

Slip Op. 15-84

UNITED STATES COURT OF INTERNATIONAL TRADE

CHANGZHOU TRINA SOLAR
ENERGY CO., LTD., TRINA SOLAR
(U.S.) INC., WUXI SUNTECH POWER
CO., LTD., SUNTECH AMERICA, INC.,
SUNTECH ARIZONA, INC., YINGLI
GREEN ENERGY HOLDING COMPANY
LIMITED, and YINGLI GREEN
ENERGY AMERICAS, INC.,

Plaintiffs,

v.

UNITED STATES INTERNATIONAL
TRADE COMMISSION,

Defendant,

and

SOLARWORLD AMERICAS INC.,

Defendant-Intervenor.

Before: Richard K. Eaton, Judge

Court No. 13-00014

PUBLIC VERSION

OPINION

[United States International Trade Commission's Final Determination is sustained.]

Dated: August 7, 2015

Neil R. Ellis and *Rajib Pal*, Sidley Austin LLP, of Washington, DC, argued for plaintiffs. With them on the brief were *Richard Weiner*, *Brenda A. Jacobs*, *Lawrence R. Walders*, and *Raphaelle E. Monty*.

Mary Jane Alves, Attorney-Advisor, Office of General Counsel, United States International Trade Commission, of Washington, DC, argued for defendant. With her on the brief were *Dominic L. Bianchi*, General Counsel, and *Neal J. Reynolds*, Assistant General Counsel for Litigation.

Timothy C. Brightbill, Wiley Rein LLP, of Washington, DC, argued for defendant-intervenor.

EATON, Judge: Before the court is the motion for judgment on the agency record of plaintiffs Changzhou Trina Solar Energy Co., Ltd., Trina Solar (U.S.) Inc., Wuxi Suntech Power Co., Ltd., Suntech America, Inc., Suntech Arizona, Inc. (“Suntech Arizona”), Yingli Green Energy Holding Company Limited, and Yingli Green Energy Americas, Inc. (collectively, “plaintiffs”) made pursuant to USCIT Rule 56.2. *See* Mot. for J. on the Agency R. (ECF Dkt. No. 31). By their motion, plaintiffs contest the final affirmative material injury determination of the United States International Trade Commission (“ITC” or the “Commission”) in the antidumping and countervailing duty investigations concerning crystalline silicon photovoltaic (“CSPV”) cells and modules from China. *See* Crystalline Silicon Photovoltaic Cells and Modules From China (Final), USITC Pub. 4360, Inv. Nos. 701-TA-481 and 731-TA-1190 (Nov. 2012) (ECF Dkt. No. 20-1) (“Final Determination”); Crystalline Silicon Photovoltaic Cells and Modules From China, 77 Fed. Reg. 72,884 (ITC Dec. 6, 2012). Defendant, the ITC, opposes plaintiffs’ motion and asks that its Final Determination be sustained. *See* Def. International Trade Commission’s Opp’n to Pls.’ Mot. for J. on the Agency R. 1 (ECF Dkt. No. 35). Defendant-intervenor, SolarWorld Americas Inc. (“defendant-intervenor” or “SolarWorld”), a domestic manufacturer of solar cells and modules, joins in opposition to plaintiffs’ motion. *See* Def.-int. SolarWorld’s Resp. to Pls.’ Rule 56.2 Mot for J. on the Agency R. and Accompanying Mem. of P. & A. in Supp. 1–3 (ECF Dkt. No. 38). Jurisdiction lies pursuant to 28 U.S.C. § 1581(c) and 19 U.S.C. § 1516a(a)(2)(B)(i). For the reasons that follow, the ITC’s Final Determination is sustained.

