure I-1 provides a historical timeline for changes in the additional rate of duty applied to these products under Section 301.[18]

[14] *Notice of Modification of Section 301 Action: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation*, 83 FR 47974, September 21, 2018. See U.S. notes 20(e) and 20(f), subchapter III of chapter 99. *HTSUS (2019) Revision 12*, USITC Publication No. 4949, September 2019, pp. 99-III-21, 99-III-43.

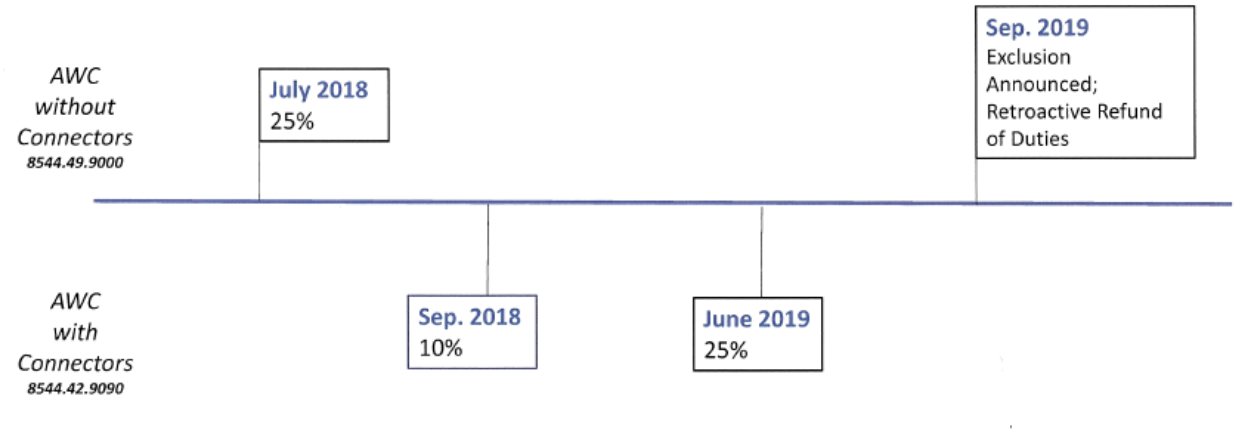
[15] Petitioners noted that AWC with connectors, imported under HTS subheading 8544.42.90, had not been present in the U.S. market until the Section 301 additional duty rate of 25 percent was imposed on products imported under HTS subheading 8544.49.90 (AWC without connectors). The petitioner noted that subject exporters may have been engaging in "tariff engineering" by adding connectors to the product in order to have the product classified under HTS subheading 8544.42.90 to avoid the tariff or obtain the lower Section 301 additional duty rate of 10 percent once imposed in September 2019. Petitioners noted that these connectors are of no use to firms operating in the U.S. AWC supply chain (see Figure I-1 for further information). Hearing transcript, pp. 45-47 (Levy and Kieffer).

[16] The precise products covered by this exclusion include "insulated electric conductors, for a voltage not exceeding 1,000 V, fitted with connectors (other than of a kind used for telecommunications, other than extension cords as defined in statistical note 6 to chapter 85), such conductors measuring not less than 8 m and not more than 10 m in length, incorporating a connector on one end and a weather-resistant compartment and cover designed to house 4 AA batteries on the other end (described in statistical reporting number 8544.42.9090)." *HTSUS (2019) Revision 16*, USITC Publication No. 4991, November 2019, p. 99-III-114.

[17] *Notice of Product Exclusions: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation*, 84 FR 57803, October 28, 2019.

[18] Further information on actions taken under Section 301 is provided in Appendix E, Table E-2.

Figure I-1
AWC: Section 301 timeline



Note: On October 28, 2019, USTR announced an exclusion for certain electric conductors imported under HTS statistical reporting number 8544.42.9090 (see "Notice of Product Exclusions: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation," 84 FR 57803, October 28, 2019).

Source: Petitioners' Hearing Exhibits, Exhibit 11.

The product

Description and applications[19]

AWC end-use applications rely on aluminum's relatively high thermal and electrical conductivities[20] to transmit electrical power in industrial, commercial, and residential applications.[21] Most AWC is sold into industrial and commercial applications with only an estimated 10 percent sold into residential applications.[22] The combined physical characteristics of AWC products influence the specific application(s) for which they are suited, including either above-ground or underground; and either interior- or exterior building applications. Compared to copper, aluminum is more suitable for overhead power-transmission cables, due to its lighter

[19] Unless otherwise noted, this information is based on *Aluminum Wire and Cable from China, Inv. Nos. 701-TA-611 and 731-TA-1428 (Preliminary)*, USITC Publication 4843, November 2018, pp. I-8 – I-10.

[20] Aluminum is also malleable, ductile, and readily worked. Aluminum conductors also offer advantages of one-half the weight per unit length, twice the conductivity on a weight basis, and lower cost, compared to copper conductors.

[21] Overall demand for AWC is driven by macroeconomic conditions, industrial and commercial construction activity, and building renovations. Conference transcript, p. 19 (Jones).

[22] Conference transcript, p. 54 (Levy).

weight, and is also more suitable for long-distance, underground power-transmission cables, due to its lesser cost.[23] AWC is generally categorized into three end-use segments of "feeder," "intermediate," and "circuit" wiring.[24] Roughly 80 percent of AWC sales are to the feeder segment (which routes electric power from the utility pole to the meter base and from the meter base to the distribution panel board of a building), and 20 percent are to the intermediate segment (which includes branch circuits throughout a building).[25] By contrast, smaller-diameter circuit wiring is almost exclusively of copper, particularly in residential buildings due to electrical-code requirements.[26] In commercial applications, intermediate wiring can be of either aluminum or copper.[27]

According to a Priority witness, AWC is substitutable for copper wire and cable ("CWC") in almost all applications, despite code restrictions.[28] Historically, CWC was utilized in electric-power transmission and distribution applications, but AWC increasingly became more acceptable over the past couple of decades, as developers sought a cheaper alternative material during the robust economic conditions of the mid-2000s that drove-up copper prices to record highs between January 2004 and May 2006.[29]

AWC products (generally rated at 600 volts)[30] consist of one or more electrical conductors[31] of one or more aluminum alloys: 8000 Series Aluminum Alloys,[32] Aluminum Alloy

[23] Conference transcript, p. 24 (Asher), pp. 46 and 49 (Kieffer); Petitioners' postconference brief, p. II-10.

[24] Conference transcript, p. 18 (Jones).

[25] Conference transcript, p. 19 (Jones); Petitioners' postconference brief, pp. II-9 – II-10.

[26] Conference transcript, pp. 19 (Jones), 25 (Asher), 48-49 (Kieffer); Petitioners' postconference brief, p. II-10.

[27] Conference transcript, p. 47 (Kieffer). Counsel to Encore further elaborated during the staff conference that in Manhattan, where the power supply is located in the basement of high-rise buildings, aluminum is selected for its lighter weight to distribute electric power vertically upward. By contrast, in Las Vegas, where the power supply is located on the roof, copper is selected to distribute electric power vertically downwards. Conference transcript, p. 49 (Levy).

[28] Conference transcript, p. 70 (Strahs); Priority's postconference brief, p. 4.

[29] Conference transcript, pp. 69-71 (Strahs); Priority's postconference brief, pp. 4-5.

[30] Conference transcript, p. 17 (Jones).

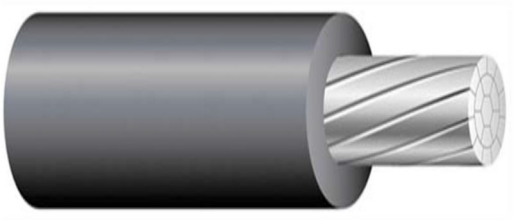
[31] A stranded conductor is typically referred to as a "wire," and a "cable" typically contains two or more conductors. However, the term "cable" may sometimes refer to stranded wires. Petition, p. 11.

[32] ASTM, "B800-05 (Reapproved 2015) Standard Specification for 8000 Series Aluminum Alloy Wire for Electrical Purposes—Annealed and Intermediate Tempers," Petition, Exhibit GEN-05.

1350,[33] and/or Aluminum Alloy 6201.[34] These aluminum alloys provide different combinations of electrical conductivity and tensile strength, which make them more or less suitable for a particular application. For example, Aluminum 1350 has relatively high conductivity but lower strength than other alloys.

AWC may or may not include a neutral or grounding conductor made of aluminum or copper, and may include a metal or fiber-optic element typically used for signal transmission. "Stranding"— bundling or wrapping wire strands together— improves the AWC's flexibility while preserving its capacity to carry electrical current. Manufacturers commonly rely on their own proprietary stranding processes and configurations. For AWCs that have multiple conductors, the conductors may be combined in different ways, such as twisted or laid flat with a jacket around them, sometimes referred to as "cabling" (figure I-2).

Figure I-2
AWC: Cross-sectional view of an insulated aluminum cable showing three concentric layers of stranded conductor wires



Source: Petitioners' postconference brief, Responses to Questions from Commission Staff, XIV Electronic Image, p. II-16.

AWC within the scope of these investigations is distinguished by having at least one electrical conductor that is insulated. Such insulation includes black or colored polyvinyl chloride ("PVC") or cross-link polyethylene ("XLPE"), and may vary in thickness. The type and thickness of the insulation influences the moisture and heat characteristics of the AWC. PVC insulation is often used when sunlight resistance is important, while thicker or higher-grade insulation is needed for higher-voltage applications. The insulation may be covered with a nylon

[33] ASTM, "B230/B230M- 07 (Reapproved 2016), Standard Specification for Aluminum 1350-H19 Wire for Electrical Purposes," Petition, Exhibit Gen-06; ASTM, "B609/B609M-12 (Reapproved 2016), Standard Specification for Aluminum 1350 Round Wire, Annealed and Intermediate Tempers, for Electrical Purposes," Petition, Exhibit GEN-07.

[34] ASTM, "B398/B398M-15, Aluminum-Alloy 6201-T81 and 6201-T83 Wire for Electrical Purposes," Petition, Exhibit Gen-08.

sheath to enhance the AWC's resistance to oil and gas. AWC may also be covered with aluminum or steel cladding armor to further protect the AWC from abrasions, cutting, or chemical reactions.

The industry designates standard AWC types with each having distinct combinations of the features, described above, appropriate to their intended end use(s). Moreover, each type typically conforms to one or more UL standards and/or National Electrical Code ("NEC") specifications, which denote temperature ratings, voltage, wet or dry conditions ratings, or other product attributes.[35]

For example, SE Cable is commonly used to convey power from the service drop (e.g., a utility pole) to the meter base, and from the meter base to the distribution panel board. This standard AWC type can also be used in interior wiring as branch circuits to ranges, ovens, cooking units, and clothes dryers. In addition, Type SE Cable is:

- Manufactured in accordance with UL-854 and installed in accordance with Article 338 of the NEC;
- Assembled with compact stranded conductors of Aluminum Alloy 8000 Series, including a ground/neutral conductor of stranded bare aluminum; and
- Insulated with high-dielectric strength, heat- and moisture-resistant, black or colored PVC, rated for continuous use at 90° C, wet or dry.

Type SE Cable and other AWC types are standardized across the industry, with all AWC of a given type being interchangeable and substitutable, regardless of the manufacturer.[36] All AWC is designated by a specific part number, across all manufacturers. Suppliers can provide co-mingled AWC, having a common part number, of both U.S. and foreign origin.[37] In case of an AWC that does not bear a manufacturer's brand name or a supplier's manufacturer-specific E-number, it may be difficult to identify where it was produced.[38]

[35] For more information about typical UL standards used in various AWC types, see: Petition, Exhibit GEN-11, "UL 44, Thermoset-Insulated Wires and Cables."

[36] Specifications and details for various AWC types covered by this petition are provided in Petition, Exhibit GEN-12.

[37] Conference transcript, p. 78 (Strahs).

[38] An E-number is a designated marking on aluminum wire and cable which can be used to track the product back to its original manufacturer, or in the case of certain imported products, its original supplier, pp. 110-111 (Strahs and Porter).

Manufacturing processes[39]

AWC firms start with unwrought aluminum rod[40] as the feedstock for the multi-stage manufacturing process with up to nine distinctive steps:

(1) Drawing— Coiled, unwrought aluminum rod is lubricated prior to being pulled through a series of successively smaller-diameter dies to reduce its cross section into circular or trapezoidal-shaped strands.[41]

(2) Annealing— Work-hardened, drawn aluminum must be annealed to soften it and restore its ductility by batch annealing in furnaces at 800-900° F for several hours followed by controlled cooling in a chamber for several hours.

(3) Stranding— Individual strands are laid down on a common axis as the stranding machine's head rotates to form a single strand. To form a six-wire system, six strands are helically wound around a center strand. Additional layers are arranged around the first 7 strands in a progression of 12 strands in the second layer, 18 strands in the third layer, and 24 strands in the fourth layer. Other systems for compact strand conductors may omit the center strand and lay the strands in progression of 5 strands, 9 strands, 15 strand, etc. Stranding improves the flexibility of the wires while preserving their electrical current-carrying capacity. Compact stranded conductors have unique shapes so that when they are combined, they form a round configuration. AWC manufacturers commonly produce their own proprietary stranded configurations.

(4) Insulating— Insulation is applied typically by pressure-extruding PVC or XLPE onto the stranded wire at high temperature. The insulation also may be covered by a layer of extruded nylon.

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[39] Unless otherwise noted, this information is based on *Aluminum Wire and Cable from China, Inv. Nos. 701-TA-611 and 731-TA-1428 (Preliminary)*, USITC Publication 4843, November 2018, pp. I-11 – I-12.

[40] AWC manufacturers either produce their own aluminum rod in-house or purchase it from outside suppliers. Encore purchases coiled aluminum rod but Southwire and other domestic AWC firms produce their own aluminum rod feedstock. Conference transcript, p. 17 (Jones).

Witnesses for both the Petitioners and Respondent testified that they were not aware of whether or not Chinese AWC firms purchase or produce their own aluminum rod feedstock. Conference transcript, p. 60 (Asher and Jones), p. 110 (Strahs).

[41] Concentric strand conductors may be drawn through a die to reduce its diameter by 3 percent to produce compressed concentric strand conductors.

(5) Cabling— Two or more individual conductors may be cabled (twisted together) with other conductors to achieve the desired features of the finished product. For example, combinations of individual conductors may be twisted together with conductors of the same size and type, with different (e.g., insulated ground or neutral) conductors, or with uninsulated supporting neutral conductors.

(6) Armoring— Cabled or parallel conductors can be armored by wrapping them with a separator tape and covering them with interlocked aluminum or steel cladding armor.

(7) Jacketing— Conductors or armored cable may also be jacketed. The conductors with optional filler are surrounded by a tape separator and covered with a PVC or other jacketing material. A jacket may be applied over combinations of individual conductors that may be left parallel without twisting, with non-metallic fillers added to fill-in the indentations formed by the curvature of the conductors so that the cable assembly is as round as possible. Type SE Style U, which has a rounded rectangular cross-section, consists of two parallel conductors surrounded by helical bare ground wires, wrapped by a glass-reinforced tape shield and covered by an extruded PVC jacket. After insulating or jacketing, a legend may be printed on the outside surface.

(8) Testing— Machine operators and quality-control inspectors conduct routine product inspections. The Petitioners manufacture and typically test all of their products in accordance with UL standards. Finished cables typically undergo electrical-continuity testing to ensure compliance with the manufacturer's own quality standards and those of UL.

(9) Packaging— Finished cable is either wound onto reels or coiled and shrink-wrapped for shipment. AWC may also be cut to length at a customer's request.

According to Petitioners' witnesses, firms cannot readily switch to producing CWC on their AWC equipment without significant additional change-over costs and down-time due to the different physical characteristics of the two metals.[42]

[42] Encore has dedicated AWC and CWC production lines. Some Southwire facilities produce both AWC and other products, but the change-over requires different tooling, flushing-out oil systems, and sometimes switching wire-drawing equipment. Conference transcript, pp. 36 (Jones), 37 (Asher); Petitioners' postconference brief, pp. I-8 – I-9, II-10 – II-11.

Domestic like product issues

No issues with respect to domestic like product have been raised in these investigations. The petitioners propose a single domestic like product definition of AWC, corresponding to the scope of the investigations.[43] Respondent agreed with petitioners' definition of the domestic like product for purposes of the preliminary phase investigations, but reserved the right to comment in the final phase.[44] The Commission defined a single domestic like product consisting of AWC that is coextensive with the scope of the investigations.[45]

During the final phase of the investigations, petitioners maintained that the domestic like product should be defined as a single like product, coextensive with the scope of the investigations.[46] No other party commented on the domestic like product definition, or the definition of the domestic industry, in this final phase.

[43] Petition, vol. 1, p. 87.

[44] Conference transcript, pp. 96-97 (Porter).

[45] *Aluminum Wire and Cable from China, Inv. Nos. 701-TA-611 and 731-TA-1428 (Preliminary)*, USITC Publication 4843, November 2018, p. 8.

[46] Petitioner Encore's prehearing brief, p. 8; and Petitioner Southwire's prehearing brief, p. 7.

Part II: Conditions of competition in the U.S. market

U.S. market characteristics

AWC is used for power distribution and in commercial and residential construction to provide electrical power to these structures. Demand is thus related to electricity usage, construction activity, and overall economic activity.

Apparent U.S. consumption of AWC increased 8.5 percent during 2016-17, and then increased more moderately over 2017-18. Overall, apparent U.S. consumption in 2018 was more than 10 percent higher than in 2016. Consumption from January-June 2019 was higher than consumption in January-June 2018.

U.S. producers and importers were asked if there had been any changes to the product mix, range, or marketing of AWC since January 1, 2016. All five U.S. producers and fourteen importers indicated that there had not been.

Impact of section 301 tariffs

In June 2018, USTR announced a section 301 investigation in response to Chinese trade practices, and effective July 2018, AWC was included in a list of products subject to an additional 25 percent duty.[1] U.S. producers and importers were asked if the announcement or subsequent imposition of tariffs had affected the U.S. AWC market. One U.S. producer and eight importers stated that it had, while two U.S. producers and one importer stated that it had not. Two U.S. producers and four importers stated that they did not know.

U.S. producers Encore and Southwire described Chinese AWC producers as attaching useless "connectors" to their AWC exported to the United States in order to avoid the 25 percent duty. Encore and Southwire continued that in September 2018, USTR imposed tariffs of 10 percent on AWC with connectors from China, and then in September 2019, USTR granted exclusions to "most" AWC (AWC without connectors) from China. Thus, Encore and Southwire concluded that the 301 tariffs had not had much effect on the U.S. AWC market.[2] On the other hand, *** stated that, along with these investigations, the section 301 tariffs had reduced, but not eliminated, Chinese AWC from the U.S. market.

[1] For more detailed information, see the section entitled "Tariff treatment" in Part I of this report.

[2] See prehearing brief of Encore, pp. 13-14, prehearing brief of Southwire, pp. 14-15, and hearing transcript, p. 27 (Asher). In addition, in October 28, 2019, USTR announced an exclusion of AWC with connectors.

Among importers, *** reported increased prices, decreased profits, and/or decreased sales due to the section 301 tariffs, with *** characterizing its decreased sales as "drastic." *** stated that U.S. producers had increased profits but not increased capacity or employment. *** stated that it has had to pay the 25 percent tariff but has not been able to raise prices. ***, importers of AWC from nonsubject countries, indicated that demand for their products had risen. Importer *** stated that, because of both the section 232 (see part V) and the section 301 tariffs, it had shifted its supply chain, including to the United States. It added that its business continues to grow, and concludes that its AWC sales are based on factors other than price.

U.S. producers and importers were asked to assess the impact of the section 301 tariffs on U.S. demand for AWC, U.S. supply of AWC, U.S. prices of AWC, and raw material costs of AWC. As shown in table II-1, most firms described the section 301 tariffs as not changing demand and supply in the AWC market, although most importers reported that these tariffs had increased prices and raw material costs, and most producers indicated that these tariffs had increased raw material costs. In further comments, importer *** stated that, since January 1, 2016, there had not been much change in overall AWC supply in the U.S. market, or in prices, because U.S. producers had increased capacity, and because nonsubject import volumes had increased. Importer *** stated that importers had increased their prices to account for the section 301 tariffs.

Table II-1
AWC: Firms' responses on the impact of the section 301 tariffs on Chinese-origin products

Item	Number of firms reporting			
	Increase	No change	Decrease	Fluctuate
Impact on demand.--				
U.S. producers	---	4	---	---
U.S. importers	3	6	---	1
Impact on supply--				
U.S. producers	---	4	---	---
U.S. importers	---	6	3	1
Impact on prices.--				
U.S. producers	1	2	---	---
U.S. importers	9	1	---	1
Impact on raw material costs.--				
U.S. producers	---	3	---	---
U.S. importers	4	3	---	3

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

U.S. purchasers

The Commission received 11 usable questionnaire responses from firms that had purchased AWC during January 2016-June 2019.[3] Six responding purchasers are distributors, two are electrical utilities, and three are retailers. The largest purchasers include ***.[4] Purchaser ***.

Of the six distributor purchasers, four indicated that they do not compete with their AWC suppliers, although two (***) indicated that they did. Distributor purchasers indicated that their major customers were electrical products distributors or electrical contractors.

Channels of distribution

U.S. producers and importers sold mainly to distributors, although importers sold through distributors more than U.S. producers, as shown in table II-2. Encore described the AWC market as consisting of two levels of distributors, with master distributors (including large importers like Priority) and U.S. producers competing with each other for sales to smaller electrical distributors, who in turn sell to end users, contractors, and utilities.[5]

[3] Of the 11 responding purchasers, nine purchased domestic AWC, four purchased imports of the subject merchandise from China, one purchased nonsubject imports from Mexico, one purchased nonsubject imports from Turkey, and one purchased imports of AWC from other sources.

[4] Purchaser ***. See email from ***.

[5] Hearing transcript, p. 19 (Kieffer), p. 47 (Asher).

Table II-2
AWC: U.S. producers' and importers' U.S. commercial shipments, by sources and channels of distribution, January 2016-June 2019

Item	Period				
	Calendar year			January-June	
	2016	2017	2018	2018	2019
	Share of reported shipments (percent)				
U.S. producers' U.S. commercial shipments of AWC:					
Distributors	***	***	***	***	***
End users	***	***	***	***	***
U.S. importers' U.S. commercial shipments of AWC from China:					
Distributors	***	***	***	***	***
End users	***	***	***	***	***
U.S. importers' U.S. commercial shipments of AWC from Mexico (nonsubject):					
Distributors	***	***	***	***	***
End users	***	***	***	***	***
U.S. importers' U.S. commercial shipments of AWC from Turkey (nonsubject):					
Distributors	***	***	***	***	***
End users	***	***	***	***	***
U.S. importers' U.S. commercial shipments of AWC from all other countries:					
Distributors	***	***	***	***	***
End users	***	***	***	***	***

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

Geographic distribution

U.S. producers and importers reported selling AWC to all specified U.S. regions (table II-3). U.S. producers' sales averaged further distances from their production facility than U.S. importers' sales from their U.S. point of shipment. For U.S. producers, *** percent of sales were within 100 miles of their production facility, *** percent were between 101 and 1,000 miles, and *** percent were over 1,000 miles. Importers sold *** percent within 100 miles of their U.S. point of shipment, *** percent between 101 and 1,000 miles, and *** percent over 1,000 miles.

Table II-3
AWC: Geographic market areas in the United States served by U.S. producers and importers

Region	U.S. producers	Importers (China-subject)	Importers (Mexico-nonsubject)
Northeast	5	7	1
Midwest	5	7	1
Southeast	5	8	1
Central Southwest	5	8	1
Mountain	5	7	1
Pacific Coast	5	7	1
Other	3	3	---
All regions (except Other)	5	7	1
Reporting firms	5	8	1

Note.--"Other" regions refers to all other U.S. markets, including AK, HI, PR, and VI.

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

Supply and demand considerations

U.S. supply

Table II-4 provides a summary of the supply factors regarding AWC from U.S. producers, as well as from one Chinese producer that represents a very small share of Chinese production. (See Part VII.)

Table II-4
AWC: Supply factors that affect the ability to increase shipments to the U.S. market

	Capacity (1,000 pounds)		Capacity utilization (percent)		Ratio of inventories to total shipments (percent)		Shipments by market, 2018 (percent)		Able to shift to alternate products
Country	2016	2018	2016	2018	2016	2018	Home market shipments	Exports to non-U.S. markets	No. of firms reporting "yes"
United States	519,353	528,773	66.8	70.5	***	***	87.5	***	4 of 5
China	***	***	***	***	***	***	***	***	1 of 1

Note.--Responding U.S. producers accounted for all U.S. production of AWC in 2018. The responding foreign producer accounted for a small share of U.S. imports of AWC from China during 2018. For additional data on the number of responding firms and their share of U.S. production and of U.S. imports from China, please refer to Part I, "Summary Data and Data Sources."

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

Domestic production

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

Over 2016 to 2018, U.S. producers' capacity utilization increased slightly as capacity also increased. U.S. producers' principal export markets are Canada and Mexico, although exports make up a small share of U.S. production. Most U.S. producers can also produce copper wire and/or other aluminum and copper conductors on the same equipment as they use to produce AWC, although switching would sometimes be limited by technical issues in switching dedicated equipment.

Seven purchasers indicated that there had not been any changes in the availability of U.S.-produced AWC in the U.S. market since January 1, 2016. Four stated that there had been, citing changes in the price of copper, and demand at individual projects. Purchaser *** stated that imports appear to have had a negative impact on domestic producers' ability to invest in inventory.

Subject imports from China

Based on available information, producers of AWC from China have the ability to respond to changes in demand with large changes in the quantity of shipments of AWC to the U.S. market. The Commission received very little data from Chinese producers in these investigations, but Chinese exports to the world are larger than total U.S. consumption (see part VII). Chinese exports to the United States are only a small portion of total Chinese exports, suggesting that Chinese suppliers could divert some of their exports to the U.S. market in response to changes in U.S. demand.

Four purchasers indicated that there had not been any changes in the availability of Chinese AWC in the U.S. market since January 1, 2016. Three stated that there had been, citing tariff changes as well as the "significant" supply available from importers.

Imports from nonsubject sources

Nonsubject imports accounted for approximately 40 percent of total U.S. imports during 2016-18. The largest sources of nonsubject imports during 2018 included Ecuador, Mexico, and Turkey.

Six purchasers indicated that there had not been any changes in the availability of AWC from nonsubject countries in the U.S. market since January 1, 2016. One stated that there had been, citing tariff changes. U.S. producer Encore described nonsubject imports as a "major factor" in the market since the imposition of the preliminary-phase duties in these investigations, but added that AWC from nonsubject countries did not have the same "deep" discounts as Chinese AWC.[6]

Supply constraints

Five U.S. producers and 11 responding importers reported that they had not experienced any supply constraints since January 1, 2016. Three importers indicated that they had, citing longer lead times to receive product, or an inability to meet timely deliveries due to the section 301 tariffs.

Ten purchasers indicated that they had not had any firm refuse, decline, or be unable to supply them with AWC (including not meeting timely shipping commitments) since January 1, 2016. However, *** stated that longer lead times in receiving product had led it to have to extend its own delivery dates.

New suppliers

Nine purchasers indicated that no new suppliers entered the U.S. market since January 1, 2016.[7] However, purchaser *** indicated that importer Classic Wire and Cable had entered the market.[8]

U.S. demand

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

[6] Hearing transcript, p. 21 (Kieffer).

[7] In answer to another question, purchaser *** stated that U.S. producer Encore had entered the market, as previously noted.

[8] ***.

End uses and cost share

U.S. demand for AWC depends on the demand for U.S.-produced downstream products. AWC is used to transmit electricity, and so is used in power distribution, as well as residential and commercial construction. Encore described about 80 percent of AWC demand as coming from power distribution (the "feeder" segment, conducting electricity from the utility pole to the meter base and then the distribution panel board) while the remaining 20 percent of AWC demand comes from the "intermediate" segment, i.e., branch circuits through a building. (The smaller circuits in a building are usually served by copper wire.)[9]

At the preliminary phase staff conference, petitioners estimated that the cost of AWC commercial construction was approximately 2 to 8 percent of the total cost of the construction.[10] Petitioners also estimated that commercial/nonresidential construction represents over 90 percent of total sales.[11] Respondents estimated that 0.33 percent of the cost of a home would be the cost of AWC.[12]

In responses to final-phase questionnaires, firms indicated that AWC usually accounts for a small share of the cost of the end-use products in which it is used. Reported cost shares for some end uses were as follows: residential, commercial, or utility wiring, 20 percent; power feed to a building, 15 percent; building construction, 3 percent; and utility power distribution, 1 percent.[13]

Business cycles

U.S. producers were more likely than importers or purchasers to describe the AWC market as subject to business cycles or distinctive conditions of competition. Four U.S. producers, seven importers, and four purchasers indicated that the market was subject to business cycles or distinctive conditions of competition. However, one U.S. producer, seven importers, and seven purchasers indicated that the AWC market was not subject to business cycles or distinctive conditions of competition.

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[9] Conference transcript, pp. 17-19 (Jones), and hearing transcript, pp. 17-18 (Jones).

[10] Conference transcript, p. 56 (Jones).

[11] Conference transcript, p. 54 (Jones).

[12] Conference transcript, pp. 102-103 (Strahs).

[13] Purchasers were asked for trends in their firms' end use products. As most purchasers were retailers or distributors, they did not respond. However, two (including one distributor) indicated that demand for their end use product had fluctuated, and that it had not affected their demand for AWC.

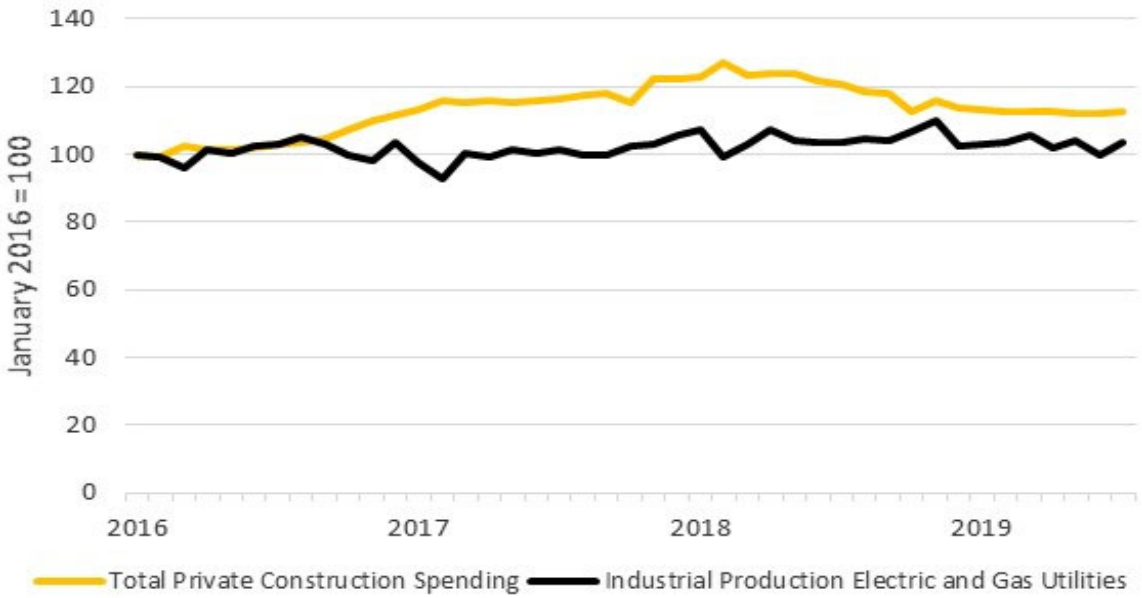
Among firms describing distinctive conditions of competition, four U.S. producers and six importers generally described the construction season in colder parts of the country as driving higher demand in the summer months and lower demand in the winter.[14] *** as well as importer *** also attributed market pricing pressure since 2016 to increased imports of AWC. Among importers describing distinctive conditions of competition, *** described an increase in U.S. AWC manufacturing facilities, increased available inventory of AWC, and the addition of new service competitors. *** indicated that pricing follows Southwire's market prices, and that new manufacturers have entered the market. Among U.S. purchasers, *** described system upgrades and storm restoration as distinctive conditions. *** indicated that the cost of copper drives the use of AWC.

Demand trends

As discussed above, demand for AWC depends on both construction activity and electricity generation. As shown in figure II-1, from January 2016 to April 2018, private construction spending increased 24 percent, and then fell almost 10 percent through July 2019. Overall, private construction spending increased 13 percent from January 2016 to July 2019. Industrial production at oil and gas utilities has been mostly steady since January 2016, and U.S. electricity generation is generally fairly constant. However, construction of new generation equipment may require new AWC, as noted by some firms below.

[14] For example, see hearing transcript, p. 69 (Kieffer).

Figure II-1
Trends in total U.S. private construction spending and industrial production at U.S. electric and gas utilities, January 2016-July 2019



Source: Federal Reserve Board of Governors and U.S. Census Bureau, via Federal Reserve Bank of St. Louis, accessed September 19, 2019.

Most U.S. producers and importers reported an increase in U.S. demand for AWC since January 1, 2016 (table II-5), while nearly half of purchasers reported fluctuating demand. U.S. producer *** and *** indicated that demand had increased because of increased housing and construction activity, as well as higher prices of copper wire (a substitute). Other U.S. producers also cited construction activity as driving increased demand, with U.S. producer *** indicating that demand is higher in summer months when there is more home construction. U.S. importer *** stated that demand had increased because of clean energy incentives and increased investments in electrical transmission and distribution lines. U.S. importer *** stated that AWC demand expands with the U.S. economy overall. Purchaser *** indicated that the acceptance of AWC had increased since 2016.

Table II-5
AWC: Firms' responses regarding U.S. demand and demand outside the United States

Item	Increase	No change	Decrease	Fluctuate
Demand in the United States				
U.S. producers	3	---	1	1
Importers	9	---	---	3
Purchasers	2	2	1	4
Demand outside the United States				
U.S. producers	1	1	---	---
Importers	1	1	1	2
Purchasers	---	---	---	1

Note.—Most U.S. producers, importers, and purchasers that offered comment on demand outside the United States indicated that they had little to no familiarity with it.

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

Substitute products

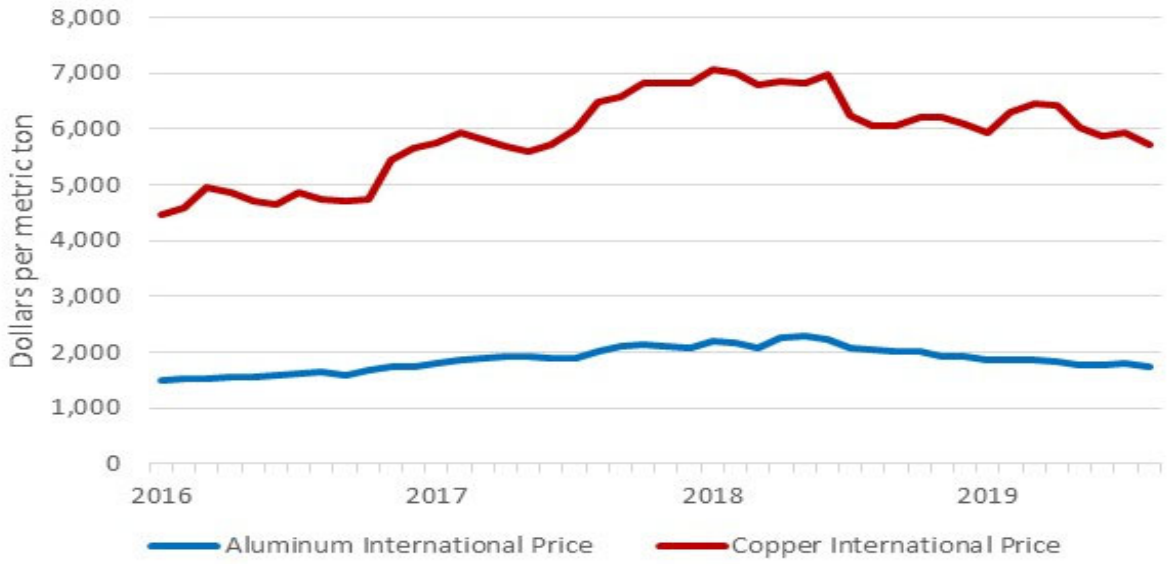
The main substitute for AWC is copper wire and cable (CWC), as both AWC and CWC can deliver electricity. However, substitution is limited because of copper's heavier weight and greater expense, because project specifications dictate whether AWC or CWC should be used, and because of general requirements for CWC (not AWC) to be used inside homes.[15] All 5 responding U.S. producers, 4 of 11 responding importers, and 6 of 11 responding purchasers reported that there were substitutes for AWC, citing CWC (and no other products). Several firms indicated that copper is more expensive than aluminum, and so AWC is a less expensive alternative to CWC. Substitution between these products is limited by local building ordinances, the heavier weight of CWC, and the higher cost of copper. Purchaser *** indicated that it regards AWC as a secondary option, and not a "main" product.

According to importer ***, copper wire and AWC are sometimes substitutes because some specifications of each have equivalent UL ratings, and substitution into AWC increases as the spread between the prices of copper and aluminum increases. *** also stated that ***.

Four of five responding producers, two of two responding importers, and three of six responding purchasers reported that the price of CWC does not affect the price of AWC. U.S. producer *** stated that the "significant" premium for copper over aluminum meant that the degree of competition between copper wire and AWC was limited. Figure II-2 shows the difference in the international prices of aluminum and copper.

[15] Hearing transcript, pp. 24-25 (Asher).

Figure II-2
International prices of aluminum and copper



Source: International Monetary Fund, global prices of aluminum and copper, via Federal Reserve Bank of St. Louis, accessed September 19, 2019.

Substitutability issues

The degree of substitution between domestic and imported AWC depends upon such factors as relative prices, quality (e.g., grade standards such as UL rating, defect rates, etc.), and conditions of sale (e.g., price discounts/rebates, lead times between order and delivery dates, reliability of supply, product services, etc.). Staff believes that there is high degree of substitutability between domestically produced AWC and AWC imported from subject sources, based on the high level of interchangeability and comparability across most purchasing factors.

Lead times

AWC is primarily sold from inventory. U.S. producers reported that *** percent of their commercial shipments were from inventories, with lead times averaging *** days. The remaining *** percent of their commercial shipments were produced-to-order, with lead times averaging *** days. U.S. importers reported that *** percent of their commercial shipments were from inventories, with lead times averaging *** days. Another *** percent of their commercial shipments were produced-to-order, with lead times averaging *** days. The remainder of U.S. importers' U.S. commercial shipments were from foreign inventory, with lead times of *** days.

Knowledge of country sources

Ten purchasers indicated they had marketing/pricing knowledge of domestic product, four of Chinese product, and one (***) indicated knowledge of Mexican, Turkish, and other nonsubject country product.[16]

Purchasers were asked whether they or their customers ever specifically order AWC from one country in particular over other possible sources of supply. Nine purchasers answered that they did not. *** responded that they do, ordering domestic product because of appropriate service and quality, as well as their own customers' requests for domestic product under "Buy American" contracts.

As shown in table II-6, most purchasers and their customers never make purchasing decisions based on the producer or country of origin. The minority of purchasers that described purchasing from particular manufacturers did so for reasons of price, quality, delivery, and availability, with *** indicating that it only purchases from domestic suppliers. A minority of purchasers also described both themselves and their customers making decisions based on manufacturer and/or country of origin because of "Buy American" policies or pricing.

Table II-6
AWC: Purchasing decisions based on producer and country of origin

Purchaser/customer decision	Always	Usually	Sometimes	Never
Purchaser makes decision based on producer	2	---	2	7
Purchaser's customers make decision based on producer	---	1	2	4
Purchaser makes decision based on country	1	---	2	8
Purchaser's customers make decision based on country	---	---	3	4

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

Factors affecting purchasing decisions

The most often cited top three factors firms consider in their purchasing decisions for AWC were price/cost (10 firms), quality[17] (8 firms), and availability/supply (8 firms) as shown in table II-7. Certification by outside bodies (UL and NRTL), delivery, and lead times were also mentioned as important factors by more than one purchaser. One of the three firms that did not list quality as an important factor did list UL certification.

[16] Purchaser *** indicated that it only had knowledge of domestic product, and that it purchases exclusively from domestic producers, ***.

[17] Purchasers described AWC quality as being based on insulation, product flexibility, packaging, purity of metal conductor, UL certification, appearance, raw material sources, electrical properties, and quality control, among other factors.

Table II-7
AWC: Ranking of factors used in purchasing decisions as reported by U.S. purchasers, by factor

Factor	First	Second	Third	Total
Price / Cost	5	2	3	10
Quality	4	1	3	8
Availability / Supply	1	4	3	8
All other factors[1]	1	4	1	6

Note.--Other factors include UL and NRTL certification, delivery, and lead times.

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

A plurality of purchasers (5 of 11) reported that they only sometimes purchase the lowest-priced AWC. Four reported that they usually do, and two reported that they always do.

Ten purchasers indicated that there were not any specific grades, types, or sizes of AWC that were only available from a particular country source, but *** stated that some product from China and South American countries does not have UL certification, disqualifying it from *** purchases.

Importance of specified purchase factors

Purchasers were asked to rate the importance of 18 factors in their purchasing decisions (table II-8). The factors rated as very important by at least 9 of 11 responding purchasers were availability, price, product consistency, quality meets industry standards, reliability of supply, and UL certification.

Table II-8
AWC: Importance of purchase factors, as reported by U.S. purchasers, by factor

Factor	Very important	Somewhat important	Not important
Availability	9	2	0
Copper prices	4	2	5
Delivery terms	7	3	1
Delivery time	6	5	0
Discounts offered	6	4	2
Minimum quantity requirements	2	6	3
NEC compliance	5	5	1
Packaging	4	6	1
Payment terms	7	3	1
Price	10	1	0
Product consistency	9	1	1
Product range	4	6	1
Quality meets industry standards	10	1	0
Quality exceeds industry standards	4	5	2
Reliability of supply	10	1	0
Technical support/service	3	6	2
UL certification	9	2	0
U.S. transportation costs	3	6	2

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

Supplier certification

U.S. producer Southwire described AWC from all sources as produced to the same industry-wide standards.[18] Six responding purchasers require their suppliers to become certified or qualified to sell AWC to their firm, while five did not require certification. Two of the purchasers requiring certification, ***, indicated that the main certification requirement was UL certification. Three others (***) described their qualification process as requiring design and specification reviews as well as factory and/or warehouse visits. Purchasers reported that the time to qualify a new supplier ranged from 30 days to 1 year. Eight purchasers reported that no domestic or foreign supplier had failed in its attempt to qualify AWC, or had lost its approved status since 2016. However, *** had disqualified a supplier because it lacked UL certification, and *** had disqualified a Chinese supplier for ***.

Changes in purchasing patterns

Purchasers were asked about changes in their purchasing patterns from different sources since January 1, 2016 (table II-9); reasons reported for changes in sourcing included demand and price. Three of 11 responding purchasers reported that they had changed suppliers since January 1, 2016, adding suppliers because of available material and pricing, while dropping *** supplier for ***.

Table II-9
AWC: Changes in purchase patterns from U.S., subject, and nonsubject countries

Source of purchases	Did not purchase	Decreased	Increased	Constant	Fluctuated
United States	---	3	---	4	3
China	5	---	2	---	2
Mexico	7	1	---	---	---
Turkey	7	---	1	---	---
All other sources	7	1	---	---	---

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

Importance of purchasing domestic product

Eight purchasers reported that at least 98 percent of their purchases did not require purchasing U.S.-produced product. *** reported that it did not require purchasing U.S.-produced product for 80 percent of its purchases, but that it did for 15 percent because of

[18] Hearing transcript, p. 24 (Asher).

"Buy American" provisions, and for 5 percent because of its customers. *** reported that it had only approved domestic suppliers for its purchases.

Comparisons of domestic products, subject imports, and nonsubject imports

Purchasers were asked a number of questions comparing AWC produced in the United States, China, and nonsubject countries. First, purchasers were asked for a country-by-country comparison on the same 18 factors (table II-10) for which they were asked to rate the importance.

Most purchasers reported that U.S., Chinese, and nonsubject AWC were comparable on all factors. However, two purchasers also described U.S. product as superior to Chinese product in delivery time. One to two purchasers also indicated that U.S. product was inferior to Mexican, Turkish, and other nonsubject sources of AWC in delivery time.

Table II-10
AWC: Purchasers' comparisons between U.S.-produced and imported product

Factor	U.S. vs. China			U.S. vs. Mexico, and U.S. vs. Turkey			U.S. vs. other nonsubject		
	S	C	I	S	C	I	S	C	I
Availability	1	4	0	0	2	0	0	2	0
Copper prices	0	4	0	0	1	0	0	2	0
Delivery terms	0	5	0	0	2	0	0	2	0
Delivery time	2	2	1	0	1	1	0	0	2
Discounts offered	0	4	0	0	1	0	0	2	0
Minimum quantity requirements	0	5	0	0	2	0	0	2	0
NEC compliance	1	4	0	1	1	0	0	2	0
Packaging	1	4	0	1	1	0	0	2	0
Payment terms	1	4	0	1	1	0	0	2	0
Price	1	3	0	0	1	0	0	1	1
Product consistency	1	4	0	1	1	0	0	2	0
Product range	1	4	0	1	1	0	0	2	0
Quality meets industry standards	1	4	0	1	1	0	0	2	0
Quality exceeds industry standards	1	4	0	1	1	0	0	2	0
Reliability of supply	2	3	0	1	1	0	0	2	0
Technical support/service	1	4	0	1	1	0	0	2	0
UL certification	1	4	0	1	1	0	0	2	0
U.S. transportation costs	0	4	0	0	1	0	0	2	0

Note.--A rating of superior means that price/U.S. transportation cost is generally lower. For example, if a firm reported "U.S. superior," it meant that the U.S. product was generally priced lower than the imported product.
Note.--Purchaser comparisons of U.S. vs. Mexico and U.S. vs. Turkey were requested separately, but the responses were the same.
Note.--S=first listed country's product is superior; C=both countries' products are comparable; I=first list country's product is inferior.

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

Comparison of U.S.-produced and imported AWC

In order to determine whether U.S.-produced AWC can generally be used in the same applications as imports from China and other countries, U.S. producers, importers, and purchasers were asked whether the products can always, frequently, sometimes, or never be used interchangeably. As shown in table II-11, most responding U.S. producers, importers, and purchasers indicated that U.S. and imported AWC is always or frequently interchangeable.

Table II-11
AWC: Interchangeability between AWC produced in the United States and in other countries, by country pair

Country pair	Number of U.S. producers reporting				Number of U.S. importers reporting				Number of purchasers reporting			
	A	F	S	N	A	F	S	N	A	F	S	N
U.S. vs. subject countries:												
U.S. vs. China	3	1	0	1	5	3	1	1	3	1	1	0
Nonsubject countries comparisons:												
U.S. vs. Mexico	2	1	0	1	4	2	1	1	1	0	1	0
U.S. vs. Turkey	2	1	0	1	3	2	1	1	1	1	1	0
U.S. vs. other countries	2	1	0	1	3	2	3	0	1	0	1	0
China vs. Mexico	2	0	0	0	3	0	0	0	0	0	0	0
China vs. Turkey	2	0	0	0	2	0	0	0	0	0	0	0
China vs. other countries	2	0	0	0	2	0	0	0	0	0	0	0

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

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

In additional comments, importer *** stated that local building codes and standards may impact interchangeability of AWC. Importer *** stated that use of aluminum building wires is limited to the United States and "very few" other countries.

As can be seen from table II-12, all responding purchasers reported that domestically produced and Chinese AWC always or usually met minimum quality specifications. Six purchasers expressed that they did not know whether Chinese AWC met minimum quality specifications, and eight expressed a similar lack of knowledge of AWC from nonsubject sources (including Mexico and Turkey).

Table II-12
AWC: Ability to meet minimum quality specifications, by source

Source	Always	Usually	Sometimes	Rarely or never
United States	8	1	0	0
China	3	1	0	0
Mexico	1	0	0	0
Turkey	1	0	0	0
All other sources	1	0	1	0

Note.--Purchasers were asked how often domestically produced or imported AWC meets minimum quality specifications for their own or their customers' uses.

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

In addition, U.S. producers, importers, and purchasers were asked to assess how often differences other than price were significant in sales of AWC from the United States, subject, or nonsubject countries. As seen in table II-13, U.S. producers and importers were most likely to describe non-price factors as significant differences in sales of AWC produced in the United States and in other countries, but purchasers were more likely to describe non-price factors as always significant in such comparisons. However, purchasers did not usually describe which such factors were significant.

Table II-13
AWC Significance of differences other than price between AWC produced in the United States and in other countries, by country pair

Country pair	Number of U.S. producers reporting				Number of U.S. importers reporting				Number of purchasers reporting			
	A	F	S	N	A	F	S	N	A	F	S	N
U.S. vs. subject countries:												
U.S. vs. China	0	0	3	2	2	0	5	2	3	1	2	0
Nonsubject countries comparisons:												
U.S. vs. Mexico	0	0	2	2	1	0	4	1	2	0	1	0
U.S. vs. Turkey	0	0	2	2	1	0	3	2	2	0	1	0
U.S. vs. other countries	0	0	2	2	2	0	5	1	2	0	1	0
China vs. Mexico	0	0	1	1	1	0	1	0	0	0	0	0
China vs. Turkey	0	0	1	1	1	0	0	0	0	0	0	0
China vs. other countries	0	0	1	1	1	0	1	0	0	0	0	0

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

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

In additional comments, U.S. producer *** stated that lead times and technical support can sometimes be differences between U.S., Chinese, and nonsubject AWC. Importer *** stated that it stocks AWC from multiple sources, and that it believes it wins orders because of non-price factors branded under its name and sold with an expectation of additional

services. Importer *** and purchaser *** also cited lead time, technical services, and/or U.S. transportation network as significant non-price factors.

Elasticity estimates

This section discusses elasticity estimates; parties were encouraged to comment on these estimates. None did so.

U.S. supply elasticity

The domestic supply elasticity[19] for AWC measures the sensitivity of the quantity supplied by U.S. producers to changes in the U.S. market price of AWC. The elasticity of domestic supply depends on several factors including the level of excess capacity, the ease with which producers can alter capacity, producers' ability to shift to production of other products, the existence of inventories, and the availability of alternate markets for U.S.-produced AWC. Analysis of these factors above indicates that the U.S. industry has the ability to increase or decrease shipments to the U.S. market; an estimate in the range of 4 to 8 is suggested.

U.S. demand elasticity

The U.S. demand elasticity for AWC measures the sensitivity of the overall quantity demanded to a change in the U.S. market price of AWC. This estimate depends on factors discussed above such as the existence, availability, and commercial viability of substitute products, as well as the component share of the AWC in the production of any downstream products. Based on the available information, the aggregate demand for AWC is likely to be inelastic; a range of -0.25 to -0.5 is suggested.

Substitution elasticity

The elasticity of substitution depends upon the extent of product differentiation between the domestic and imported products.[20] Product differentiation, in turn, depends upon such factors as quality (e.g., chemistry, appearance, etc.) and conditions of sale (e.g., availability, sales terms/ discounts/ promotions, etc.). Based on available information, the

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

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

elasticity of substitution between U.S.-produced AWC and imported AWC is likely to be in the range of 4 to 6.

Part III: U.S. producers' production, shipments, and employment

The Commission analyzes a number of factors in making injury determinations (see 19 U.S.C. §§ 1677(7)(B) and 1677(7)(C)). Information on the subsidies and dumping margins was presented in *Part I* of this report and information on the volume and pricing of imports of the subject merchandise is presented in *Part IV* and *Part V*. Information on the other factors specified is presented in this section and/or *Part VI* and (except as noted) is based on the questionnaire responses of five firms that accounted for all of U.S. production of AWC during 2018.

U.S. producers

The Commission issued a U.S. producer questionnaire to five firms based on information contained in the petition. Five firms provided usable data on their productive operations. Staff believes that these responses represent all U.S. production of AWC.

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

Table III-1
AWC: U.S. producers of AWC, their position on the petition, production locations, and shares of reported production, 2018

Firm	Position on petition	Production location(s)	Share of production (percent)
Cerro	***	Ogden, UT	***
Encore	Petitioner	McKinney, TX	***
Nexans	***	Chester NY	***
Prysmian	***	Sedalia, MO Abbeville, SC Williamsport, PA Marshall, TX	***
Southwire	Petitioner	Carrollton, GA Villa Rica, GA Starkville, MS	***
Total			***

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent.

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

Table III-2 presents information on U.S. producers' ownership, related and/or affiliated firms of AWC.

Table III-2
AWC: U.S. producers' ownership, related and/or affiliated firms

Item / Firm	Firm Name	Affiliated/Ownership
Ownership:		
***	***	***
***	***	***
***	***	***
***	***	***
Related producers:		
***	***	***
***	***	***

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

As indicated in table III-2, no U.S. producers are related to foreign producers of the subject merchandise and no U.S. producers are related to U.S. importers of the subject merchandise. In addition, as discussed in greater detail below, no U.S. producers directly import the subject merchandise or purchase the subject merchandise from U.S. importers.

Table III-3 presents U.S. producers' reported changes in operations since January 1, 2016.

Table III-3
AWC: U.S. producers' reported changes in operations, since January 1, 2016

Item / Firm	Reported changes in operations
Expansions:	
***	***
Acquisitions:	
***	***
Prolonged shutdowns or curtailments:	
***	***
***	***
Other:	
***	***
***	***

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

U.S. production, capacity, and capacity utilization

Table III-4 and figure III-1 present U.S. producers' production, capacity, and capacity utilization. Domestic producers' AWC production increased by 7.6 percent during 2016-18, and was 2.2 percent lower in January to June 2019 than in January to June 2018. Three of five responding producers, ***, reported a decrease in production between 2016 and 2018, with *** ceasing production of AWC in May 2018 due to a low profit margin and aluminum being a direct substitute for copper.

Capacity similarly increased during 2016-18, by 1.8 percent, and was relatively unchanged in January to June 2019 compared to January to June 2018. The increase in capacity between 2016 and 2017 was due to ***. *** reported *** low capacity utilization rates during the period of investigation. *** reported that "***."

Table III-4
AWC: U.S. producers' capacity, production, and capacity utilization, 2016-18, January to June 2018, and January to June 2019

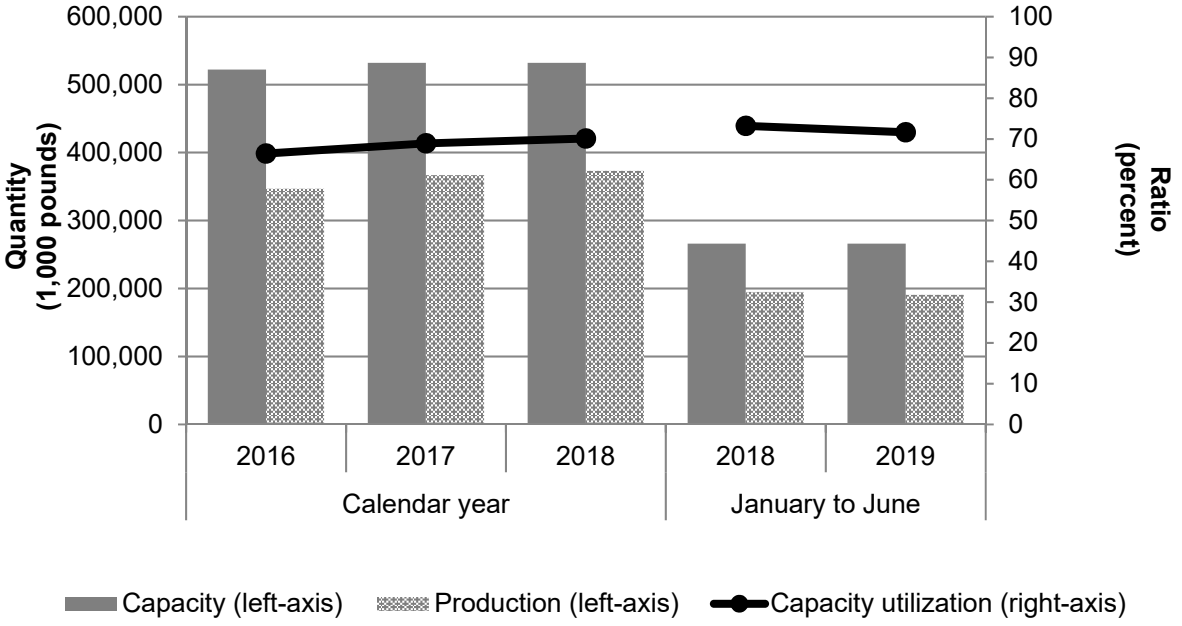
Item	Calendar year			January to June	
	2016	2017	2018	2018	2019
	Capacity (1,000 pounds)				
Cerro	***	***	***	***	***
Encore	***	***	***	***	***
Nexans	***	***	***	***	***
Prysmian	***	***	***	***	***
Southwire	***	***	***	***	***
Total capacity	519,353	529,030	528,773	264,438	264,347
	Production (1,000 pounds)				
Cerro	***	***	***	***	***
Encore	***	***	***	***	***
Nexans	***	***	***	***	***
Prysmian	***	***	***	***	***
Southwire	***	***	***	***	***
Total production	346,777	366,732	372,979	194,814	190,570
	Capacity utilization (percent)				
Cerro	***	***	***	***	***
Encore	***	***	***	***	***
Nexans	***	***	***	***	***
Prysmian	***	***	***	***	***
Southwire	***	***	***	***	***
Total capacity utilization	66.8	69.3	70.5	73.7	72.1

Note: *** reported its AWC capacity as equal to its overall plant capacity, even though it reported production of other products. *** asserts that its treatment of capacity is correct since its "other products" consist of uninsulated wire that uses the same processes as insulated AWC until the insulation step is bypassed. *** further states that these products could easily be made into AWC by simply running them through the insulating step, and that the quantity of its uninsulated wire production is minimal. Staff correspondence with ***, August 16, 2019.

Note: Staff allocated AWC capacity for *** based on a ratio of its overall production. In its questionnaire response, *** allocated the majority of its overall plant capacity to AWC even though the majority of its production consisted of other products. Staff correspondence with ***, September 19, 2019.

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

Figure III-1
AWC: U.S. producers' production, capacity, and capacity utilization, 2016-18, January to June 2018, and January to June 2019



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

Constraints on capacity

All five responding U.S. producers reported constraints in the manufacturing process. *** reported that its constraints in the manufacturing process are based on its equipment and product mix. Two producers (***) reported as a primary constraint the capacity to produce strand, which impacts the amount of AWC that can be produced. Both *** cited low domestic prices as a constraint on its capacity to produce AWC. *** also cited a shortage of production workers as a constraint in its capacity to produce AWC.

Alternative products

As shown in table III-5, the majority of production on the same machinery and equipment as AWC was dedicated to alternative products. Four of five firms reported production of other products, with *** accounting for the vast majority. Firms reported producing copper wire and cables, higher voltage copper and aluminum products, and uninsulated aluminum wire.

Firms were asked about their ability to switch production from AWC to other products. *** reports that some equipment is dual purpose, but drawing machines and cablers are limited to AWC. *** reports that the aluminum plant could theoretically produce insulated wire and cable with higher voltage ratings, but would first require investing in upstream PVC manufacturing operations. *** reports its ability to switch production, to some extent, to copper building wire products as well as higher voltage aluminum and copper products. *** reports its ability to switch to the copper equivalent of in-scope AWC. Representatives from Encore and Southwire testified that switching from AWC production to the production of copper equivalents is very costly and inefficient, requiring many hours of downtime.[1]

Table III-5
AWC: U.S. producers' overall plant capacity and production on the same equipment as subject production, 2016-18, January to June 2018, and January to June 2019

Item	Calendar year			January to June	
	2016	2017	2018	2018	2019
	Quantity (1,000 pounds)				
Overall capacity	***	***	***	***	***
Production:					
AWC	***	***	***	***	***
Out-of-scope production	***	***	***	***	***
Total production on same machinery	***	***	***	***	***
	Ratios and shares (percent)				
Overall capacity utilization	***	***	***	***	***
Share of production:					
AWC	***	***	***	***	***
Out-of-scope production	***	***	***	***	***
Total production on same machinery	***	***	***	***	***

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

[1] Conference transcript, pp. 36-37 (Jones, Asher)

U.S. producers' U.S. shipments and exports

Table III-6 presents U.S. producers' U.S. shipments, export shipments, and total shipments. U.S. shipments by quantity increased overall by 4.0 percent during 2016-18, and were 0.8 percent higher in January to June 2019 than in the same period in 2018. The value of such shipments similarly increased by 12.2 percent between 2016 and 2018, and were 9.1 percent higher in January to June 2019 than in January to June 2018. As a result, unit values increased by 7.9 percent between 2016 and 2018, from $1.84 per pound to $1.99 per pound, and were higher in January to June 2019 ($2.00 per pound) compared to the same period in 2018 ($1.84 per pound). U.S. producers' U.S. shipments accounted for the majority of total shipments (*** percent in 2018). *** of the five responding firms, *** reported export shipments, with *** accounting for the majority. Exports increased by *** percent between 2016 and 2018, and were *** percent higher in January to June 2019 than in January to June 2018. No U.S. producer reported internal consumption of AWC. In addition, *** was the only U.S. producer to report *** transfers to related firms.

Table III-6
AWC: U.S. producers' U.S. shipments, exports shipments, and total shipments, 2016-18, January to June 2018, and January to June 2019

Item	Calendar year			January to June	
	2016	2017	2018	2018	2019
	Quantity (1,000 pounds)				
U.S. shipments	316,423	326,692	329,031	169,233	170,613
Export shipments	***	***	***	***	***
Total shipments	***	***	***	***	***
	Value (1,000 dollars)				
U.S. shipments	583,279	615,983	654,231	312,069	340,599
Export shipments	***	***	***	***	***
Total shipments	***	***	***	***	***
	Unit value (dollars per pound)				
U.S. shipments	1.84	1.89	1.99	1.84	2.00
Export shipments	***	***	***	***	***
Total shipments	***	***	***	***	***
	Share of quantity (percent)				
U.S. shipments	***	***	***	***	***
Export shipments	***	***	***	***	***
Total shipments	***	***	***	***	***
	Share of value (percent)				
U.S. shipments	***	***	***	***	***
Export shipments	***	***	***	***	***
Total shipments	***	***	***	***	***

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

U.S. producers' inventories

Table III-7 presents U.S. producers' end-of-period inventories and the ratio of these inventories to U.S. producers' production, U.S. shipments, and total shipments**.** The U.S. industry's inventories of AWC fluctuated during 2016-18 and decreased overall by 1.1 percent. Inventories were 20.6 percent lower in January to June 2019 than in January to June 2018. During 2016-18, the ratio of inventories to production ranged between 10.3 percent in 2018 and 11.4 percent in 2017, while the ratio of inventories to U.S. shipments ranged between 11.7 percent in 2018 and 12.8 percent in 2017. The high volume of inventories relative to production and shipments is common in the AWC industry, as producers must respond quickly to meet customer demands, and be able to ship on a same-day or next-day basis.[2]

Table III-7
AWC: U.S. producers' inventories, 2016-18, January to June 2018, and January to June 2019

Item	Calendar year			January to June	
	2016	2017	2018	2018	2019
	Quantity (1,000 pounds)				
U.S. producers' end-of-period inventories	38,910	41,708	38,481	48,760	38,700
	Ratio (percent)				
Ratio of inventories to.--					
U.S. production	11.2	11.4	10.3	12.5	10.2
U.S. shipments	12.3	12.8	11.7	14.4	11.3
Total shipments	***	***	***	***	***

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

U.S. producers' imports and purchases

Two of five U.S. producers imported AWC during the period of investigation. *** reported importing AWC from nonsubject sources, each citing product mix as the primary reason for importing. *** imports small quantities from ***, while *** imported *** from ***. No U.S. producer reported purchases of AWC from any source.

[2] Conference transcript, pp. 37-39 (Jones, Levy, Asher, Kieffer); and petitioners' postconference brief, Responses to questions from Commission staff, p. II-15.

U.S. employment, wages, and productivity

Table III-8 shows U.S. producers' employment-related data. All employment-related indicators increased during 2016-18, with the exception of hours worked. The number of production and related workers ("PRWs") increased by 0.6 percent between 2016 and 2018, and was 0.5 percent higher in January to June 2019 than in January to June 2018. *** reported an overall decrease in PRWs and attributed this trend to modest production levels caused by subject import competition and price erosion of aluminum building wire, respectively. *** reported an overall increase in PRWs, which is consistent with their increased production levels during the period of investigation. *** accounted for the majority of PRWs in each period.[3]

Wages paid also increased during 2016-18, by 7.8 percent, and were 1.9 percent higher in January to June 2019 than in January to June 2018. Productivity and unit labor costs also increased between 2016 and 2018, by 8.9 percent and 0.3 percent respectively; productivity was 1.5 percent lower in January to June 2019 when compared to the same period in 2018 while unit labor costs were 4.2 percent higher.

Table III-8
AWC: Average number of production and related workers, hours worked, wages paid to such employees, hourly wages, productivity, and unit labor costs, 2016-18, January to June 2018, and January to June 2019

Item	Calendar year			January to June	
	2016	2017	2018	2018	2019
Production and related workers (PRWs) (number)	1,709	1,734	1,720	1,739	1,747
Total hours worked (1,000 hours)	4,358	4,305	4,306	2,250	2,235
Hours worked per PRW (hours)	2,550	2,483	2,504	1,294	1,279
Wages paid ($1,000)	90,886	93,360	98,013	50,444	51,402
Hourly wages (dollars per hour)	$20.85	$21.69	$22.76	$22.42	$23.00
Productivity (pounds per hour)	79.6	85.2	86.6	86.6	85.3
Unit labor costs (dollars per pound)	$0.26	$0.25	$0.26	$0.26	$0.27

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

[3] ***.

Part IV: U.S. imports, apparent U.S. consumption, and market shares

U.S. importers

The Commission issued importer questionnaires to 38 firms believed to be importers of subject AWC, as well as to all U.S. producers of AWC.[1] Usable questionnaire responses were received from 14 companies, representing the majority of U.S. imports from China and all other sources in 2018 under HTS statistical reporting number 8544.49.9000, a "basket" category.[2] [3] Table IV-1 lists all responding U.S. importers of AWC from China and other sources, their locations, and their shares of U.S. imports, in 2018.

[1] The Commission issued questionnaires to those firms identified in the petition, along with firms that, based on a review of data provided by U.S. Customs and Border Protection ("Customs"), may have accounted for more than one percent of total imports under HTS subheading 8544.49.9000 in 2018.

[2] Fifteen additional firms certified that they had not imported AWC from any source since January 1, 2016.

[3] These 14 firms, in addition to the 15 firms that certified they had not imported AWC into the U.S. since January 1, 2016, accounted for *** percent of U.S. imports from China, *** percent of U.S. imports from all other sources, and *** percent of total U.S. imports in 2018, based on proprietary Customs records. Of the 14 responding firms, 8 reported imports from China, 2 from Mexico, 4 from Turkey, and 11 from all other sources.

Table IV-1
AWC: U.S. importers by source, 2018

Firm	Headquarters	Share of imports by source (percent)					
		China	Mexico	Turkey	All other sources	Nonsubject sources	All import sources
American Wire	Aventura, FL	***	***	***	***	***	***
Cameron	Little Rock, AR	***	***	***	***	***	***
CME	Suwanee, GA	***	***	***	***	***	***
Condumex	Grand Prairie, TX	***	***	***	***	***	***
Coreal	Fort Lee, NJ	***	***	***	***	***	***
Electrocables del Caribe	San Juan, PR	***	***	***	***	***	***
Electrocables USA	Tamarac, FL	***	***	***	***	***	***
Houston Wire	Houston, TX	***	***	***	***	***	***
ICC	Fort Lee, NJ	***	***	***	***	***	***
Legacy	Irving, TX	***	***	***	***	***	***
Nexans	Chester, NY	***	***	***	***	***	***
Priority	North Little Rock, AR	***	***	***	***	***	***
Prysmian	Highland Heights, KY	***	***	***	***	***	***
Repwire	Doral, FL	***	***	***	***	***	***
Total		***	***	***	***	***	***

Note: American Wire's questionnaire response includes its affiliated company Classic Wire and Cable.

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

U.S. imports

Table IV-2 and figure IV-1 present information on U.S. imports of AWC from China and all other sources. Total U.S. imports, by quantity, increased overall by 24.5 percent during 2016-18, and were 13.4 percent lower in January to June 2019 than in January to June 2018. Subject U.S. imports from China increased overall by 28.2 percent during 2016-18, increasing by 39.7 percent from 2016-17 then decreasing by 8.2 percent from 2017-18, and were 85.7 percent lower in January to June 2019 when compared to the same period in 2018. Petitioners attribute the lower level of imports in January to June 219 compared to January to June 2018 to the filing of the petitions in the third quarter of 2018 and the pendency of the investigations.[4]

[4] Hearing transcript, pp. 13, 67-68 (Levy); and Petitioners' posthearing brief, p. I-7.

Imports from nonsubject sources increased by 19.5 percent between 2016 and 2018, and were 124.1 percent higher in January to June 2019 than in January to June 2018. The leading nonsubject sources of AWC imports are Mexico and Turkey, accounting for *** percent and *** percent of total U.S. imports in 2018, respectively. Importers *** reported imports from Canada, Colombia, Ecuador, and Venezuela, and together accounted for the vast majority of imports from all other sources (***). Other sources of imports included France, Germany, Italy, Japan, Poland, Singapore, and South Korea.

Average unit values from subject sources increased by 1.1 percent between 2016 and 2018, and were 3.4 percent lower in January to June 2019 than in January to June 2018. Average unit values from nonsubject sources decreased by 3.3 percent between 2016 and 2018, and were 16.6 percent lower in January to June 2019 than in January to June 2018. The ratio of U.S. imports from China to U.S. production increased during 2016-18, peaking at 25.2 percent of U.S. production in 2017 and was 22.8 percent of U.S. production in 2018.

Table IV-2
AWC: U.S. imports by source, 2016-18, January to June 2018, and January to June 2019

Item	Calendar year			January to June	
	2016	2017	2018	2018	2019
	Quantity (1,000 pounds)				
U.S. imports from.--					
China	66,253	92,565	84,952	41,497	5,922
Mexico	***	***	***	***	***
Turkey	***	***	***	***	***
All other sources	***	***	***	***	***
Nonsubject sources	49,890	59,658	59,605	21,824	48,911
All import sources	116,143	152,223	144,557	63,321	54,833
	Value (1,000 dollars)				
U.S. imports from.--					
China	97,878	134,254	126,856	63,720	8,781
Mexico	***	***	***	***	***
Turkey	***	***	***	***	***
All other sources	***	***	***	***	***
Nonsubject sources	88,054	106,592	101,772	42,259	79,008
All import sources	185,932	240,846	228,628	105,979	87,789
	Unit value (dollars per pound)				
U.S. imports from.--					
China	1.48	1.45	1.49	1.54	1.48
Mexico	***	***	***	***	***
Turkey	***	***	***	***	***
All other sources	***	***	***	***	***
Nonsubject sources	1.76	1.79	1.71	1.94	1.62
All import sources	1.60	1.58	1.58	1.67	1.60

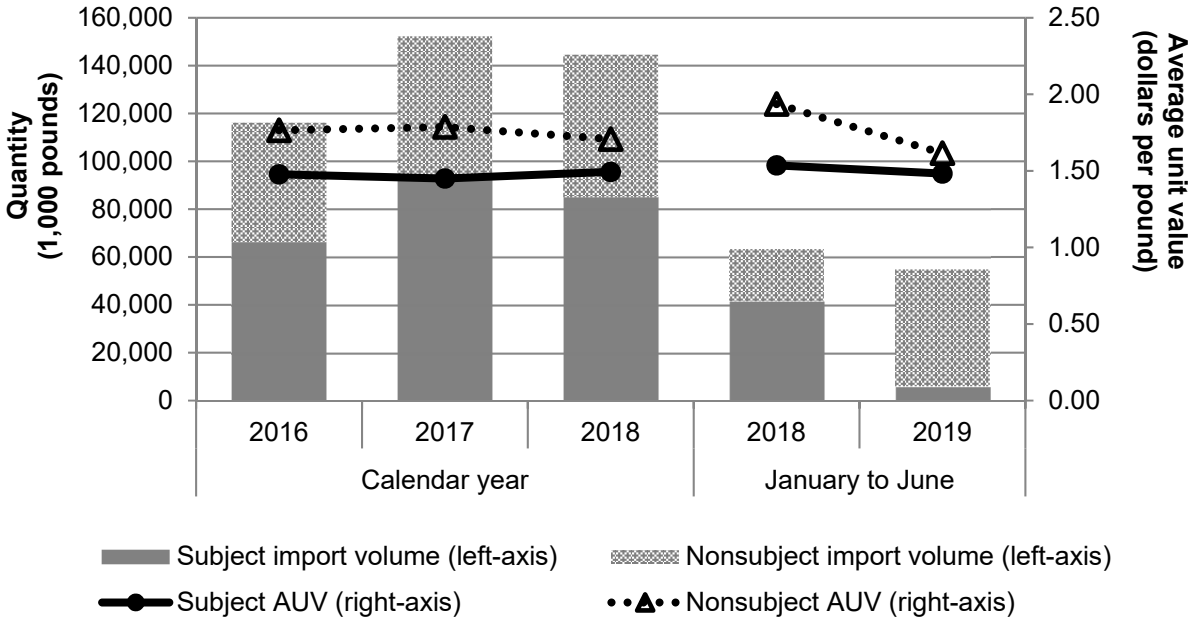
Table continued on next page.

Table IV-2--Continued
AWC: U.S. imports by source, 2016-18, January to June 2018, and January to June 2019

Item	Calendar year			January to June	
	2016	2017	2018	2018	2019
	Share of quantity (percent)				
U.S. imports from.--					
China	57.0	60.8	58.8	65.5	10.8
Mexico	***	***	***	***	***
Turkey	***	***	***	***	***
All other sources	***	***	***	***	***
Nonsubject sources	43.0	39.2	41.2	34.5	89.2
All import sources	100.0	100.0	100.0	100.0	100.0
	Share of value (percent)				
U.S. imports from.--					
China	52.6	55.7	55.5	60.1	10.0
Mexico	***	***	***	***	***
Turkey	***	***	***	***	***
All other sources	***	***	***	***	***
Nonsubject sources	47.4	44.3	44.5	39.9	90.0
All import sources	100.0	100.0	100.0	100.0	100.0
	Ratio to U.S. production				
U.S. imports from.--					
China	19.1	25.2	22.8	21.3	3.1
Mexico	***	***	***	***	***
Turkey	***	***	***	***	***
All other sources	***	***	***	***	***
Nonsubject sources	14.4	16.3	16.0	11.2	25.7
All import sources	33.5	41.5	38.8	32.5	28.8

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

Figure IV-1
AWC: U.S. import volumes and average unit values (AUVs), 2016-18, January to June 2018, and January to June 2019



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

Negligibility

The statute requires that an investigation be terminated without an injury determination if imports of the subject merchandise are found to be negligible.[5] Negligible imports are generally defined in the Act, as amended, as imports from a country of merchandise corresponding to a domestic like product where such imports account for less than 3 percent of the volume of all such merchandise imported into the United States in the most recent 12-month period for which data are available that precedes the filing of the petition or the initiation of the investigation. However, if there are imports of such merchandise from a number of countries subject to investigations initiated on the same day that individually account for less than 3 percent of the total volume of the subject merchandise, and if the imports from those countries collectively account for more than 7 percent of the volume of all such merchandise imported into the United States during the applicable 12-month period, then imports from such countries are deemed not to be negligible.[6] Imports from China accounted for 61.4 percent of total imports of AWC by quantity during September 2017 through August 2018, based on importer questionnaire data (table IV-3).

Table IV-3
AWC: U.S. imports in the twelve month period preceding the filing of the petition, September 2017 through August 2018

Item	September 2017 through August 2018	
	Quantity (1,000 pounds)	Share of quantity (percent)
U.S. imports from.--		
China	74,568	61.4
Mexico	***	***
Turkey	***	***
All other sources	***	***
Nonsubject sources	46,929	38.6
All import sources	121,497	100.0

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

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

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

Apparent U.S. consumption

Table IV-4 presents data on apparent U.S. consumption and U.S. market shares for AWC. Apparent consumption increased by 10.2 percent during 2016-18, increasing during each full year, and was 2.1 percent higher in January to June 2019 than in January to June 2018.

Table IV-4
AWC: U.S. shipments of domestic product, U.S. shipments of imports, and apparent U.S. consumption, 2016-18, January to June 2018, and January to June 2019

Item	Calendar year			January to June	
	2016	2017	2018	2018	2019
	Quantity (1,000 pounds)				
U.S. producers' U.S. shipments	316,423	326,692	329,031	169,233	170,613
U.S. importers' U.S. shipments from.--China	***	81,933	85,295	41,732	23,703
Mexico	***	***	***	***	***
Turkey	***	***	***	***	***
All other sources	***	***	***	***	***
Nonsubject sources	***	58,193	59,620	25,053	46,711
All import sources	113,841	140,126	144,915	66,785	70,415
Apparent U.S. consumption	430,264	466,818	473,946	236,018	241,028
	Value (1,000 dollars)				
U.S. producers' U.S. shipments	583,279	615,983	654,231	312,069	340,599
U.S. importers' U.S. shipments from.--China	***	147,209	166,413	81,777	***
Mexico	***	***	***	***	***
Turkey	***	***	***	***	***
All other sources	***	***	***	***	***
Nonsubject sources	***	110,575	116,722	51,227	***
All import sources	221,589	257,783	283,135	133,004	141,215
Apparent U.S. consumption	804,868	873,766	937,367	445,072	481,814

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

U.S. market shares

U.S. market share data are presented in table IV-5 and figure IV-2. U.S. producers' market share decreased by 4.1 percentage points between 2016 and 2018, and was 0.9 percentage points lower in January to June 2019 than in January to June 2018. Both subject and nonsubject import market shares increased during 2016-18, by *** and *** percentage points respectively. Subject import market share was 7.8 percentage points lower in January to June 2019 than in January to June 2018, while nonsubject import market share was 8.8 percentage points higher during the same period.

Table IV-5
AWC: U.S. consumption and market shares, 2016-18, January to June 2018, and January to June 2019

Item	Calendar year			January to June	
	2016	2017	2018	2018	2019
	Quantity (1,000 pounds)				
Apparent U.S. consumption	430,264	466,818	473,946	236,018	241,028
	Share of quantity (percent)				
U.S. producers' U.S. shipments	73.5	70.0	69.4	71.7	70.8
U.S. importers' U.S. shipments from.--					
China	***	17.6	18.0	17.7	9.8
Mexico	***	***	***	***	***
Turkey	***	***	***	***	***
All other sources	***	***	***	***	***
Nonsubject sources	***	12.5	12.6	10.6	19.4
All import sources	26.5	30.0	30.6	28.3	29.2
	Value (1,000 dollars)				
Apparent U.S. consumption	804,868	873,766	937,367	445,072	481,814
	Share of value (percent)				
U.S. producers' U.S. shipments	72.5	70.5	69.8	70.1	70.7
U.S. importers' U.S. shipments from.--					
China	***	16.8	17.8	18.4	***
Mexico	***	***	***	***	***
Turkey	***	***	***	***	***
All other sources	***	***	***	***	***
Nonsubject sources	***	12.7	12.5	11.5	***
All import sources	27.5	29.5	30.2	29.9	29.3

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent.

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

Figure IV-2
AWC: Apparent U.S. consumption, 2016-18, January to June 2018, and January to June 2019

* * * * * * *

Part V: Pricing data

Factors affecting prices

Raw material costs

Raw materials represented between *** and *** percent of U.S. producers' costs of good sold over January 2016-June 2019. The major raw material used in AWC is aluminum wire rod. U.S. AWC producers either produce their own wire rod from primary aluminum and alloying materials, or they purchase wire rod, which can be made from a combination of primary aluminum and aluminum alloy scrap.[1] Aluminum scrap prices are presented in figure V-1.[2] The price of aluminum sheet scrap fluctuated between January 2016 and August 2019, increasing by *** percent from January 2016 to June 2018, before decreasing by *** percent from June 2018 to August 2019. Overall, the price of aluminum scrap decreased *** percent between January 2016 and August 2019, ending well below its levels in 2014 and 2015.[3]

Figure V-1
Aluminum sheet scrap: Aluminum sheet scrap prices, January 2016-August 2019

* * * * * * *

Source: Platts Metals Week Price Notification Monthly Reports, accessed September 26, 2019.

[1] Conference transcript, p. 60 (Asher), hearing transcript, p. 16 (Jones), and petitioners' posthearing brief, p. II-19.

[2] Conference transcript, p. 35 (Levy).

[3] See data from Platts for 2014 and 2015.

The London Metal Exchange ("LME") and the LME plus the Midwest price premium are two commonly reported sources for primary aluminum prices in the United States. As seen in figure V-2, the LME price of high-grade aluminum has fluctuated since 2016, increasing *** percent from January 2016 to May 2018, and decreasing by *** percent from May 2018 to August 2019. Overall, the LME price increased *** percent between January 2016 and August 2019.

The Midwest premium is a daily premium to the LME price applicable to U.S. firms purchasing aluminum.[4] Traditionally, the Midwest premium has been less than ten cents per pound, but in 2014-15 the premium increased to a historic high of more than 24 cents.[5] The premium returned to traditional levels in 2016 and 2017, but then increased again in 2018 and has remained high in 2019.[6] As seen in figure V-2, the LME plus Midwest premium price for aluminum has fluctuated since 2016, increasing *** perce nt from January 2016 to May 2018, and decreasing by *** percent from May 2018 to August 2018. The LME plus Midwest premium price for aluminum price increased *** percent between January 2016 and June 2018, but was below levels it had reached in 2014 and 2015.[7]

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[4] The Midwest premium is based on physical spot deals, bids, and offers reported through a daily survey of spot buyers and sellers, and uses a representative sample of producers, traders, and different types of end users. It reflects both deliveries to a typical freight consumer in a broad U.S. Midwest region via truck or rail as well as the transaction costs. S & P Global Platts, *Methodology and Specifications Guide: Nonferrous*, August 2019. See also Southwire's prehearing brief, pp. 24-25.

[5] Aluminum Foil Conference Transcript, pp. 110-111 (Casey). During this period (2014-15), industry sources reported that aluminum end users believed that the "aggressive queue-management schemes of LME warehouse operators" were the root cause of the higher Midwest premium prices. However, aluminum producers and warehouse operators stated that the increases were in part due to decreasing U.S. smelting capacity and increased demand in financing or investing in aluminum. Reuters, "Aluminum Premiums Adjust to Life After the Queues," June 15, 2016, at https://www.reuters.com/article/us-aluminium-premiums-ahome/column-aluminum-premiums-adjust-to-life-after-the-queues-idUSKCN0Z11RB, downloaded November 5, 2019.

[6] Possible reasons why the premium increased in 2018 and remained high include the section 232 tariffs (see below), April 2019 sanctions on a Russian aluminum producer, and a lock-out at a Canadian aluminum producer. See Reuters, "Tariff Relief But No Price Relief," June 14, 2019, at https://www.reuters.com/article/tariffs-aluminium-ahome/column-tariff-relief-but-no-price-relief-for-u-s-aluminium-andy-home-idUSL8N23L29L, downloaded September 24, 2019.

[7] See data from Platts for 2014 and 2015.

Figure V-2
Aluminum price indices: LME (High Grade Cash) and LME plus Midwest premium price index of aluminum, January 2016-August 2019

* * * * * * *

Source: Platts Metals Week Price Notification Monthly Reports, accessed September 26, 2019.

Among responding U.S. producers and importers, two U.S. producers and seven importers indicated that raw materials prices had fluctuated, while three U.S. producers and five importers indicated that they had increased overall. Importers cited increases or fluctuations in the price of aluminum, the Midwest transaction premium, and/or the prices of polyethylene.

Eight purchasers indicated that they were familiar with the prices for raw materials used in the production of AWC, while three indicated that they were not. Six purchasers stated that information on raw materials prices had not affected their firm's negotiations or contracts to purchase AWC since January 1, 2016, but four stated that it had, describing changes in raw materials prices (especially increases in the price of aluminum) as having driven changes in AWC prices.

Impact of section 232 tariffs on aluminum

In April 2017, the Commerce Department announced a section 232 investigation on imports of aluminum, and in March 2018, the President announced additional import duties for steel mill and aluminum articles. U.S. producers and importers of AWC were asked if the announcement of the 232 investigation or the subsequent imposition of tariffs had an impact on the AWC market. Three U.S. producers and three importers stated that the 232 tariffs had

not had an effect, while two U.S. producers and eight importers stated that it had. Multiple U.S. producers and importers described the tariffs as increasing raw material costs for themselves and/or other U.S. producers.[8] However, Encore and Southwire also indicated that they had not had any difficulty in obtaining aluminum raw materials.[9]

Importer *** described the 232 duties as having caused an immediate increase in aluminum prices, but added that prices have since stabilized. Importer *** indicated that the 232 had caused increased demand for its AWC. Importer *** stated that, because of both the 232 and the 301 (see part II), it had shifted its supply chain, including to the United States. It added that its business continues to grow, and so it concludes that its AWC sales are based on factors other than price.

U.S. producers and importers were asked to assess the impact of the 232 tariffs on U.S. demand for AWC, U.S. supply of AWC, U.S. prices of AWC, and raw material costs of AWC. As shown in table V-1, most responding firms described the 232 tariffs as increasing raw materials costs, and most importers described the 232 tariffs as causing an increase in AWC prices.

Table V-1
AWC: Firms' responses on the impact of the 232 tariffs on aluminum and steel

Item	Number of firms reporting			
	Increase	No change	Decrease	Fluctuate
Impact on demand.--				
U.S. producers	---	4	---	---
U.S. importers	3	5	1	1
Impact on supply--				
U.S. producers	---	4	---	---
U.S. importers	---	5	4	1
Impact on prices.--				
U.S. producers	1	3	---	---
U.S. importers	7	2	---	1
Impact on raw material costs.--				
U.S. producers	4	---	---	---
U.S. importers	6	1	---	3

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

[8] For example, see hearing transcript, p. 26 (Asher).

[9] Hearing transcript, pp. 90-92, and petitioners' posthearing brief, p. II-16.

Transportation costs to the U.S. market

Transportation costs for AWC shipped from China to the United States averaged 5.5 percent during 2018. These estimates were derived from official import data and represent the transportation and other charges on imports.[10]

U.S. inland transportation costs

All five responding U.S. producers and all eight responding importers reported that they typically arrange transportation to their customers. Most U.S. producers reported that their U.S. inland transportation costs ranged from 2 to 6 percent while most importers reported costs of 1 to 5 percen (One U.S. producer reported transportation costs of *** percent, and one U.S. importer reported transportation costs of *** percent.) Six U.S. importers shipped AWC from a storage facility, while two shipped from their point of importation.

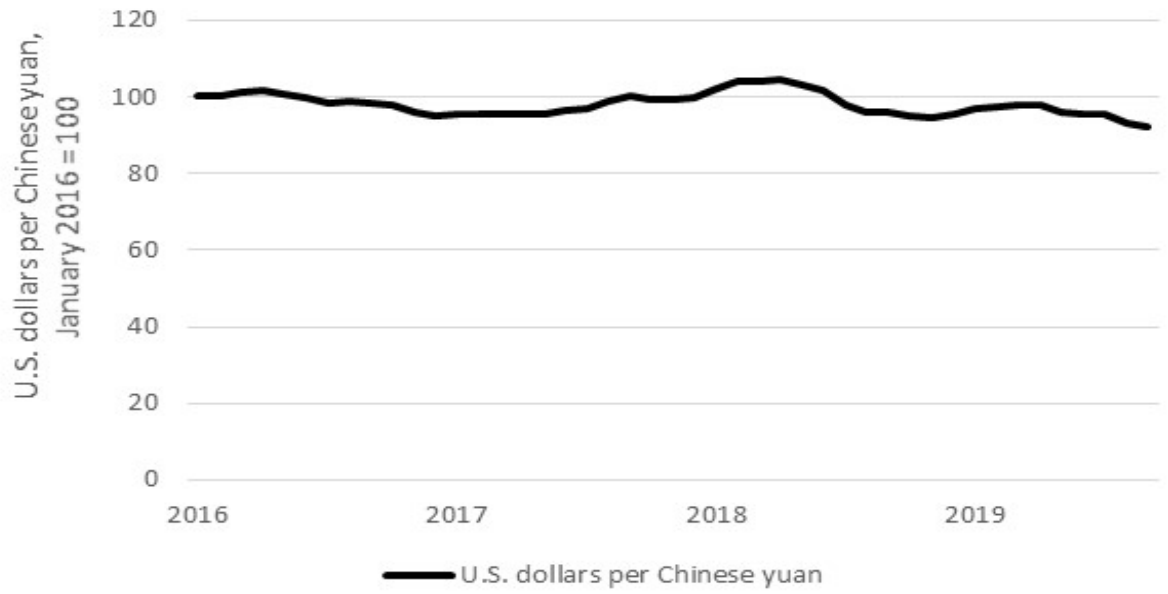
Exchange rate of Chinese yuan

Petitioners stated that depreciation in the yuan has offset some of the effects of the section 301 tariffs.[11] (See Part II.) The yuan fluctuated during 2016-18, and then depreciated after that, for an overall depreciation of 7.6 percent from January 2016 to September 2019, as shown in figure V-3.

[10] The estimated transportation costs were obtained by subtracting the customs value from the c.i.f. value of the imports for 2018 and then dividing by the customs value based on HTS statistical reporting number 8544.49.9000.

[11] For example, see hearing transcript, p. 102 (Levy).

Figure V-3
Exchange rate: Chinese yuan to U.S. dollar, January 2016-September 2019.



Source: Federal Reserve Bank of St. Louis and staff calculations.

Pricing practices

Pricing methods

Petitioners described AWC prices as publicly available in supplier-issued price lists, which tend to be very similar across the industry.[12] Prices of the different gauges of AWC are interrelated so that firms can calculate all prices from the price of any individual product on the list.[13] List prices are adjusted from time to time in order to reflect the publicly available price of aluminum and other costs.[14] Firms compete on prices by the size of the discounts applied to these price lists.[15] Petitioners described this system of discounts off public price lists as resulting in a market with highly transparent pricing, in which discounts are communicated by purchasers looking for larger discounts by quoting competing supplier discounts during negotiations.[16]

[12] Conference transcript, p. 56-57, 107 (Asher, Strahs); hearing transcript, p. 20 (Kieffer).
[13] Conference transcript, p. 56-57, 107 (Asher, Strahs).
[14] Conference transcript, p. 56-57 (Asher); hearing transcript, p. 20 (Kieffer).
[15] Conference transcript, p. 57-58 (Asher); hearing transcript, p. 20 (Kieffer).
[16] Hearing transcript, pp. 56-57 (Asher and Kieffer).

In response to final-phase questionnaires, purchasers were asked if their purchases of AWC usually involve price lists publicly available from their supplier, and then negotiations of discounts off this price list. Seven purchasers indicated that their purchases did not involve this process. Four (***) indicated that they did. *** indicated that the publicly available price lists used at a particular time from different suppliers were typically the same, but *** indicated that they were not typically the same. *** indicated that their price negotiations are based on various methods (including adjusting monthly) on the price of aluminum.

All U.S. producers and most importers reported using transaction-by-transaction negotiations for pricing. As presented in table V-2, U.S. producers and importers also frequently reported using price lists and contracts to set prices. U.S. producer *** stated that list prices are used as a starting point for negotiations. Importer *** stated that it followed the pricing of U.S. producer ***.

Table V-2
AWC: U.S. producers' and importers' reported price setting methods, by number of responding firms

Method	U.S. producers	Importers
Transaction-by-transaction	5	11
Contract	3	4
Set price list	3	8
Other	---	---
Responding firms	5	14

Note.--the sum of responses down may not add up to the total number of responding firms as each firm was instructed to check all applicable price setting methods employed.

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

As shown in table V-3, U.S. producers and importers of subject AWC reported their 2017 U.S. commercial shipments by type of sale. Most (*** percent) sales of U.S.-produced AWC and most (*** percent) imported Chinese AWC is sold in spot sales. For the remainder of their sales, both U.S. producers and importers had some short-term contracts, but ***.

Table V-3
AWC: U.S. producers' and importers' shares of U.S. commercial shipments by type of sale, 2018

Type of sale	U.S. producers	Importers
Long-term contracts	***	***
Annual contracts	***	***
Short-term contracts	***	***
Spot sales	***	***

Note.--because of rounding, figures may not add to the totals shown.

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

U.S. producers reported using different contract terms. *** reported that prices are fixed, there are no price renegotiations, and prices are not indexed to raw material costs. *** reported that contracts fix price and quantity, there are price renegotiations during the contract, and prices are indexed to raw material costs. *** indicated that the raw material indexes used were the Producer Price Index (PPI), the LME, and the Midwest Transaction Premium. Most importers that reported contracts reported similar contract terms. All responding importers reported that prices are not renegotiated, that contracts fix both price and quantity, and that contract prices are not indexed to raw material prices.

Five purchasers reported that they purchase product weekly, three purchase daily, and two purchase monthly or bimonthly. Nine of 11 responding purchasers reported that their purchasing frequency had not changed since January 1, 2016, while *** stated that it had increased the frequency of purchases, and *** stated that it had created a consistent level of purchases to ensure supply. Most purchasers contact 1 to 5 suppliers before making a purchase, although *** contact only one.

Sales terms and discounts

U.S. producers (4 of 5) and importers (6 of 8) typically quote prices on a delivered basis. All five responding producers reported volume discounts, three reported quantity discounts, and two reported "other" discounts, including discounts off the price list that are based on level of purchase, negotiated annual rebates based on volume, and early payment discounts. U.S. producer *** stated that the AWC market generally follows a published list price, but that discounts are applied to that price based on feedback at the transaction level. Eight of 14 responding importers offered either quantity or volume discounts (or both), 3 importers reported no discount policies, and 5 reported other discounts including early payment discounts and discounts off price list.

Price leadership

Purchasers were asked to name firms that have been price leaders in the AWC market since January 1, 2016, and describe how those firms exhibited price leadership. Seven purchasers listed U.S. producer Southwire as a price leader, four purchasers listed U.S. producer Encore, two listed importer Priority, two listed importer Classic Wire, one listed U.S. producer/importer Prysmian, one listed Cerro, one listed CME, and one listed King Wire. Purchasers *** described Encore, Southwire, and/or Cerro as leading by being the first to initiate price changes. Purchaser ***

*** described Southwire as the leading through its status as the largest producer of wire in the world. Purchaser *** also described *** as typically offering lower-priced product. Purchaser *** described Priority as a historical price leader that led by keeping prices lower than *** producers.[17]

Purchaser *** provided extensive comments on price leadership, describing Encore as leading by ***. It described Priority as leading by establishing a ***. It described CME as leading through a ***, and Classic Wire as leading by ***. It also described *** as leading through its ***.

Price data

The Commission requested U.S. producers and importers to provide quarterly data for the total quantity and f.o.b. value of the following AWC products shipped to unrelated U.S. customers during January 2016-June 2019.

Product 1.-- Type SE (Style R) cables containing three 600 volt conductors made of Aluminum Alloy 8000 Series, plus a neutral/ground wire, with American Wire Gauge (AWG) sizes of 4/0, 4/0, 4/0, and 2/0, and excluding Sureseal and Powerglide.

Product 2.—"Sweetbriar" underground distribution cables containing two 600 volt conductors made of Aluminum Alloy 1350 Series, plus a neutral/ground wire, with American Wire Gauge (AWG) sizes of 4/0, 4/0, and 2/0, excluding Sureseal and Powerglide.

Product 3.-- Type XHHW wires rated at 600 volts, with the conductor made of Aluminum Alloy 8000 Series, with a size of 500 kcmil, excluding Sureseal and Powerglide.

Product 4.—"Wittenburg" underground distribution cables containing three 600 volt conductors made of Aluminum Alloy 1350 Series, plus a neutral ground wire, with American Wire Gauge (AWG) sizes of 2, 2, 2, and 2, and excluding Sureseal and Powerglide.

[17] At the hearing, Southwire described itself as trying to institute seven price increases (with new price lists) in 2018, but not being able to do so. Hearing transcript, pp. 74-75 (Asher).

Product 5.— Type SE (Style R) cables containing three 600 volt conductors made of Aluminum Alloy 8000 Series, plus a neutral/ground wire, with American Wire Gauge (AWG) sizes of 6, 6, 6, and 6, and excluding Sureseal and Powerglide.[18]

Product 6.-- Type XHHW wires rated at 600 volts, with the conductor made of Aluminum Alloy 8000 Series, with a size of 250 kcmil, and excluding Sureseal and Powerglide.

Five U.S. producers[19] and seven importers of Chinese AWC provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters.[20] Pricing data reported by these firms accounted for approximately *** percent of U.S. producers' shipments of AWC and *** percent of U.S. shipments of subject imports from China in 2018.

Price data for products 1-6 are presented in tables V-4 to V-9 and figures V-4 to V-9. Nonsubject country prices (for Mexico and Turkey) are presented in Appendix D.

[18] On July 29, 2019, staff became aware that the description of product 5 in the questionnaires was equivalent to the description of product 1. On July 31, 2019, staff requested that parties supply data for their sales of product 5 as noted above. See emails from ***, July 29 and July 30, 2019, and email from John Benedetto, ITC economist, to parties, July 31, 2019. The original questionnaire description of product 5 was "SER 6-6-6-6 Type SE cables containing three 600 volt conductors made of Aluminum Alloy 8000 Series, plus a neutral/ground wire, with American Wire Gauge (AWG) sizes of 4/0, 4/0, 4/0, and 2/0, and excluding Sureseal and Powerglide." All the responding firms that provided data for product 5 were either represented by counsel emailed on July 31, 2019, or were contacted by staff and confirmed that their data met the definition as currently listed in the text of the report above. See emails from ***.

[19] In the prehearing report, staff adjusted pricing data for ***. A follow-up email from *** clarified that ***. On the basis of this email, staff used the data from *** in this posthearing staff report.

[20] Per-unit pricing data are calculated from total quantity and total value data provided by U.S. producers and importers. The precision and variation of these figures may be affected by rounding, limited quantities, and producer or importer estimates.

Table V-4
AWC: Weighted-average f.o.b. prices and quantities of domestic and imported product 1 and margins of underselling/(overselling), by quarters, January 2016-June 2019

Period	United States		China		
	Price (per pound, gross weight)	Quantity (pounds, gross weight)	Price (per pound, gross weight)	Quantity (pounds, gross weight)	Margin (percent)
2016: Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2017: Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2018: Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2019: Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***

Note.--Product 1: Type SE (Style R) cables containing three 600 volt conductors made of Aluminum Alloy 8000 Series, plus a neutral/ground wire, with American Wire Gauge (AWG) sizes of 4/0, 4/0, 4/0, and 2/0, and excluding Sureseal and Powerglide.

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

Table V-5
AWC: Weighted-average f.o.b. prices and quantities of domestic and imported product 2 and margins of underselling/(overselling), by quarters, January 2016-June 2019

Period	United States		China		
	Price (per pound, gross weight)	Quantity (pounds, gross weight)	Price (per pound, gross weight)	Quantity (pounds, gross weight)	Margin (percent)
2016: Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2017: Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2018: Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2019: Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***

Note.--Product 2: “Sweetbriar” underground distribution cables containing two 600 volt conductors made of Aluminum Alloy 1350 Series, plus a neutral/ground wire, with American Wire Gauge (AWG) sizes of 4/0, 4/0, and 2/0, excluding Sureseal and Powerglide.

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

Table V-6
AWC: Weighted-average f.o.b. prices and quantities of domestic and imported product 3 and margins of underselling/(overselling), by quarters, January 2016-June 2019

Period	United States		China		
	Price (per pound, gross weight)	Quantity (pounds, gross weight)	Price (per pound, gross weight)	Quantity (pounds, gross weight)	Margin (percent)
2016: Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2017: Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2018: Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2019: Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***

Note.--Product 3: Type XHHW wires rated at 600 volts, with the conductor made of Aluminum Alloy 8000 Series, with a size of 500 kcmil, excluding Sureseal and Powerglide.

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

Table V-7
AWC: Weighted-average f.o.b. prices and quantities of domestic and imported product 4 and margins of underselling/(overselling), by quarters, January 2016-June 2019

Period	United States		China		
	Price (per pound, gross weight)	Quantity (pounds, gross weight)	Price (per pound, gross weight)	Quantity (pounds, gross weight)	Margin (percent)
2016: Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2017: Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2018: Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2019: Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***

Note.--Product 4: “Wittenburg” underground distribution cables containing three 600 volt conductors made of Aluminum Alloy 1350 Series, plus a neutral ground wire, with American Wire Gauge (AWG) sizes of 2, 2, 2, and 2, and excluding Sureseal and Powerglide.

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

Table V-8
AWC: Weighted-average f.o.b. prices and quantities of domestic and imported product 5 and margins of underselling/(overselling), by quarters, January 2016-June 2019

Period	United States		China		
	Price (per pound, gross weight)	Quantity (pounds, gross weight)	Price (per pound, gross weight)	Quantity (pounds, gross weight)	Margin (percent)
2016: Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2017: Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2018: Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2019: Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***

Note.-- Type SE (Style R) cables containing three 600 volt conductors made of Aluminum Alloy 8000 Series, plus a neutral/ground wire, with American Wire Gauge (AWG) sizes of 6, 6, 6, and 6, and excluding Sureseal and Powerglide.

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

Table V-9
AWC: Weighted-average f.o.b. prices and quantities of domestic and imported product 6 and margins of underselling/(overselling), by quarters, January 2016-June 2019

Period	United States		China		
	Price (per pound, gross weight)	Quantity (pounds, gross weight)	Price (per pound, gross weight)	Quantity (pounds, gross weight)	Margin (percent)
2016: Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2017: Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2018: Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***
July-Sept.	***	***	***	***	***
Oct.-Dec.	***	***	***	***	***
2019: Jan.-Mar.	***	***	***	***	***
Apr.-June	***	***	***	***	***

Note.--Product 6: Type XHHW wires rated at 600 volts, with the conductor made of Aluminum Alloy 8000 Series, with a size of 250 kcmil, and excluding Sureseal and Powerglide.

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

Figure V-4
AWC: Weighted-average prices and quantities of domestic and imported product 1, by quarters, January 2016-June 2019

* * * * * * *

Product 1: Type SE (Style R) cables containing three 600 volt conductors made of Aluminum Alloy 8000 Series, plus a neutral/ground wire, with American Wire Gauge (AWG) sizes of 4/0, 4/0, 4/0, and 2/0, and excluding Sureseal and Powerglide.

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

Figure V-5
AWC: Weighted-average prices and quantities of domestic and imported product 2, by quarters, January 2016-June 2019

* * * * * * *

Product 2: “Sweetbriar” underground distribution cables containing two 600 volt conductors made of Aluminum Alloy 1350 Series, plus a neutral/ground wire, with American Wire Gauge (AWG) sizes of 4/0, 4/0, and 2/0, excluding Sureseal and Powerglide.

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

Figure V-6
AWC: Weighted-average prices and quantities of domestic and imported product 3, by quarters, January 2016-June 2019

* * * * * * *

Product 3: Type XHHW wires rated at 600 volts, with the conductor made of Aluminum Alloy 8000 Series, with a size of 500 kcmil, excluding Sureseal and Powerglide.

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

Figure V-7
AWC: Weighted-average prices and quantities of domestic and imported product 4, by quarters, January 2016-June 2019

* * * * * * *

Product 4: “Wittenburg” underground distribution cables containing three 600 volt conductors made of Aluminum Alloy 1350 Series, plus a neutral ground wire, with American Wire Gauge (AWG) sizes of 2, 2, 2, and 2, and excluding Sureseal and Powerglide.

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

Figure V-8
AWC: Weighted-average prices and quantities of domestic and imported product 5, by quarters, January 2016-June 2019

* * * * * * *

Product 5: Type SE (Style R) cables containing three 600 volt conductors made of Aluminum Alloy 8000 Series, plus a neutral/ground wire, with American Wire Gauge (AWG) sizes of 6, 6, 6, and 6, and excluding Sureseal and Powerglide.

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

Figure V-9
AWC: Weighted-average prices and quantities of domestic and imported product 6, by quarters, January 2016-June 2019

* * * * * * *

Product 6: Type XHHW wires rated at 600 volts, with the conductor made of Aluminum Alloy 8000 Series, with a size of 250 kcmil, and excluding Sureseal and Powerglide.

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

Price trends

Prices showed mixed trends during January 2016-June 2019. Table V-10 summarizes the price trends, by country and by product. As shown in the table, domestic price increases ranged from *** to *** percent during January 2016-June 2019, while domestic price decreases ranged from *** to *** percent (*** to *** percent, while product *** showed a *** percent decrease.

Table V-10
AWC: Summary of weighted-average f.o.b. prices for products 1-6 from the United States and China

Item	Number of quarters	Low price (per pound, gross weight)	High price (per pound, gross weight)	Change in price (percent)
Product 1				
United States	***	***	***	***
China	***	***	***	***
Product 2				
United States	***	***	***	***
China	***	***	***	***
Product 3				
United States	***	***	***	***
China	***	***	***	***
Product 4				
United States	***	***	***	***
China	***	***	***	***
Product 5				
United States	***	***	***	***
China	***	***	***	***
Product 6				
United States	***	***	***	***
China	***	***	***	***

Note.--Percentage changes are from the first quarter in which data were available to the last quarter in which price data were available.

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

Price comparisons

As shown in table V-11, prices for product imported from China were below those for U.S.-produced product in 68 of 82 instances (35.1 million pounds); margins of underselling were an average of 5.7 percent. In the remaining 14 instances (7.1 million pounds), prices for product from China were an average of 8.9 percent above prices for the domestic product.

Table V-11
AWC: Instances of underselling/overselling and the range and average of margins, by country, January 2016-June 2019

Source	Underselling				
	Number of quarters	Quantity (pounds, gross weight)	Average margin (percent)	Margin range (percent)	
				Min	Max
Product 1	***	***	***	***	***
Product 2	***	***	***	***	***
Product 3	***	***	***	***	***
Product 4	***	***	***	***	***
Product 5	***	***	***	***	***
Product 6	***	***	***	***	***
Total, underselling	68	35,059,177	5.7	0.4	34.9
Source	**(Overselling)**				
	Number of quarters	Quantity (pounds, gross weight)	Average margin (percent)	Margin range (percent)	
				Min	Max
Product 1	***	***	***	***	***
Product 2	***	***	***	***	***
Product 3	***	***	***	***	***
Product 4	***	***	***	***	***
Product 5	***	***	***	***	***
Product 6	***	***	***	***	***
Total, overselling	14	7,123,885	(8.9)	(0.7)	(87.7)

Note.--These data include only quarters in which there is a comparison between the U.S. and subject product.

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

Lost sales and lost revenue

In the preliminary phase of the investigations, the Commission requested that U.S. producers of AWC report purchasers where they experienced instances of lost sales or revenue due to competition from imports of AWC from China during January 2015-June 2018. All four responding U.S. producers reported that they had both reduced prices and lost sales because of imports of AWC from China. Two U.S. producers submitted usable lost sales and lost revenue allegations. The two responding U.S. producers identified 19 firms where they both lost sales and lost revenue.

In this final phase of the investigations, of the five responding U.S. producers, five reported that they had to reduce prices, and four reported that they had to roll back announced price increases. Five firms reported that they had lost sales.

Staff contacted 42 purchasers and received responses from 11 purchasers.[21] Responding purchasers reported purchasing over 166 million pounds of AWC during January 2016-June 2019 (table V-12).

Of the 11 responding purchasers, four reported that, since 2016, they had purchased imported AWC from China instead of U.S.-produced product. All four of these purchasers reported that subject import prices were lower than U.S.-produced product, and all four of these purchasers reported that price was a primary reason for the decision to purchase imported product rather than U.S.-produced product. Two purchasers estimated the quantity of AWC from China purchased instead of domestic product; quantities ranged from *** pounds to *** pounds (table V-13).

Of the 11 responding purchasers, two reported that U.S. producers had reduced prices in order to compete with lower-priced imports from China (table V-14; three reported that U.S. producers had not done so, and six reported that they did not know).

Table V-12
AWC: Purchasers' responses to purchasing patterns

Purchaser	Purchases and imports in January 2016-June 2019 (pounds, gross weight)			Change in domestic share (pp, 2016-18)	Change in subject country share (pp, 2016-18)
	Domestic	Subject	All other		
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
Total	***	***	***	***	***

Note.--All other includes all other sources and unknown sources.
Note.--Percentage points (pp) change is the change in the share of the firm's total purchases of domestic and/or subject country imports between first and last years.

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

[21] Six purchasers submitted lost sales lost revenue survey responses in the preliminary phase, but did not submit purchaser questionnaire responses in the final phase.

Table V-13
AWC: Purchasers' responses to purchasing subject imports instead of domestic product

Purchaser	Purchased subject imports instead of domestic (Y/N)	Imports priced lower (Y/N)	If purchased imports instead of domestic, was price a primary reason		
			Y/N	If Yes, quantity purchased instead of domestic (pounds, gross weight)	If No, non-price reason
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
Total	Yes--4; No--7	Yes--4; No--0	Yes--4; No--0	***	***

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

Table V-14
AWC: Purchasers' responses to U.S. producer price reductions

Purchaser	U.S. producers reduced priced to compete with subject imports (Y/N)	If U.S. producers reduced prices	
		Estimated U.S. price reduction (percent)	Additional information, if available
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
Total / average	Yes--2; No--3	***	***

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

Part VI: Financial experience of U.S. producers

Background

Five U.S. producers, Cerro, Encore, Nexans, Prysmian, and Southwire, reported usable financial results on their AWC operations for 2016 through June 2019. The majority of U.S. producers reported their financial results on the basis of generally accepted accounting principles (GAAP). All U.S. producers reported their financial results for calendar-year periods.[1]

The U.S. industry's AWC operations are relatively concentrated with two U.S. producers (*** and ***) accounting for *** percent and *** percent of total sales quantity in 2018, respectively. *** accounted for *** percent of 2018 total sales quantity followed by *** (*** percent) and *** (*** percent).

Changes in the character of U.S. AWC operations during the period include Prysmian's acquisition of General Cable in June 2018 and *** exit from the AWC market during 2018.[2] While not exiting the AWC market entirely, *** reduced its AWC sales during the period.

Operations on AWC

Table VI-1 and table VI-2 present income-and-loss data for U.S. producers' operations on AWC and corresponding changes in average per pound values, respectively. Table VI-3 presents a variance analysis of these financial results and table VI-4 presents selected financial information by firm.[3]

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[1] *** reported their financial results based on International Financial Reporting Standards (IFRS). On September 12-13, 2019, staff conducted a verification of the financial section of Southwire's U.S. producer questionnaire, as well as selected elements of the trade and pricing sections. Data changes pursuant to verification are reflected in this and other relevant sections of this report. Verification report, pp. 2-3.

[2] ***. Email with attachment from *** to USITC staff, September 4, 2019.

[3] The Commission's variance analysis is calculated in three parts: sales variance, cost of goods sold ("COGS") variance, and selling, general, and administrative ("SG&A") expenses variance. Each part consists of a price variance (in the case of the sales variance) or a cost or expense variance (in the case of the COGS and SG&A expense variances), and a volume variance. The sales or cost/expense variance is calculated as the change in unit price or per-unit cost/expense times the new volume, while the volume variance is calculated as the change in volume times the old unit price or per-unit cost/expense. As summarized at the bottom of the table, the price variance is from sales, the cost/expense variance is the sum of those items from COGS and SG&A variances, respectively, and the volume variance is the sum of the volume components of the net sales, COGS, and SG&A expenses variances. In general, the utility of the Commission's variance analysis is enhanced when product mix remains the same

Table VI-1
AWC: Results of operations of U.S. producers, 2016-18, January-June 2018, and January-June 2019

Item	Fiscal year			January to June	
	2016	2017	2018	2018	2019
	Quantity (1,000 pounds)				
Total net sales	354,098	363,934	376,175	187,762	190,351
	Value (1,000 dollars)				
Total net sales	654,473	695,642	741,072	354,418	377,108
Cost of goods sold					
Raw materials	389,502	426,337	468,113	229,199	226,637
Direct labor	13,856	15,347	17,807	8,414	9,008
Other factory costs	138,502	157,944	165,873	77,931	83,774
Total cost of goods sold	541,860	599,628	651,793	315,544	319,419
Gross profit	112,612	96,014	89,279	38,875	57,689
SG&A expenses	69,963	63,432	69,673	33,831	34,320
Operating income	42,649	32,582	19,606	5,043	23,369
Interest expense	***	***	***	***	***
Other expenses	***	***	***	***	***
Other income	***	***	***	***	***
Net income or (loss)	34,871	28,049	8,910	(440)	19,484
Depreciation/amortization	20,185	22,256	23,227	11,781	11,331
Estimated cash flow	55,057	50,305	32,137	11,341	30,814
	Ratio to net sales (percent)				
Cost of goods sold.-- Raw materials	59.5	61.3	63.2	64.7	60.1
Direct labor	2.1	2.2	2.4	2.4	2.4
Other factory costs	21.2	22.7	22.4	22.0	22.2
Cost of goods sold	82.8	86.2	88.0	89.0	84.7
Gross profit	17.2	13.8	12.0	11.0	15.3
SG&A expenses	10.7	9.1	9.4	9.5	9.1
Operating income	6.5	4.7	2.6	1.4	6.2
Net income or (loss)	5.3	4.0	1.2	(0.1)	5.2

Table continued on next page.

throughout the period. As described in the *Revenue* section, U.S. producers were mixed in terms of the extent to which AWC product mix changed during the period.

Table VI-1—Continued
AWC: Results of operations of U.S. producers, 2016-18, January-June 2018, and January-June 2019

Item	Fiscal year			January to June	
	2016	2017	2018	2018	2019
	Ratio to total COGS (percent)				
Cost of goods sold:					
Raw materials	71.9	71.1	71.8	72.6	71.0
Direct labor	2.6	2.6	2.7	2.7	2.8
Other factory costs	25.6	26.3	25.4	24.7	26.2
	Unit value (dollars per pound)				
Total net sales	1.85	1.91	1.97	1.89	1.98
Cost of goods sold:					
Raw materials	1.10	1.17	1.24	1.22	1.19
Direct labor	0.04	0.04	0.05	0.04	0.05
Other factory costs	0.39	0.43	0.44	0.42	0.44
Total cost of goods sold	1.53	1.65	1.73	1.68	1.68
Gross profit	0.32	0.26	0.24	0.21	0.30
SG&A expenses	0.20	0.17	0.19	0.18	0.18
Operating income	0.12	0.09	0.05	0.03	0.12
Net income or (loss)	0.10	0.08	0.02	(0.002)	0.10
	Number of firms reporting				
Operating losses	***	***	***	***	***
Net losses	***	***	***	***	***
Data	5	5	5	5	4

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

Table VI-2
AWC: Changes in average per pound values, 2016-18, January-June 2018, and January-June 2019

Item	Between fiscal years			Between partial year period
	2016-18	2016-17	2017-18	2018-19
	Change in AUVs (dollars per pound)			
Total net sales	0.12	0.06	0.06	0.09
Cost of goods sold:				
Raw materials	0.14	0.07	0.07	(0.03)
Direct labor	0.01	0.003	0.01	0.00
Other factory costs	0.05	0.04	0.01	0.03
Total cost of goods sold	0.20	0.12	0.09	(0.003)
Gross profit	(0.08)	(0.05)	(0.03)	0.10
SG&A expenses	(0.01)	(0.02)	0.01	0.001
Operating income	(0.07)	(0.03)	(0.04)	0.10
Net income or (loss)	(0.07)	(0.02)	(0.05)	0.10

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

Table VI-3
AWC: Variance analysis on the operations of U.S. producers, 2016-18, January-June 2018, and January-June 2019

Item	Between fiscal years			Between partial year period
	2016-18	2016-17	2017-18	2018-19
	Value (1,000 dollars)			
Net sales:				
Price variance	45,796	22,991	22,031	17,802
Volume variance	40,804	18,178	23,399	4,888
Net sales variance	86,599	41,170	45,430	22,690
COGS:				
Cost variance	(76,150)	(42,717)	(31,995)	477
Volume variance	(33,783)	(15,050)	(20,169)	(4,352)
COGS variance	(109,933)	(57,768)	(52,165)	(3,875)
Gross profit variance	(23,333)	(16,598)	(6,735)	18,815
SG&A expenses:				
Cost/expense variance	4,652	8,475	(4,108)	(23)
Volume variance	(4,362)	(1,943)	(2,134)	(467)
Total SG&A expense variance	290	6,532	(6,242)	(489)
Operating income variance	(23,043)	(10,067)	(12,976)	18,326
Summarized as:				
Price variance	45,796	22,991	22,031	17,802
Net cost/expense variance	(71,498)	(34,243)	(36,103)	454
Net volume variance	2,659	1,185	1,096	70

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

Table VI-4
AWC: Results of operations of U.S. producers, by firm, 2016-18, January-June 2018, and January-June 2019

Item	Fiscal year			January to June	
	2016	2017	2018	2018	2019
	Total net sales (1,000 pounds)				
Cerro	***	***	***	***	***
Encore	***	***	***	***	***
Nexans	***	***	***	***	***
Prysmian	***	***	***	***	***
Southwire	***	***	***	***	***
Total net sales quantity	354,098	363,934	376,175	187,762	190,351
	Total net sales (1,000 dollars)				
Cerro	***	***	***	***	***
Encore	***	***	***	***	***
Nexans	***	***	***	***	***
Prysmian	***	***	***	***	***
Southwire	***	***	***	***	***
Total net sales value	654,473	695,642	741,072	354,418	377,108

Table continued on next page.

Table VI-4—Continued
AWC: Results of operations of U.S. producers, by firm, 2016-18, January-June 2018, and January-June 2019

Item	Fiscal year			January to June	
	2016	2017	2018	2018	2019
	Cost of goods sold (1,000 dollars)				
Cerro	***	***	***	***	***
Encore	***	***	***	***	***
Nexans	***	***	***	***	***
Prysmian	***	***	***	***	***
Southwire	***	***	***	***	***
Total COGS	541,860	599,628	651,793	315,544	319,419
	Gross profit or (loss) (1,000 dollars)				
Cerro	***	***	***	***	***
Encore	***	***	***	***	***
Nexans	***	***	***	***	***
Prysmian	***	***	***	***	***
Southwire	***	***	***	***	***
Total gross profit or (loss)	112,612	96,014	89,279	38,875	57,689
	SG&A expenses (1,000 dollars)				
Cerro	***	***	***	***	***
Encore	***	***	***	***	***
Nexans	***	***	***	***	***
Prysmian	***	***	***	***	***
Southwire	***	***	***	***	***
Total SG&A expenses	69,963	63,432	69,673	33,831	34,320
	Operating income or (loss) (1,000 dollars)				
Cerro	***	***	***	***	***
Encore	***	***	***	***	***
Nexans	***	***	***	***	***
Prysmian	***	***	***	***	***
Southwire	***	***	***	***	***
Total operating income or (loss)	42,649	32,582	19,606	5,043	23,369
	Net income or (loss) (1,000 dollars)				
Cerro	***	***	***	***	***
Encore	***	***	***	***	***
Nexans	***	***	***	***	***
Prysmian	***	***	***	***	***
Southwire	***	***	***	***	***
Total net income or (loss)	34,871	28,049	8,910	(440)	19,484
	Cost of goods sold to net sales ratio (percent)				
Cerro	***	***	***	***	***
Encore	***	***	***	***	***
Nexans	***	***	***	***	***
Prysmian	***	***	***	***	***
Southwire	***	***	***	***	***
Average COGS to net sales ratio	82.8	86.2	88.0	89.0	84.7

Table continued on next page.

Table VI-4—Continued
AWC: Results of operations of U.S. producers, by firm, 2016-18, January-June 2018, and January-June 2019

Item	Fiscal year			January to June	
	2016	2017	2018	2018	2019
	Gross profit or (loss) to net sales ratio (percent)				
Cerro	***	***	***	***	***
Encore	***	***	***	***	***
Nexans	***	***	***	***	***
Prysmian	***	***	***	***	***
Southwire	***	***	***	***	***
Average gross profit or (loss) to net sales ratio	17.2	13.8	12.0	11.0	15.3
	SG&A expense to net sales ratio (percent)				
Cerro	***	***	***	***	***
Encore	***	***	***	***	***
Nexans	***	***	***	***	***
Prysmian	***	***	***	***	***
Southwire	***	***	***	***	***
Average SG&A expense to net sales ratio	10.7	9.1	9.4	9.5	9.1
	Operating income or (loss) to net sales ratio (percent)				
Cerro	***	***	***	***	***
Encore	***	***	***	***	***
Nexans	***	***	***	***	***
Prysmian	***	***	***	***	***
Southwire	***	***	***	***	***
Avg. operating income or (loss) to net sales ratio	6.5	4.7	2.6	1.4	6.2
	Net income or (loss) to net sales ratio (percent)				
Cerro	***	***	***	***	***
Encore	***	***	***	***	***
Nexans	***	***	***	***	***
Prysmian	***	***	***	***	***
Southwire	***	***	***	***	***
Avg. net income or (loss) to net sales ratio	5.3	4.0	1.2	(0.1)	5.2
	Unit net sales value (dollars per pound)				
Cerro	***	***	***	***	***
Encore	***	***	***	***	***
Nexans	***	***	***	***	***
Prysmian	***	***	***	***	***
Southwire	***	***	***	***	***
Average unit net sales value	1.85	1.91	1.97	1.89	1.98

Table continued on next page.

Table VI-4—Continued
AWC: Results of operations of U.S. producers, by firm, 2016-18, January-June 2018, and January-June 2019

Item	Fiscal year			January to June	
	2016	2017	2018	2018	2019
	Unit raw materials (dollars per pound)				
Cerro	***	***	***	***	***
Encore	***	***	***	***	***
Nexans	***	***	***	***	***
Prysmian	***	***	***	***	***
Southwire	***	***	***	***	***
Average unit raw materials	1.10	1.17	1.24	1.22	1.19
	Unit direct labor value (dollars per pound)				
Cerro	***	***	***	***	***
Encore	***	***	***	***	***
Nexans	***	***	***	***	***
Prysmian	***	***	***	***	***
Southwire	***	***	***	***	***
Average unit direct labor	0.04	0.04	0.05	0.04	0.05
	Unit other factory costs (dollars per pound)				
Cerro	***	***	***	***	***
Encore	***	***	***	***	***
Nexans	***	***	***	***	***
Prysmian	***	***	***	***	***
Southwire	***	***	***	***	***
Average unit other factory costs	0.39	0.43	0.44	0.42	0.44
	Unit cost of goods sold (dollars per pound)				
Cerro	***	***	***	***	***
Encore	***	***	***	***	***
Nexans	***	***	***	***	***
Prysmian	***	***	***	***	***
Southwire	***	***	***	***	***
Average unit COGS	1.53	1.65	1.73	1.68	1.68

[1] ***.

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

Revenue

The substantial majority of AWC revenue (*** percent) represents commercial sales with transfers to related firms accounting for the remainder (*** percent).[4] Given the predominance of commercial sales, a single revenue line item is presented in the tables above.

Quantity

[4] ***. Email with attachment from *** to USITC staff, September 4, 2019. ***. Ibid. ***. ***.

While total AWC sales quantity increased during the full-year period and was also somewhat higher in January-June 2019 compared to January-June 2018, on a company-specific basis, the directional pattern of sales quantity was not uniform. Table VI-4 shows that the overall increase in full-year sales quantity was attributable to *** and ***, which offset the overall declines reported by other U.S. producers.[5] In contrast, the industry's higher sales quantity in January-June 2019 compared to January-June 2018 was largely attributable to *** higher sales quantity, which more than offset *** corresponding lower sales quantity.[6]

Value

While U.S. producers' average per pound AWC sales values were, for the most part, in a similar range, the directional pattern of change was mixed during the full-year period.[7] In

[5] ***. Email with attachments from counsel on behalf of *** to USITC staff, August 22, 2019.
[6] ***. Email with attachments from counsel on behalf of *** to USITC staff, August 28, 2019.
[7] ***. Email with attachments from *** to USITC staff, July 23, 2019.

contrast, all U.S. producers that had sales in January-June 2019 reported higher average per pound sales values compared to January-June 2018. In general, U.S. producers were mixed in terms of the extent to which changes in product mix played an important role explaining changes in average per pound sales value.[8] As shown in the revenue section of the table VI-3 variance analysis, the overall increase in AWC revenue during the full-year period reflects the impact of a positive price variance and a positive volume variance.

*** noted that, given the importance of aluminum as an AWC input cost, the pattern of sales price minus aluminum cost, ***, is more meaningful than the pattern of gross sales value. On this basis, both companies noted that there was a decline in net value through the first half of 2018, followed by a partial recovery in the second half of 2018 and first half of 2019.[9] ***, while noting that there are a number of factors impacting the pattern of average per pound sales value, including product mix, also stated, ***.[10]

Cost of goods sold and gross profit or loss

Raw materials

The level of integration with respect to the primary input, aluminum, varies among the U.S. producers; e.g., ***

[8] ***. Email with attachments from counsel on behalf of *** to USITC staff, August 22, 2019. Email with attachments from counsel on behalf of *** to USITC staff, August 28, 2019. ***. Email with attachment from *** to USITC staff, September 4, 2019. ***. Email with attachments from *** to USITC staff, July 23, 2019.

[9] Email with attachments from counsel on behalf of *** to USITC staff, August 22, 2019. Email with attachments from counsel on behalf of *** to USITC staff, August 28, 2019.

[10] Email with attachment from *** to USITC staff, September 4, 2019.

***.[11] In contrast, Encore purchases aluminum rod.[12]

Raw material cost accounts for the majority of AWC total COGS, ranging from 71.0 percent of total COGS (January-June 2019) to 72.6 percent (January-June 2018) with aluminum accounting for the majority of total raw material cost.[13] In addition to aluminum wire rod and primary aluminum feedstock, other identified raw material inputs include aluminum scrap, alloying materials, insulation and wrapping, and packaging.[14] [15]

[11] Email with attachments from counsel on behalf of *** to USITC staff, August 28, 2019. ***. Verification report, p. 3.

***. Email with attachments from counsel on behalf of *** to USITC staff, August 28, 2019.

[12] Encore 2018 10-K, p. 2.

[13] For example, information submitted by *** indicates that the share of its total raw material cost accounted for by aluminum ranged from *** percent (2016) to *** percent (January-June 2018). USITC auditor final-phase notes. ***. Email with attachments from counsel on behalf of *** to USITC staff, August 22, 2019.

[14] Insulation and wrapping accounts for the *** non-aluminum material inputs. ***, the *** producers, reported that the cost of insulation and wrapping material accounted for *** percent and *** percent of 2018 total raw material cost, respectively. *** U.S. producer questionnaires, responses to III-9c. Encore, which reported a *** share of insulation and wrapping cost as a share of raw material cost (*** percent) (Encore U.S. producer questionnaire, response to III-9c), compounds its own wire jacket and insulation compounds. Encore 2018 10-K, p. 2.

[15] *** U.S. producers, ***, reported material input purchases from related suppliers. ***. *** U.S. producer questionnaire, response to III-7. Email with attachments from *** to USITC staff, July 23, 2019. ***. *** U.S. producer questionnaire, response to III-7. Email with attachment from *** to USITC staff, September 4, 2019.

On a company-specific basis and with *** exception, U.S. producers reported the same directional pattern of increasing average per pound raw material costs during the full-year period. While the industry's overall increase in average per pound raw material cost was similar in both 2017 (6.5 percent) and 2018 (6.2 percent), company-specific increases were generally more pronounced in 2018.[16] Overall average per pound raw material cost was lower in January-June 2019 compared to January-June 2018 with U.S. producers reporting a mixed directional pattern of increases and decreases.[17]

Direct labor and other factory costs

Other factory costs represent the second largest component of COGS, ranging from 24.7 percent (January-June 2018) of total COGS to 26.3 percent (2017). Direct labor, the smallest component of COGS, ranged from 2.6 percent (2016 and 2017) of total COGS to 2.8 percent (January-June 2019). While other factory costs and direct labor both increased during the full-year period, the percentage increase in average per pound direct labor (21.0 percent) was greater than the percentage increase in average per pound other factory costs (12.7 percent). As indicated above and notwithstanding the relatively large percentage increase, direct labor accounts for a modest share of total COGS.

On a company-specific basis, average per pound direct labor cost was generally in a similar range,[18] while differences in average per pound other factory costs were more pronounced.[19] Although U.S. producers reported a mixed directional pattern of change in average per pound direct labor and other factory costs in 2017, they were directionally uniform in terms of reporting increases throughout the rest of the period.[20] In 2017 and among the

[16] In contrast, *** reported a relatively small increase in average per pound raw material cost in 2018 (*** percent). ***. Email with attachment from *** to USITC staff, September 4, 2019.

[17] ***.

[18] ***.

[19] Differences in underlying cost structure, as well as how specific costs are classified, would, at least in part, account for the range of company-specific other factory costs.

[20] ***. Email with attachments from counsel on behalf of *** to USITC staff, August 22, 2019.

larger volume producers, *** reported a notably large increase (*** percent) in its average per pound other factory costs.[21]

Cost of goods sold

In conjunction with higher average per pound raw material cost and conversion cost (combined direct labor and other factory costs), average per pound COGS increased during the full-year period. Marginally lower (essentially static) average per pound COGS in January-June 2019 compared to January-June 2018 reflects lower average per pound raw materials cost, which more than offset higher average per pound conversion cost (see table VI-2). As noted above, the company-specific directional pattern of average per pound raw material cost was mixed at the end of the period; i.e., lower average per pound raw material cost in January-June 2019 compared to January-June 2018 is not reflective of all U.S. producers.

On a company-specific basis, U.S. producers reported average per pound COGS that were generally in a similar range and, for the most part, followed the same directional pattern of increases during the full-year period.[22] In January-June 2019 compared to January-June 2018, there was a mix of higher and lower company-specific average pound COGS, primarily reflecting company-specific differences in the directional pattern of average per pound raw material costs noted above.

Gross profit or loss

Notwithstanding increases in total sales quantity and value during the full-year period, reductions in gross profit ratio (total gross profit or loss divided by total revenue) yielded declines in total gross profit during 2016-18. The deterioration in full-year gross profit ratio in turn reflects increasing raw material and conversion costs that were only partially offset by

[21] With regard to average per pound conversion costs (combined direct labor and other factory costs) in general, all U.S. producers reported at least some variability but remained in a relatively narrow range. In contrast, *** reported a *** percent increase in its average per pound conversion cost during the full-year period. Note: While *** initially attributed the full-year increase in its conversion costs largely to higher freight out expense (Email with attachment from *** to USITC staff, September 4, 2019), the company's revenue and COGS were subsequently adjusted to remove freight out. Email with attachment from *** to USITC staff, September 12, 2019.

[22] *** was the *** U.S. producer to report a decline in its average per pound COGS (2016-17) during the full-year period. While magnitudes varied, the other U.S. producers all reported increasing average per pound COGS during the full-year period.

corresponding increases in sales value. In January-June 2019, higher gross profit ratio and total sales quantity yielded higher total gross profit compared to January-June 2018. The higher gross profit ratio in January-June 2019 in turn reflects an increase in average per pound sales value and essentially static average per pound COGS compared to January-June 2018.[23]

SG&A expenses and operating income or loss

On a company-specific basis, U.S. producers reported a range of SG&A expense ratios (total SG&A expenses divided by total revenue), which, in most cases, did not change notably during the period. The decline in the industry's total SG&A expenses in 2017, in conjunction with higher revenue, yielded a corresponding decline in SG&A expense ratio, which remained at a somewhat lower level, as compared to 2016, throughout the rest of the period.[24] [25] The industry's somewhat lower overall SG&A expense ratio in January-June 2019 compared to January-June 2018 largely reflects *** lower SG&A expense ratio, which itself reflects an increase in revenue and decline in SG&A expenses. The SG&A expense ratios of the other large-volume producers, ***, were about the same in January-June 2019 compared to January-June 2018.

While the industry's SG&A expense ratio was relatively stable throughout the period, its impact on operating results was more notable in 2017, declining from 10.7 percent (2016) to

[23] ***. Email with attachments from counsel on behalf of *** to USITC staff, August 28, 2019. Similarly, *** also emphasized the importance of conversion margin (value added) in terms of explaining the pattern of gross profit during the period. Email with attachments from counsel on behalf of *** to USITC staff, August 22, 2019.

[24] While most U.S. producers reported lower total SG&A expenses in 2017, the majority of the overall decline in that year was accounted for by ***, which yielded a lower 2017 SG&A expense ratio for that company and the industry as a whole. ***. Email with attachment from *** to USITC staff, September 4, 2019.

[25] ***. Verification report, p. 4.

9.1 percent (2017) and thereby partially offsetting the corresponding decline in gross profit ratio. To a lesser extent, the somewhat lower SG&A expense ratio in January-June 2019 (9.1 percent) compared to January-June 2018 (9.5 percent) modestly amplified the positive effect of higher gross profit ratio in January-June 2019. In general and notwithstanding the above-noted changes in SG&A expense ratios, the pattern of the industry's AWC operating results was largely determined by factors impacting profitability at the gross level.[26]

Interest expense, other expenses and income, and net income or loss

*** were the *** U.S. producers reporting interest expense with *** accounting for a somewhat larger share compared to ***. Other expenses, reported *** by ***, fluctuated during the full-year period and moved within a relatively wide range.[27] Other income covered a wider range and was at a notably higher level in 2017, reflecting ***, the *** year that the company reported other income.[28] *** was the *** other U.S. producer that reported other income during the period.

[26] On a company-specific basis, the level of SG&A expenses, in part, explain differences in profitability at the operating level; e.g., *** gross profit ratios were lower compared to *** throughout most of the period, but its operating profit ratios were higher, reflecting lower corresponding SG&A expense ratios. In contrast and while *** SG&A expense ratios were in a similar range compared to ***, its gross profit ratios were lower throughout the period. ***. Email with attachment from *** to USITC staff, September 4, 2019.

[27] ***. Email with attachments from counsel on behalf of *** to USITC staff, August 28, 2019. ***. Verification report, p. 5.

[28] ***. Email with attachments from counsel on behalf of *** to USITC staff, August 28, 2019.

While net income was lower than corresponding operating income, reflecting the presence of interest expense and other expenses, which were only partially offset by corresponding other income, it followed the same directional pattern as operating income throughout the period: declining during 2016-18 and then higher in January-June 2019 compared to January-June 2018.

Capital expenditures and research and development expenses

Table VI-5 presents U.S. producers' capital expenditures and research and development ("R&D") expenses related to their AWC operations.

Table VI-5
AWC: Capital expenditures and research and development (R&D) expenses of U.S. producers, 2016-18, January-June 2018, and January-June 2019

Item	Fiscal year			January to June	
	2016	2017	2018	2018	2019
	Capital expenditures (1,000 dollars)				
Cerro	***	***	***	***	***
Encore	***	***	***	***	***
Nexans	***	***	***	***	***
Prysmian	***	***	***	***	***
Southwire	***	***	***	***	***
Total capital expenditures	***	***	***	***	***
	Research and development expenses (1,000 dollars)				
Cerro	***	***	***	***	***
Encore	***	***	***	***	***
Nexans	***	***	***	***	***
Prysmian	***	***	***	***	***
Southwire	***	***	***	***	***
Total R&D expenses	***	***	***	***	***

[1] ***.

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

Total capital expenditures declined modestly in 2017, increased in 2018 to their highest levels of the period, and were higher in January-June 2019 compared to January-June 2018. *** (*** percent of the period's total reported capital expenditures) accounted for the majority of the overall increase in 2018 capital expenditures.[29] *** and ***,

[29] ***. *** U.S. producer questionnaire, response to III-13 (note 1). ***. Verification report, p. 5.

accounting for *** percent and *** percent, respectively, also reported relatively large increases in capital expenditures in 2018.[30] ***, which reported capital expenditures in 2016 and 2017 ***, accounted for *** percent of the period's total reported capital expenditures. *** reported no capital expenditures during the period.[31]

***, the *** U.S. producers reporting R&D expenses, accounted for *** percent and *** percent of the period's total R&D expenses, respectively.[32]

Assets and return on assets

Table VI-6 presents data on the U.S. producers' total net assets and operating return on net assets related to operations on AWC.[33]

[30] ***. *** U.S. producer questionnaire, response to III-13 (note 1).

***. *** U.S. producer questionnaire, response to III-13 (note 1). Prior to the period examined, Encore made substantial investments in its aluminum and wire cable plant, doubling the size of the facility. Hearing transcript, p. 15 (Jones).

[31] ***. Email with attachments from *** to USITC staff, July 23, 2019.

[32] ***. *** U.S. producer questionnaire, response to III-13 (note 2). ***. *** U.S. producer questionnaire, response to III-13 (note 2).

[33] With respect to a company's overall operations, staff notes that a total asset value (i.e., the bottom line value on the asset side of a company's balance sheet) reflects an aggregation of a number of current and non-current assets, which, in many instances, are not product specific. Allocation factors were presumably necessary to report total asset values specific to U.S. producers' operations on AWC. The ability of U.S. producers to assign total asset values to discrete product lines affects the meaningfulness of operating return on net assets. Note: ***. Verification report, p. 5.

Table VI-6
AWC: U.S. producers' total net assets and operating return on assets, 2016-18

Firm	Fiscal years		
	2016	2017	2018
	Total net assets (1,000 dollars)		
Cerro	***	***	***
Encore	***	***	***
Nexans	***	***	***
Prysmian	***	***	***
Southwire	***	***	***
Total net assets	***	***	***
	Operating return on assets (percent)		
Cerro	***	***	***
Encore	***	***	***
Nexans	***	***	***
Prysmian	***	***	***
Southwire	***	***	***
Average operating return on assets	***	***	***

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

Capital and investment

The Commission requested that U.S. producers of AWC describe any actual or potential negative effects on their return on investment or their growth, investment, ability to raise capital, existing development and production efforts (including efforts to develop a derivative or more advanced version of the product), or the scale of capital investments as a result of imports of AWC from China. Table VI-7 tabulates the responses on actual negative effects on investment, growth and development, as well as anticipated negative effects. Table VI-8 presents the narrative responses of the U.S. producers regarding actual and anticipated negative effects on investment, growth and development.

Table VI-7
AWC: Negative effects of imports from subject sources on investment, growth, and development since January 1, 2016

Item	No	Yes
Negative effects on investment	0	5
Cancellation, postponement, or rejection of expansion projects		3
Denial or rejection of investment proposal		1
Reduction in the size of capital investments		1
Return on specific investments negatively impacted		4
Other		3
Negative effects on growth and development	1	4
Rejection of bank loans		0
Lowering of credit rating		0
Problem related to the issue of stocks or bonds		0
Ability to service debt		1
Other		3
Anticipated negative effects of imports	0	5

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

Table VI-8
AWC: Narrative responses of U.S. producers regarding actual and anticipated negative effects of imports from subject sources on investment, growth, and development since January 1, 2016

Effects/Firm	Narrative
Impact on investment	
Cancellation, postponement, or rejection of expansion projects:	
***	***
***	***
***	***
Denial or rejection of investment proposal:	
***	***
Reduction in the size of capital investments:	
***	***
Return on specific investments negatively impacted:	
***	***
***	***
***	***
***	***

Table continued on next page.

Table VI-8—Continued
AWC: Narrative responses of U.S. producers regarding actual and anticipated negative effects of imports from subject sources on investment, growth, and development since January 1, 2016

Effects/Firm	Narrative
Impact on investment--continued	
Other:	
***	***
***	***
***	***
Impact on growth and development	
Ability to service debt:	
***	***
Other:	
***	***
***	***
***	***
Anticipated effects of imports:	
***	***
***	***
***	***
***	***
***	***

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

Part VII: Threat considerations and information on nonsubject countries

Section 771(7)(F)(i) of the Act (19 U.S.C. § 1677(7)(F)(i)) provides that—

> *In determining whether an industry in the United States is threatened with material injury by reason of imports (or sales for importation) of the subject merchandise, the Commission shall consider, among other relevant economic factors*[1]*--*
>
> *(I) if a countervailable subsidy is involved, such information as may be presented to it by the administering authority as to the nature of the subsidy (particularly as to whether the countervailable subsidy is a subsidy described in Article 3 or 6.1 of the Subsidies fAgreement), and whether imports of the subject merchandise are likely to increase,*
>
> *(II) any existing unused production capacity or imminent, substantial increase in production capacity in the exporting country indicating the likelihood of substantially increased imports of the subject merchandise into the United States, taking into account the availability of other export markets to absorb any additional exports,*
>
> *(III) a significant rate of increase of the volume or market penetration of imports of the subject merchandise indicating the likelihood of substantially increased imports,*
>
> *(IV) whether imports of the subject merchandise are entering at prices that are likely to have a significant depressing or suppressing effect on domestic prices, and are likely to increase demand for further imports,*
>
> *(V) inventories of the subject merchandise,*

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

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

(VII) in any investigation under this title which involves imports of both a raw agricultural product (within the meaning of paragraph (4)(E)(iv)) and any product processed from such raw agricultural product, the likelihood that there will be increased imports, by reason of product shifting, if there is an affirmative determination by the Commission under section 705(b)(1) or 735(b)(1) with respect to either the raw agricultural product or the processed agricultural product (but not both),

(VIII) the actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the domestic like product, and

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

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

[2] Section 771(7)(F)(iii) of the Act (19 U.S.C. § 1677(7)(F)(iii)) further provides that, in antidumping investigations, ". . . the Commission shall consider whether dumping in the markets of foreign countries (as evidenced by dumping findings or antidumping remedies in other WTO member markets against the same class or kind of merchandise manufactured or exported by the same party as under investigation) suggests a threat of material injury to the domestic industry."

The industry in China

The Commission issued foreign producers' or exporters' questionnaires to 32 firms believed to produce and/or export AWC from China.[3] Usable responses to the Commission's questionnaire were received from one firm: Shanghai Cable Works Group Co. Ltd ("Shanghai Cable"). Shanghai Cable estimates that it accounts for *** percent of AWC production in China. This firm's exports to the United States accounted for approximately *** percent of U.S. imports of AWC from China in 2018, based on importer questionnaire data.

During the preliminary phase of these investigations, the Commission received usable questionnaires from seven firms (including Shanghai Cable), whose exports to the United States accounted for approximately 62.2 percent of U.S. imports of AWC from China in 2017, based on importer questionnaire data. According to estimates requested of the responding Chinese producers in the preliminary phase questionnaire, the production of AWC in China reported in questionnaires accounted for approximately *** percent of overall production of AWC in China in 2017. Information on the Chinese industry from the preliminary phase investigations is presented in Appendix F.

Changfeng Wire and Cable is one of the top ten Chinese producers of wire and cable, including AWC, with an annual cable production capacity totaling $750 million. Changfeng exports wire and cable to 30 countries, including Australia, the United States, Singapore, South Africa, and Brazil. In 2010, the firm invested $12 million in new aluminum alloy power cable production equipment, and in 2015 it received certification from the American Petroleum Institute (API) and UL—an international safety standards organization.[4]

Wuxi Jiangnan Cable Co Ltd. is a producer of integrated wire and cable, including AWC. The firm has a production capacity of 2.6 million kilometers of wire and cable product per year, including power cables of 500 kV and below, electric equipment cables, and bare wires of 1,000kV and below. Wuxi imported extra-high-voltage cable production equipment from Finland to build an advanced production line at its facility in Jiangsu Province, China.[5]

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[3] These firms were identified through a review of information submitted in the petition and contained in *** records.

[4] Changfeng Wire and Cable Co., Ltd, "About Us," http://www.changfenggroup.com/intro/1.html, accessed September 18, 2019. UL, "Our Mission," https://www.ul.com/about/mission, accessed September 18, 2019.

[5] Jiangnan Cable, "Company Profile," http://www.jncablegroup.com/company-profile.html, accessed September 18, 2019.

Shanghai Cable is a Chinese producer of wire and cable products, including AWC.[6] According to information available through Bloomberg, the firm also serves as a distributor of wire and cable products throughout China and has approximately 500 employees.[7] No other public information on Shanghai Cable Works Group Co. Ltd. is readily available.

Changes in operations

Shanghai Cable reported ***.

Operations on AWC

Table VII-1 presents information on the AWC operations of Shanghai Cable.

[6] Shanghai Cable Works Co., Ltd, "Product," http://www.scw-cable.com/html/en/index.php, accessed September 18, 2019.

[7] Bloomberg, "Shanghai Cable Works Co Ltd," https://www.bloomberg.com/profile/company/GIBEKZ:CH, accessed September 18, 2019.

Table VII-1
AWC: Data for producer in China, 2016-18, January to June 2018, and January to June 2019, and projected 2019 and 2020

Item	Actual experience					Projections	
	Calendar year			January to June		Calendar year	
	2016	2017	2018	2018	2019	2019	2020
	Quantity (1,000 pounds)						
Capacity	***	***	***	***	***	***	***
Production	***	***	***	***	***	***	***
End-of-period inventories	***	***	***	***	***	***	***
Shipments:							
Home market shipments:							
Internal consumption/ transfers	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Total home market shipments	***	***	***	***	***	***	***
Export shipments to:							
United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***
	Ratios and shares (percent)						
Capacity utilization	***	***	***	***	***	***	***
Inventories/production	***	***	***	***	***	***	***
Inventories/total shipments	***	***	***	***	***	***	***
Share of shipments:							
Home market shipments:							
Internal consumption/ transfers	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Total home market shipments	***	***	***	***	***	***	***
Export shipments to:							
United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***

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

Alternative products

As shown in table VII-2, Shanghai Cable reported production of other products on the same equipment and machinery used to produce AWC. Shanghai Cable reported producing ***.

Table VII-2
AWC: China producer's overall capacity and production on the same equipment as subject production, 2016-18, January to June 2018, and January to June 2019

Item	Calendar year			January to June	
	2016	2017	2018	2018	2019
	Quantity (1,000 pounds)				
Overall capacity	***	***	***	***	***
Production:					
AWC	***	***	***	***	***
Out-of-scope production	***	***	***	***	***
Total production on same machinery	***	***	***	***	***
	Ratios and shares (percent)				
Overall capacity utilization	***	***	***	***	***
Share of production:					
AWC	***	***	***	***	***
Out-of-scope production	***	***	***	***	***
Total production on same machinery	***	***	***	***	***

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

Exports

According to Global Trade Atlas data, the leading export markets for insulated conductors, which includes AWC, from China are the United States, Australia, Hong Kong, and the Philippines (table VII-3). China's exports increased 12.6 percent in quantity terms, from 2016 to 2018. During 2018, the United States was the top export market for insulated conductors from China, accounting for 11.5 percent of the country's exports, in quantity terms, followed by Australia (9.3 percent), Hong Kong (6.2 percent) and the Philippines (5.8 percent).

Table VII-3
Insulated conductors: Exports from China, 2016-18, January to June 2018, and January to June 2019

Destination market	Calendar year		
	2016	2017	2018
	Quantity (1,000 pounds)		
United States	221,833	264,975	197,864
Australia	113,950	149,443	159,270
Hong Kong	115,074	122,835	107,091
Philippines	69,983	77,345	99,976
Vietnam	64,977	83,210	96,338
Singapore	83,909	68,184	62,937
Indonesia	45,756	47,344	58,962
Nigeria	25,232	38,180	45,293
Thailand	55,589	45,382	43,596
All other destination markets	728,936	785,541	846,331
Total exports	1,525,239	1,682,438	1,717,657
	Value (1,000 dollars)		
United States	473,736	569,368	485,973
Australia	220,591	329,842	376,830
Hong Kong	592,033	502,923	522,690
Philippines	146,101	184,804	243,531
Vietnam	218,573	302,260	354,463
Singapore	204,684	182,132	182,981
Indonesia	111,711	139,693	162,888
Nigeria	34,120	52,625	72,660
Thailand	148,701	139,732	125,399
All other destination markets	1,789,526	1,999,535	2,265,603
Total exports	3,939,777	4,402,916	4,793,019

Table continued on next page.

Table VII-3--Continued
Insulated conductors: Exports from China, 2016-18, January to June 2018, and January to June 2019

Destination market	Calendar year		
	2016	2017	2018
	Unit value (dollars per pound)		
United States	2.14	2.15	2.46
Australia	1.94	2.21	2.37
Hong Kong	5.14	4.09	4.88
Philippines	2.09	2.39	2.44
Vietnam	3.36	3.63	3.68
Singapore	2.44	2.67	2.91
Indonesia	2.44	2.95	2.76
Nigeria	1.35	1.38	1.60
Thailand	2.68	3.08	2.88
All other destination markets	2.45	2.55	2.68
Total exports	2.58	2.62	2.79
	Share of quantity (percent)		
United States	14.5	15.7	11.5
Australia	7.5	8.9	9.3
Hong Kong	7.5	7.3	6.2
Philippines	4.6	4.6	5.8
Vietnam	4.3	4.9	5.6
Singapore	5.5	4.1	3.7
Indonesia	3.0	2.8	3.4
Nigeria	1.7	2.3	2.6
Thailand	3.6	2.7	2.5
All other destination markets	47.8	46.7	49.3
Total exports	100.0	100.0	100.0

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. The United States is shown at the top; all remaining top export destinations shown in descending order of 2018 quantity data. Data reported under subheading 8544.49 likely includes some merchandise outside the scope of these investigations.

Source: Official exports statistics under HS subheading 8544.49 as reported by China Customs in the Global Trade Atlas database, accessed July 15, 2019.

U.S. inventories of imported merchandise

Table VII-4 presents data on U.S. importers' reported inventories of AWC. Inventories of subject imports increased by *** percent between 2016 and 2018, and were *** percent lower in January to June 2019 than in January to June 2018. The ratio of importers' inventories to U.S. shipments of subject imports ranged from *** percent and *** percent during 2016-18, while the ratio of inventories to U.S. shipments of imports from nonsubject sources ranged from *** percent and *** percent during the same period.

Table VII-4
AWC: U.S. importers' inventories, 2016-18, January to June 2018, and January to June 2019

Item	Calendar year			January to June	
	2016	2017	2018	2018	2019
	Inventories (1,000 pounds); Ratios (percent)				
Imports from China Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***
Imports from Mexico: Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***
Imports from Turkey: Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***
Imports from other sources: Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***
Imports from nonsubject sources: Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***
Imports from all import sources: Inventories	29,370	40,731	39,743	37,006	24,143
Ratio to U.S. imports	25.3	26.8	27.5	29.2	22.0
Ratio to U.S. shipments of imports	25.8	29.1	27.4	27.7	17.1
Ratio to total shipments of imports	***	***	***	***	***

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

U.S. importers' outstanding orders

The Commission requested importers to indicate whether they imported or arranged for the importation of AWC from China after June 30, 2019. Ten of 14 responding firms indicated that they had arranged such imports. These data are presented in table VII-5.

Table VII-5
AWC: Arranged imports, July 2019 through June 2020

Item	Period				
	Jul-Sept 2019	Oct-Dec 2019	Jan-Mar 2020	Apr-Jun 2020	Total
	Quantity (1,000 pounds)				
Arranged U.S. imports from.--China	***	***	***	***	***
Mexico	***	***	***	***	***
Turkey	***	***	***	***	***
All other sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***

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

Antidumping or countervailing duty orders in third-country markets

There are no known trade remedy actions on AWC from China in third-country markets.[8]

[8] Counsel to both the Petitioners and Respondent Priority stated that they are unaware of any antidumping or countervailing duty orders in third-country markets on AWC from China. Conference transcript, pp. 61 (Levy), 112 (Porter).

Information on nonsubject countries

Mexico

Table VII-6 presents Mexico's exports of insulated conductors, which includes AWC, from 2016 to 2018. Mexico's exports increased 4.0 percent, in quantity terms, from 2016 to 2018. The United States accounted for the largest share of Mexico's exports, in quantity terms, in 2018 (72.1 percent), followed by Honduras (7.1 percent), Nicaragua (6.6 percent), and Guatemala (4.4 percent).

Table VII-6
Insulated conductors: Mexico exports by destination market, 2016-18

Destination market	Calendar year		
	2016	2017	2018
	Quantity (1,000 pounds)		
United States	284,312	246,349	302,690
Nicaragua	16,610	24,996	29,689
Honduras	27,250	30,861	27,814
Guatemala	13,984	16,396	18,467
El Salvador	28,478	6,558	8,705
Costa Rica	7,479	6,683	8,214
Panama	4,721	6,953	6,673
Colombia	6,263	3,437	4,672
Brazil	2,092	3,047	2,884
All other destination markets	12,590	11,634	10,254
Total exports	403,779	356,914	420,061
	Value (1,000 dollars)		
United States	758,069	854,398	1,025,330
Honduras	47,154	72,802	93,600
Nicaragua	94,861	117,272	97,749
Guatemala	31,268	40,388	46,891
El Salvador	9,410	18,185	26,003
Costa Rica	17,778	17,250	23,190
Panama	10,388	19,449	17,143
Colombia	13,859	7,933	12,476
Brazil	6,044	10,281	9,972
All other destination markets	46,880	43,969	41,174
Total exports	1,035,712	1,201,927	1,393,529

Table continued on next page.

Table VII-6—Continued
Insulated conductors: Mexico exports by destination market, 2016-18

Destination market	Calendar year		
	2016	2017	2018
	Unit value (dollars per pound)		
United States	2.67	3.47	3.39
Honduras	2.84	2.91	3.15
Nicaragua	3.48	3.80	3.51
Guatemala	2.24	2.46	2.54
El Salvador	0.33	2.77	2.99
Costa Rica	2.38	2.58	2.82
Panama	2.20	2.80	2.57
Colombia	2.21	2.31	2.67
Brazil	2.89	3.37	3.46
All other destination markets	3.72	3.78	4.02
Total exports	2.57	3.37	3.32
	Share of quantity (percent)		
United States	70.4	69.0	72.1
Honduras	4.1	7.0	7.1
Nicaragua	6.7	8.6	6.6
Guatemala	3.5	4.6	4.4
El Salvador	7.1	1.8	2.1
Costa Rica	1.9	1.9	2.0
Panama	1.2	1.9	1.6
Colombia	1.6	1.0	1.1
Brazil	0.5	0.9	0.7
All other destination markets	3.1	3.3	2.4
Total exports	100.0	100.0	100.0

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. The United States is shown at the top; all remaining top export destinations shown in descending order of 2018 quantity data. Data reported under subheading 8544.49 likely includes some merchandise outside the scope of these investigations.

Source: Official exports statistics under HS subheading 8544.49 as reported by Mexico's INEGI in the Global Trade Atlas database, accessed August 26, 2019.

Turkey

Table VII-7 presents Turkey's exports of insulated conductors, which includes AWC, from 2016 to 2018. Turkey's exports increased 3.2 percent, in quantity terms, from 2016 to 2018. The United Kingdom accounted for the largest share of Turkey's exports, in quantity terms, in 2018 (36.7 percent), followed by Iraq (10.0 percent), and Israel (8.7 percent). The United States accounted for 0.1 percent of Turkey's exports, in quantity terms, in 2018.

Table VII-7
Insulated conductors: Turkey exports by destination market, 2016-18

Destination market	Calendar year		
	2016	2017	2018
	Quantity (1,000 pounds)		
United States	464	1,173	446
United Kingdom	240,028	241,735	259,798
Iraq	69,841	71,209	70,514
Israel	73,823	74,668	61,520
Ireland	19,204	23,505	25,697
Algeria	15,891	6,211	18,572
Qatar	6,660	5,747	15,121
Germany	13,405	12,852	13,588
France	11,028	12,764	12,875
All other destination markets	235,625	223,972	229,490
Total exports	685,967	673,837	707,619
	Value (1,000 dollars)		
United States	924	2,845	1,115
United Kingdom	354,970	434,851	500,163
Iraq	104,176	118,780	121,672
Israel	110,201	128,931	108,534
Ireland	30,184	42,671	49,133
Algeria	33,672	14,700	48,700
Qatar	10,043	9,698	29,064
Germany	25,030	27,853	32,070
France	19,708	27,315	28,381
All other destination markets	447,361	485,839	526,327
Total exports	1,136,271	1,293,483	1,445,160

Table continued on next page.

Table VII-7--Continued
Insulated conductors: Turkey exports by destination market, 2016-18

Destination market	Calendar year		
	2016	2017	2018
	Unit value (dollars per pound)		
United States	1.99	2.43	2.50
United Kingdom	1.48	1.80	1.93
Iraq	1.49	1.67	1.73
Israel	1.49	1.73	1.76
Ireland	1.57	1.82	1.91
Algeria	2.12	2.37	2.62
Qatar	1.51	1.69	1.92
Germany	1.87	2.17	2.36
France	1.79	2.14	2.20
All other destination markets	1.90	2.17	2.29
Total exports	1.66	1.92	2.04
	Share of quantity (percent)		
United States	0.1	0.2	0.1
United Kingdom	35.0	35.9	36.7
Iraq	10.2	10.6	10.0
Israel	10.8	11.1	8.7
Ireland	2.8	3.5	3.6
Algeria	2.3	0.9	2.6
Qatar	1.0	0.9	2.1
Germany	2.0	1.9	1.9
France	1.6	1.9	1.8
All other destination markets	34.3	33.2	32.4
Total exports	100.0	100.0	100.0

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. United States is shown at the top, all remaining top export destinations shown in descending order of 2018 data. Data reported under subheading 8544.49 likely includes some merchandise outside the scope of these investigations.

Source: Official exports statistics under HS subheading 8544.49 as reported by Turkey's State Institute of Statistics in the Global Trade Atlas database, accessed August 26, 2019.

Global exports

Table VII-8 presents the leading exporters of insulated conductors, which includes AWC, from 2016 to 2018. Total world exports of insulated conductors increased by 19.7 percent, in value terms, from 2016 to 2018. China accounted for the largest share of global exports, in value terms, in 2018 (16.4 percent), followed by Germany (9.2 percent), the United States (8.9 percent), Italy (7.0 percent), Turkey (4.9 percent) and Mexico (4.8 percent).

Table VII-8
Insulated conductors: Global exports by exporter, 2016-18

Exporter	Calendar year		
	2016	2017	2018
	Value (1,000 dollars)		
United States	2,459,436	2,470,071	2,607,268
China	3,939,777	4,402,916	4,793,019
Germany	2,060,689	2,406,230	2,698,212
Italy	1,504,419	1,750,554	2,052,571
Turkey	1,136,271	1,293,483	1,445,160
Mexico	1,035,712	1,201,927	1,393,529
France	706,571	823,647	864,519
South Korea	807,546	735,164	863,057
Poland	609,562	821,222	833,760
Spain	622,668	711,686	790,852
Hong Kong	565,643	681,669	782,638
Czech Republic	533,055	631,468	722,060
Japan	603,240	655,385	709,942
Romania	436,740	509,987	631,257
All other exporters	7,399,494	8,692,095	8,032,592
Total	24,420,821	27,787,503	29,220,435
	Share of value (percent)		
United States	10.1	8.9	8.9
China	16.1	15.8	16.4
Germany	8.4	8.7	9.2
Italy	6.2	6.3	7.0
Turkey	4.7	4.7	4.9
Mexico	4.2	4.3	4.8
France	2.9	3.0	3.0
South Korea	3.3	2.6	3.0
Poland	2.5	3.0	2.9
Spain	2.5	2.6	2.7
Hong Kong	2.3	2.5	2.7
Czech Republic	2.2	2.3	2.5
Japan	2.5	2.4	2.4
Romania	1.8	1.8	2.2
All other exporters	30.3	31.3	27.5
Total	100.0	100.0	100.0

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent.

Source: Official exports statistics under HS subheading 8544.49 as reported by various national statistical authorities in the Global Trade Atlas database, accessed August 26, 2019.

APPENDIX A

FEDERAL REGISTER NOTICES

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

Citation	Title	Link
83 FR 48864 September 27, 2018	*Aluminum Wire and Cable From China; Institution of Anti-Dumping and Countervailing Duty Investigations and Scheduling of Preliminary Phase Investigations*	https://www.gpo.gov/fdsys/pkg/FR-2018-09-27/pdf/2018-20990.pdf
83 FR 52805 October 18, 2018	*Aluminum Wire and Cable From the People's Republic of China: Initiation of Countervailing Duty Investigation*	https://www.gpo.gov/fdsys/pkg/FR-2018-10-18/pdf/2018-22655.pdf
83 FR 52811 October 18, 2018	*Aluminum Wire and Cable From the People's Republic of China: Initiation of Less-Than-Fair-Value Investigation*	https://www.gpo.gov/fdsys/pkg/FR-2018-10-18/pdf/2018-22656.pdf
83 FR 56101 November 9, 2018	*Aluminum Wire and Cable From China*	https://www.gpo.gov/fdsys/pkg/FR-2018-11-09/pdf/2018-24510.pdf
84 FR 13886 April 8, 2019	*Aluminum Wire and Cable From the People's Republic of China: Preliminary Affirmative Countervailing Duty Determination and Alignment of Final Determination With Final Antidumping Duty Determination*	https://www.govinfo.gov/content/pkg/FR-2019-04-08/pdf/2019-06856.pdf
84 FR 26069 June 5, 2019	*Aluminum Wire and Cable From the People's Republic of China: Affirmative Preliminary Determination of Sales at Less Than Fair Value and Postponement of Final Determination*	https://www.govinfo.gov/content/pkg/FR-2019-06-05/pdf/2019-11712.pdf
84 FR 31101 June 28, 2019	*Aluminum Wire and Cable From China; Scheduling of the Final Phase of Countervailing Duty and Anti-Dumping Duty Investigations*	https://www.govinfo.gov/content/pkg/FR-2019-06-28/pdf/2019-13766.pdf
84 FR 58134 October 30, 2019	*Aluminum Wire and Cable From the People's Republic of China: Final Affirmative Determination of Sales at Less Than Fair Value*	https://www.govinfo.gov/content/pkg/FR-2019-10-30/pdf/2019-23612.pdf
84 FR 58137 October 30, 2019	*Aluminum Wire and Cable From the People's Republic of China: Final Affirmative Countervailing Duty Determination*	https://www.govinfo.gov/content/pkg/FR-2019-10-30/pdf/2019-23611.pdf

APPENDIX B

LIST OF HEARING WITNESSES

CALENDAR OF PUBLIC HEARING

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

Subject: Aluminum Wire and Cable from China

Inv. Nos.: 701-TA-611 and 731-TA-1428 (Final)

Date and Time: October 17, 2019 - 9:30 a.m.

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

OPENING REMARKS:

Petitioners (**Sydney H. Mintzer**, Mayer Brown LLP)

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

Cassidy Levy Kent LLP
Adduci Mastriani & Schaumberg LLP
Washington, DC
on behalf of

Encore Wire Corporation ("Encore")

Daniel L. Jones, Chairman, President and Chief Executive Officer, Encore

Kevin Kieffer, Vice President Sales & Marketing, Encore

Jack A. Levy)
Myles S. Getlan) – OF COUNSEL
Deanna Tanner Okun)

Mayer Brown LLP
Washington, DC
on behalf of

Southwire Company, LLP

Aaron Asher, Vice President, Distribution,
Southwire Company, LLP

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

Jonathan Hendricks, Manager, Building Wire Products,
Southwire Company, LLC

Sydney H. Mintzer)
) – OF COUNSEL
Timothy C. Lee)

CLOSING REMARKS:

Petitioners (**Myles S. Getlan**, Cassidy Levy Kent LLP)

-END-

APPENDIX C

SUMMARY DATA

Table C-1
AWC: Summary data concerning the U.S. market, 2016-18, January to June 2018, and January to June 2019
(Quantity=1,000 pounds; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per pound ; Period changes=percent--exceptions noted)

	Reported data					Period changes			
	Calendar year			January to June		Calendar year			Jan-Jun
	2016	2017	2018	2018	2019	2016-18	2016-17	2017-18	2018-19
U.S. consumption quantity:									
Amount	430,264	466,818	473,946	236,018	241,028	▲10.2	▲8.5	▲1.5	▲2.1
Producers' share (fn1)	73.5	70.0	69.4	71.7	70.8	▼(4.1)	▼(3.6)	▼(0.6)	▼(0.9)
Importers' share (fn1):									
China	***	17.6	18.0	17.7	9.8	▲***	▲***	▲0.4	▼(7.8)
Mexico	***	***	***	***	***	▼***	▼***	▲***	▲***
Turkey	***	***	***	***	***	▲***	▲***	▼***	▲***
All other sources	***	***	***	***	***	▲***	▲***	▲***	▲***
Nonsubject sources	***	12.5	12.6	10.6	19.4	▲***	▲***	▲0.1	▲8.8
All import sources	26.5	30.0	30.6	28.3	29.2	▲4.1	▲3.6	▲0.6	▲0.9
U.S. consumption value:									
Amount	804,868	873,766	937,367	445,072	481,814	▲16.5	▲8.6	▲7.3	▲8.3
Producers' share (fn1)	72.5	70.5	69.8	70.1	70.7	▼(2.7)	▼(2.0)	▼(0.7)	▲0.6
Importers' share (fn1):									
China	***	16.8	17.8	18.4	***	▲***	▲***	▲0.9	▼***
Mexico	***	***	***	***	***	▲***	▼***	▲***	▲***
Turkey	***	***	***	***	***	▼***	▲***	▼***	▲***
All other sources	***	***	***	***	***	▲***	▲***	▼***	▲***
Nonsubject sources	***	12.7	12.5	11.5	***	▲***	▲***	▼(0.2)	▲***
All import sources	27.5	29.5	30.2	29.9	29.3	▲2.7	▲2.0	▲0.7	▼(0.6)
U.S. importers' U.S. shipments of imports.--									
China:									
Quantity	***	81,933	85,295	41,732	23,703	▲***	▲***	▲4.1	▼(43.2)
Value	***	147,209	166,413	81,777	***	▲***	▲***	▲13.0	▼***
Unit value	***	$1.80	$1.95	$1.96	***	▼***	▼***	▲8.6	▲***
Ending inventory quantity	***	***	***	***	***	▲***	▲***	▼***	▼***
Mexico:									
Quantity	***	***	***	***	***	▲***	▲***	▲***	▲***
Value	***	***	***	***	***	▲***	▲***	▲***	▲***
Unit value	***	***	***	***	***	▲***	▲***	▲***	▼***
Ending inventory quantity	***	***	***	***	***	▲***	▲***	▲***	▲***
Turkey:									
Quantity	***	***	***	***	***	▲***	▲***	▼***	▲***
Value	***	***	***	***	***	▲***	▲***	▼***	▲***
Unit value	***	***	***	***	***	▼***	▼***	▲***	▲***
Ending inventory quantity	***	***	***	***	***	***	***	***	▲***
All other sources:									
Quantity	***	***	***	***	***	▲***	▲***	▲***	▲***
Value	***	***	***	***	***	▲***	▲***	▲***	▲***
Unit value	***	***	***	***	***	▲***	▼***	▲***	▼***
Ending inventory quantity	***	***	***	***	***	▲***	▲***	▼***	▲***
Nonsubject sources:									
Quantity	***	58,193	59,620	25,053	46,711	▲***	▲***	▲2.5	▲86.4
Value	***	110,575	116,722	51,227	***	▲***	▲***	▲5.6	▲***
Unit value	***	$1.90	$1.96	$2.04	***	▲***	▼***	▲3.0	▼***
Ending inventory quantity	***	***	***	***	***	▲***	▲***	▼***	▲***
All import sources:									
Quantity	113,841	140,126	144,915	66,785	70,415	▲27.3	▲23.1	▲3.4	▲5.4
Value	221,589	257,783	283,135	133,004	141,215	▲27.8	▲16.3	▲9.8	▲6.2
Unit value	$1.95	$1.84	$1.95	$1.99	$2.01	▲0.4	▼(5.5)	▲6.2	▲0.7
Ending inventory quantity	29,370	40,731	39,743	37,006	24,143	▲35.3	▲38.7	▼(2.4)	▼(34.8)

Table continued on next page.

Table C-1--Continued
AWC: Summary data concerning the U.S. market, 2016-18, January to June 2018, and January to June 2019
(Quantity=1,000 pounds; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per pound ; Period changes=percent--exceptions noted)

	Reported data					Period changes			
	Calendar year			January to June		Calendar year			Jan-Jun
	2016	2017	2018	2018	2019	2016-18	2016-17	2017-18	2018-19
U.S. producers:									
Average capacity quantity	519,353	529,030	528,773	264,438	264,347	▲1.8	▲1.9	▼(0.0)	▼(0.0)
Production quantity	346,777	366,732	372,979	194,814	190,570	▲7.6	▲5.8	▲1.7	▼(2.2)
Capacity utilization (fn1)	66.8	69.3	70.5	73.7	72.1	▲3.8	▲2.6	▲1.2	▼(1.6)
U.S. shipments:									
Quantity	316,423	326,692	329,031	169,233	170,613	▲4.0	▲3.2	▲0.7	▲0.8
Value	583,279	615,983	654,231	312,069	340,599	▲12.2	▲5.6	▲6.2	▲9.1
Unit value	$1.84	$1.89	$1.99	$1.84	$2.00	▲7.9	▲2.3	▲5.5	▲8.3
Export shipments:									
Quantity	***	***	***	***	***	▲***	▼***	▲***	▲***
Value	***	***	***	***	***	▲***	▲***	▲***	▼***
Unit value	***	***	***	***	***	▼***	▲***	▼***	▼***
Ending inventory quantity	38,910	41,708	38,481	48,760	38,700	▼(1.1)	▲7.2	▼(7.7)	▼(20.6)
Inventories/total shipments (fn1)	***	***	***	***	***	▼***	▲***	▼***	▼***
Production workers	1,709	1,734	1,720	1,739	1,747	▲0.6	▲1.5	▼(0.8)	▲0.5
Hours worked (1,000s)	4,358	4,305	4,306	2,250	2,235	▼(1.2)	▼(1.2)	▲0.0	▼(0.7)
Wages paid ($1,000)	90,886	93,360	98,013	50,444	51,402	▲7.8	▲2.7	▲5.0	▲1.9
Hourly wages (dollars per hour)	$20.85	$21.69	$22.76	$22.42	$23.00	▲9.1	▲4.0	▲5.0	▲2.6
Productivity (pounds per hour)	79.6	85.2	86.6	86.6	85.3	▲8.9	▲7.1	▲1.7	▼(1.5)
Unit labor costs	$0.26	$0.25	$0.26	$0.26	$0.27	▲0.3	▼(2.9)	▲3.2	▲4.2
Net sales:									
Quantity	354,098	363,934	376,175	187,762	190,351	▲6.2	▲2.8	▲3.4	▲1.4
Value	654,473	695,642	741,072	354,418	377,108	▲13.2	▲6.3	▲6.5	▲6.4
Unit value	$1.85	$1.91	$1.97	$1.89	$1.98	▲6.6	▲3.4	▲3.1	▲5.0
Cost of goods sold (COGS)	541,860	599,628	651,793	315,544	319,419	▲20.3	▲10.7	▲8.7	▲1.2
Gross profit or (loss) (fn2)	112,612	96,014	89,279	38,875	57,689	▼(20.7)	▼(14.7)	▼(7.0)	▲48.4
SG&A expenses	69,963	63,432	69,673	33,831	34,320	▼(0.4)	▼(9.3)	▲9.8	▲1.4
Operating income or (loss) (fn2)	42,649	32,582	19,606	5,043	23,369	▼(54.0)	▼(23.6)	▼(39.8)	▲363.4
Net income or (loss) (fn2)	34,871	28,049	8,910	(440)	19,484	▼(74.4)	▼(19.6)	▼(68.2)	▲***
Capital expenditures	***	***	***	***	***	▲***	▼***	▲***	▲***
Unit COGS	$1.53	$1.65	$1.73	$1.68	$1.68	▲13.2	▲7.7	▲5.2	▼(0.1)
Unit SG&A expenses	$0.20	$0.17	$0.19	$0.18	$0.18	▼(6.3)	▼(11.8)	▲6.3	▲0.1
Unit operating income or (loss) (fn2)	$0.12	$0.09	$0.05	$0.03	$0.12	▼(56.7)	▼(25.7)	▼(41.8)	▲357.1
Unit net income or (loss) (fn2)	$0.10	$0.08	$0.02	$0.00	$0.10	▼(75.9)	▼(21.7)	▼(69.3)	▲***
COGS/sales (fn1)	82.8	86.2	88.0	89.0	84.7	▲5.2	▲3.4	▲1.8	▼(4.3)
Operating income or (loss)/sales (fn1)	6.5	4.7	2.6	1.4	6.2	▼(3.9)	▼(1.8)	▼(2.0)	▲4.8
Net income or (loss)/sales (fn1)	5.3	4.0	1.2	(0.1)	5.2	▼(4.1)	▼(1.3)	▼(2.8)	▲5.3

Notes:

Note.--Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---".

fn1.--Reported data are in percent and period changes are in percentage points.
fn2.--Percent changes only calculated when both comparison values represent profits; The directional change in profitability provided when one or both comparison values represent a loss.

Source: Compiled data submitted in response to Commission questionnaires.

APPENDIX D

NONSUBJECT COUNTRY PRICE DATA

Two importers reported price data for Mexico and/or Turkey for products 1-6. Price data reported by these firms accounted for *** percent of U.S. commercial shipments from Mexico in 2018. All pricing data from Turkey was ***. These price items and accompanying data are comparable to those presented in tables V-5, V-6, and V-9. Price and quantity data for Mexico and Turkey are shown in tables D-1 to D-3 and in figures D-1 to D-3 (with domestic and subject sources).

In comparing nonsubject country pricing data with U.S. producer pricing data, prices for product imported from Mexico were higher than prices for U.S.-produced product in 14 instances. Prices for product imported from Turkey were higher than prices for U.S.-produced product in four instances. In comparing nonsubject country pricing data with subject country pricing data, prices for product imported from Mexico were higher than prices for product imported from China in 14 instances. Prices for product imported from Turkey were lower than prices for product imported from China in two instances and higher in two instances. A summary of price differentials is presented in table D-4.

Table D-1

AWC: Weighted-average f.o.b. prices and quantities of imported product 2, by quarters, January 2016-June 2019

Period	United States		Mexico	
	Price (per pound, gross weight)	Quantity (pounds, gross weight)	Price (per pound, gross weight)	Quantity (pounds, gross weight)
2016: Jan.-Mar.	***	***	***	***
Apr.-June	***	***	***	***
July-Sept.	***	***	***	***
Oct.-Dec.	***	***	***	***
2017: Jan.-Mar.	***	***	***	***
Apr.-June	***	***	***	***
July-Sept.	***	***	***	***
Oct.-Dec.	***	***	***	***
2018: Jan.-Mar.	***	***	***	***
Apr.-June	***	***	***	***
July-Sept.	***	***	***	***
Oct.-Dec.	***	***	***	***
2019: Jan.-Mar.	***	***	***	***
Apr.-June	***	***	***	***

Note: Product 2: “Sweetbriar” underground distribution cables containing two 600 volt conductors made of Aluminum Alloy 1350 Series, plus a neutral/ground wire, with American Wire Gauge (AWG) sizes of 4/0, 4/0, and 2/0, excluding Sureseal and Powerglide.

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

Table D-2

AWC: Weighted-average f.o.b. prices and quantities of imported product 3, by quarters, January 2016-June 2019

Period	United States		Turkey	
	Price (per pound, gross weight)	Quantity (pounds, gross weight)	Price (per pound, gross weight)	Quantity (pounds, gross weight)
2016: Jan.-Mar.	***	***	***	***
Apr.-June	***	***	***	***
July-Sept.	***	***	***	***
Oct.-Dec.	***	***	***	***
2017: Jan.-Mar.	***	***	***	***
Apr.-June	***	***	***	***
July-Sept.	***	***	***	***
Oct.-Dec.	***	***	***	***
2018: Jan.-Mar.	***	***	***	***
Apr.-June	***	***	***	***
July-Sept.	***	***	***	***
Oct.-Dec.	***	***	***	***
2019: Jan.-Mar.	***	***	***	***
Apr.-June	***	***	***	***

Note: Product 3: Type XHHW wires rated at 600 volts, with the conductor made of Aluminum Alloy 8000 Series, with a size of 500 kcmil, excluding Sureseal and Powerglide.

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

Table D-3

AWC: Weighted-average f.o.b. prices and quantities of imported product 6, by quarters, January 2016-June 2019

Period	United States		Turkey	
	Price (per pound, gross weight)	Quantity (pounds, gross weight)	Price (per pound, gross weight)	Quantity (pounds, gross weight)
2016: Jan.-Mar.	***	***	***	***
Apr.-June	***	***	***	***
July-Sept.	***	***	***	***
Oct.-Dec.	***	***	***	***
2017: Jan.-Mar.	***	***	***	***
Apr.-June	***	***	***	***
July-Sept.	***	***	***	***
Oct.-Dec.	***	***	***	***
2018: Jan.-Mar.	***	***	***	***
Apr.-June	***	***	***	***
July-Sept.	***	***	***	***
Oct.-Dec.	***	***	***	***
2019: Jan.-Mar.	***	***	***	***
Apr.-June	***	***	***	***

Note: Product 6: Type XHHW wires rated at 600 volts, with the conductor made of Aluminum Alloy 8000 Series, with a size of 250 kcmil, and excluding Sureseal and Powerglide.

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

Figure D-1

AWC: Weighted-average f.o.b. prices and quantities of domestic and imported product 2, by quarters, January 2016-June 2019

* * * * * * *

Product 2: “Sweetbriar” underground distribution cables containing two 600 volt conductors made of Aluminum Alloy 1350 Series, plus a neutral/ground wire, with American Wire Gauge (AWG) sizes of 4/0, 4/0, and 2/0, excluding Sureseal and Powerglide.

Source: Compiled from data submitted in response to Commission questionnaires

Figure D-2

AWC: Weighted-average f.o.b. prices and quantities of domestic and imported product 3, by quarters, January 2016-June 2019

* * * * * * *

Product 3: Type XHHW wires rated at 600 volts, with the conductor made of Aluminum Alloy 8000 Series, with a size of 500 kcmil, excluding Sureseal and Powerglide.

Source: Compiled from data submitted in response to Commission questionnaires

Figure D-3

AWC: Weighted-average f.o.b. prices and quantities of domestic and imported product 6, by quarters, January 2016-June 2019

* * * * * * *

Product 6: Type XHHW wires rated at 600 volts, with the conductor made of Aluminum Alloy 8000 Series, with a size of 250 kcmil, and excluding Sureseal and Powerglide.

Source: Compiled from data submitted in response to Commission questionnaires

Table D-4

AWC: Summary of underselling/(overselling), by country, January 2016-June 2019

Comparison	Total number of comparisons	Nonsubject lower than the comparison source		Nonsubject higher than the comparison source	
		Number of quarters	Quantity (pounds, gross weight)	Number of quarters	Quantity (pounds, gross weight
Nonsubject vs United States:					
Mexico vs. United States	14	---	***	14	***
Turkey vs. United States	4	---	***	4	***
Nonsubject vs subject countries:					
Mexico vs. China	14	---	***	14	***
Turkey vs. China	4	2	***	2	***

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

APPENDIX E

SECTION 232 AND SECTION 301 PROCEEDINGS

Table E-1
Section 232 import national-security events, 2018-19

Effective date	Affected U.S. trade partner(s)
April 26, 2017	Commerce announced the institution of an investigation, by its U.S. Bureau of Industry and Security ("BIS") into the potential impact of imported aluminum products on national security. (82 FR 21509, May 9, 2017)
January 19, 2018	The Secretary of Commerce submitted the BIS Section 232 aluminum imports report to the President. (83 FR 11619, March 15, 2018)
March 23, 2018	The President announced the imposition of 10 percent ad valorem national-security duties on U.S. aluminum imports. Initially exempted— Canada and Mexico. (83 FR 11619, March 15, 2018)
March 23 through May 1, 2018	**Adjustment:** Exempted— Argentina, Australia, Brazil, Canada, Mexico, South Korea, and the European Union ("EU") member states. (83 FR 13355, March 28, 2018)
May 1 through June 1, 2018	**Adjustment:** Exempted— Argentina, Australia, Brazil. Exemptions continued to June 1—Canada, Mexico, and EU member states. Exemption expired—South Korea. (83 FR 20677, May 7, 2018 and 83 FR 25849, June 5, 2018)
June 1, 2018	**Adjustment:** Exempted—Argentina (annual quota limit), Australia. Exemptions expired—Brazil, Canada, Mexico, and EU member states. (83 FR 25849, June 5, 2018)
August 29, 2018	**Exclusion Process:** Presidential Proclamation 9776 grants the Secretary of Commerce the authority to exclude aluminum articles for which there is a lack of domestic production capacity of comparable production, or to exclude aluminum articles from such restrictions for specific national security-based considerations. (83 FR 40419, September 4, 2018)
May 20, 2019	**Adjustment:** Exemptions reinstated— Canada and Mexico. (84 FR 23983, May 23, 2019)

Source: Cited *Federal Register* notices.

Table E-2
Office of the United States Trade Representative ("USTR"), Section 301 tariff actions, 2018-19

Product list	Effective date	Tariff action
Tranche 1	July 6, 2018	**Enacted:** Additional 25 percent ad valorem duties on approximately $34 billion of imports classifiable under 818 HTS tariff subheadings (Annex A to 83 FR 28710). (83 FR 28710, June 20, 2018)
Tranche 2	August 23, 2018	**Enacted:** Additional 25 percent ad valorem duties on approximately $16 billion of imports classifiable under 279 HTS tariff subheadings (Annex A to 83 FR 40823). (83 FR 40823, August 16, 2018)
Tranche 3	September 24, 2018	**Enacted:** Additional 10 percent ad valorem duties on approximately $200 billion of imports classifiable under 5,745 HTS tariff subheadings and partial subheadings (Annex A to 83 FR 47974), which are scheduled to increase to 25 percent on January 1, 2019 (Annex B to 83 FR 47974). (83 FR 47974, September 21, 2018)
Tranche 3	October 1, 2018	**Amendment:** Fourteen HTS tariff subheadings in chapter 44 (under Annex A to 83 FR 47974, September 21, 2018) were removed and replaced by 38 corresponding new HTS subheadings to conform to the International Convention on the Harmonized Commodity Description and Coding System. (83 FR 49153, September 28, 2018)
Tranche 3	March 2, 2019	**Postponed:** Duty increases from 10 percent to 25 percent were rescheduled. (83 FR 65198, December 19, 2018)
Tranche 3	n.d.	**Postponed:** Additional ad valorem duties to remain at 10 percent until further notice. (84 FR 7966, March 5, 2019)
Tranche 3	May 10, 2019	**Enacted:** Duty increases from 10 percent to 25 percent ad valorem were rescheduled. (84 FR 20459, May 9, 2019)
Tranche 3	Prior to June 1, 2019	**Enacted:** Delayed duty increases from 10 percent to 25 percent ad valorem enacted May 10, 2019 on certain products exported from China before May 10, 2019, that enter into the United States before June 1, 2019. (84 FR 21892, May 15, 2019)
Tranche 3	Prior to June 15, 2019	**Enacted:** The date was extended for the delayed duty increase from 10 percent to 25 percent ad valorem on certain products exported from China before May 10, 2019 that enter into the United States before June 15, 2019. (84 FR 26930, June 10, 2019)

Table continued on next page.

Table E-2--Continued
Office of the United States Trade Representative ("USTR"), Section 301 tariff actions, 2018-19

Product list	Effective date	Tariff action
Tranche 4, List 1	September 1, 2019	**Enacted:** Additional 10 percent ad valorem duties on imports classifiable under 3,229 full HTS tariff subheadings and 4 partial HTS subheadings (Annexes A and B to 84 FR 43304). Imports on products classifiable under HTS subheadings on lists 1 and 2 totaled approximately $300 billion. (84 FR 43304, August 20, 2019)
Tranche 4, List 2	December 15, 2019	**Enacted:** Additional 10 percent ad valorem duties on imports classifiable under 542 full HTS tariff subheadings and 8 partial HTS subheadings (Annexes C and D to 84 FR 43304). Imports on products classifiable under HTS subheadings on lists 1 and 2 totaled approximately $300 billion. (84 FR 43304, August 20, 2019)
Tranche 4, List 1	September 1, 2019	**Amendment:** Additional 10 percent ad valorem duties were increased to 15 percent ad valorem on products covered by Annex A (FR 43304). (84 FR 45821, August 30, 2019)
Tranche 4, List 2	December 15, 2019	**Amendment:** Additional 10 percent ad valorem duties were increased to 15 percent ad valorem on products covered by Annex C (FR 43304). (84 FR 43304, August 20, 2019)
Tranches 1, 2, 3	October 1, 2019	**Proposed:** Additional 25 percent ad valorem duties to be increased 30 percent ad valorem on products covered by Annex C – List 3, Part 1 (84 FR 46212). (84 FR 46212, September 3, 2019)
Tranches 1, 2, and 3	September 11, 2019	**Postponed:** Additional ad valorem duties to remain at 25 percent until October 15, 2019.
Tranches 1, 2, 3, and 4	October 11, 2019	**Postponed:** Additional ad valorem duties to remain at 25 percent until further notice.

Sources: Cited *Federal Register* notices; "Trump Agrees to 2-Week Delay in China Tariff Increase," Associated Press, September 11, 2019, https://www.apnews.com/402432900d664584906126818d0257c9; and Melissa Leon, "Trump Delays Tariff Increase on $250B in Chinese Goods for Two Weeks to Oct. 15," Fox News, September 11, 2019, https://www.foxnews.com/politics/trump-delays-tariff-increase-250-billion-in-chinese-goods-gesture-of-good-will; James Politi and Richard Henderson, "US Agrees Limited Trade Deal with China," *Financial Times,* October 11, 2019, https://www.ft.com/content/28cc18f0-ec61-11e9-a240-3b065ef5fc55; and David J. Lynch, "Trump Announces Partial Trade Deal with China, Lifting Hopes That Tensions Could Ease," *The Washington Post*, October 11, 2019, https://www.washingtonpost.com/business/2019/10/11/us-stocks-poised-big-bounce-expectations-grow-us-china-trade-deal/.

APPENDIX F

INFORMATION ON THE INDUSTRY IN CHINA FROM THE PRELIMINARY PHASE INVESTIGATIONS (*Excerpted from* USITC Publication 4843, November 2018)

THE INDUSTRY IN CHINA

The Commission issued foreign producers' or exporters' questionnaires to 32 firms believed to produce and/or export AWC from China.[3] Usable responses to the Commission's questionnaire were received from seven firms. These firms' exports to the United States accounted for approximately *** percent of U.S. imports of AWC from China in 2017, based on importer questionnaire data. According to estimates requested of the responding Chinese producers, the production of AWC in China reported in questionnaires accounted for approximately *** percent of overall production of AWC in China in 2017. Tables VII-1 and VII-2 present information on the AWC operations of the responding producers and exporters in China.

Table VII-1
AWC: Summary data for producers in China, 2017

Firm	Production (1,000 pounds)	Share of reported production (percent)	Exports to the United States (1,000 pounds)	Share of reported exports to the United States (percent)	Total shipments (1,000 pounds)	Share of firm's total shipments exported to the United States (percent)
Mingda	***	***	***	***	***	***
Qingdao	***	***	***	***	***	***
SCW Cable	***	***	***	***	***	***
Xingi Cable	***	***	***	***	***	***
Zhongzhou Cable	***	***	***	***	***	***
Total	69,251	100.0	57,591	100.0	***	***

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

Table VII-2
AWC: Summary data for resellers exporting to the United States in China, 2017

Firm	Resales exported to the United States (1,000 pounds)	Share of resales exported to the United States (percent)
AHCOF	***	***
Silin	***	***
Total	***	***

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

[3] These firms were identified through a review of information submitted in the petition and contained in *** records.

Changes in operations

As presented in table VII-3 producers in China reported several operational and organizational changes since January 1, 2015.

Table VII-3
AWC: Chinese producers' reported changes in operations, since January 1, 2015

* * * * * * *

Operations on AWC

Table VII-4 presents information on the AWC operations of the responding producers and exporters in China.

Table VII-4
AWC: Data on industry in China, 2015-17, January-June 2017, and January-June 2018, and projected 2018 and 2019

Item	Actual experience					Projections	
	Calendar year			January to June		Calendar year	
	2015	2016	2017	2017	2018	2018	2019
	Quantity (1,000 pounds)						
Capacity	71,456	74,173	83,741	39,309	41,587	82,307	94,689
Production	58,267	55,995	69,251	31,986	34,580	70,054	81,413
End-of-period inventories	1,307	1,503	1,533	1,834	1,891	***	***
Shipments:							
Home market shipments:							
Internal consumption/ transfers	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Total home market shipments	***	***	***	***	***	***	***
Export shipments to:							
United States	48,987	44,602	57,591	26,623	27,763	56,042	49,770
All other markets	5,959	6,000	8,356	3,654	5,766	13,048	14,983
Total exports	54,945	50,602	65,948	30,277	33,529	69,091	64,753
Total shipments	***	***	***	***	***	***	***
	Ratios and shares (percent)						
Capacity utilization	81.5	75.5	82.7	81.4	83.2	85.1	***
Inventories/production	2.2	2.7	2.2	2.9	2.7	***	***
Inventories/total shipments	***	***	***	***	***	***	***
Share of shipments:							
Home market shipments:							
Internal consumption/ transfers	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Total home market shipments	***	***	***	***	***	***	***
Export shipments to:							
United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***

Table continued on next page.

Table VII-4--Continued
AWC: Data on industry in China, 2015-17, January-June 2017, and January-June 2018, and projected 2018 and 2019

Item	Actual experience					Projections	
	Calendar year			January to June		Calendar year	
	2015	2016	2017	2017	2018	2018	2019
	Quantity (1,000 pounds)						
Resales exported to the United States	***	***	***	***	***	***	***
Total exports to the United States	***	***	***	***	***	***	***
	Ratios and shares (percent)						
Share of total exports to the United States.-- Exported by producers	***	***	***	***	***	***	***
Exported by resellers	***	***	***	***	***	***	***
Adjusted share of total shipments exported to the United States	***	***	***	***	***	***	***

Note.—*** reported capacity equal to production.

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

Alternative products

As shown in table VII-5, all five responding Chinese firms produced other products on the same equipment and machinery used to produce AWC. Alternative products consist primarily of copper cable, as well as bare wire and PV cable. The majority of overall capacity is dedicated to AWC production, and was 58.1 percent in 2017.

Table VII-5
AWC: Chinese producers' overall capacity and production on the same equipment as subject production, 2015-17, January-June 2017, and January-June 2018

Item	Calendar year			January to June	
	2015	2016	2017	2017	2018
	Quantity (1,000 pounds)				
Overall capacity	103,313	103,066	145,395	71,872	78,877
Production: AWC	58,267	55,995	69,251	31,986	34,580
Out-of-scope production	30,143	27,675	49,842	25,001	32,731
Total production on same machinery	88,410	83,670	119,093	56,987	67,312
	Ratios and shares (percent)				
Overall capacity utilization	85.6	81.2	81.9	79.3	85.3
Share of production: AWC	65.9	66.9	58.1	56.1	51.4
Out-of-scope production	34.1	33.1	41.9	43.9	48.6
Total production on same machinery	100.0	100.0	100.0	100.0	100.0

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