BACKGROUND

In October 2011, defendant-intervenor SolarWorld filed antidumping and countervailing duty petitions with the United States Department of Commerce (“Commerce” or the “Department”) and the ITC covering imports of CSPV cells and modules from China.¹ Crystalline Silicon Photovoltaic Cells and Modules From China, 76 Fed. Reg. 66,748, 66,748–49 (ITC Oct. 27, 2011) (institution of antidumping and countervailing duty investigations and scheduling of preliminary phase investigations). The period of investigation was January 2009 through June 2012 (“POI”). In October 2012, following its investigations, the Department determined that imports from China were both being subsidized by the Chinese government and sold in the United States at less than fair value. Subsequently, in November 2012, following its own investigations, the ITC issued its Final Determination, whereby it determined that the CSPV industry in the United States was being materially injured by reason of imports of subject merchandise. Final Determination, 77 Fed. Reg. at 72,884.

During the preliminary investigations, the Chinese Chamber of Commerce for Import and Export of Machinery and Electronic Products (the “Chinese Chamber”), an association of Chinese producers and exporters, and related U.S. importers of subject merchandise that opposed the petition, urged the ITC to define the domestic like product more broadly than was ultimately

¹ “CSPV cells typically measure 5 by 5 inches or 6 by 6 inches, have an output of 3 to 4.5 watts, and . . . use either monocrystalline silicon or multicrystalline silicon to convert sunlight into electricity.” Final Determination at 6. These cells are strung together, sealed, laminated, and framed to produce CSPV modules, also known as solar panels. *See* Final Determination at 6–7. “CSPV modules are the main component of solar CSPV systems that use crystalline silicon to convert sunlight into electricity either for on-site use or for distribution through the electric grid.” Final Determination at 7. “CSPV modules may be used in on- and off-grid applications for residential, non-residential, and utility purposes in ground- or roof-mounted systems.” Final Determination at 7. CSPV products are manufactured “from refined polysilicon that is formed into ingots, sliced into wafers, converted into cells, and then assembled into modules.” Final Determination at 12.

the case in the Final Determination. *See* Views of the Commission (Preliminary) at 9, CD 136 at Doc. No. 466545 (Dec. 13, 2011), ECF Dkt. No. 67-1 (“Preliminary Determination”).

Specifically, the Chinese Chamber argued that the scope should include thin-film photovoltaic products (“thin-film products”) in the definition of the domestic like product. Preliminary Determination at 9. At the conclusion of its investigations, however, the Commission excluded thin-film products from the scope of the domestic like product. Final Determination at 9.

In its Final Determination, the ITC also found that plaintiff Suntech Arizona should be excluded from the domestic industry as a related party because its interests rested primarily with importing CSPV products rather than their domestic production. Final Determination at 19, 22. As a result, the Commission defined the domestic industry of subject merchandise to include “all U.S. producers of CSPV cells and modules, except for Suntech [Arizona].” Final Determination at 24.

Also, during the course of the investigations, plaintiffs claimed that the ITC should take into account certain unique aspects of the CSPV marketplace before making its injury determination. *See, e.g.*, Post-Hearing Br. of China Chamber of Commerce for Import and Export of Machinery and Electronic Products (Volume I of II) at 4–14, CD 419 at Doc. No. 493162 (Oct. 11, 2012), ECF Dkt. No. 67-3. As shall be seen, the Commission takes the position that it took into account market conditions, as required by law.

In the end, in the Final Determination, the Commission issued its affirmative material injury determination, finding that the domestic industry was “materially injured by reason of unfairly traded imports.” Final Determination at 25.

STANDARD OF REVIEW

“The court shall hold unlawful any determination, finding, or conclusion found . . . to be unsupported by substantial evidence on the record, or otherwise not in accordance with law.” 19 U.S.C. § 1516a(b)(1)(B)(i).

DISCUSSION

I. LEGAL FRAMEWORK

“Under the unfair trade laws, Commerce determines whether foreign imports into the United States are either being dumped or subsidized (or both). It is for the ITC to determine whether these dumped or subsidized imports are causing material injury to a domestic industry in the United States.” *Navneet Publ’ns (India) Ltd. v. United States*, 32 CIT 169, 171 (2008) (citing 19 U.S.C. §§ 1673(1), (2), 1671(a)(1), (2)).

Although Commerce determines the “class or kind of foreign merchandise [that] is being, or is likely to be, sold in the United States at less than its fair value” or has been subsidized, “the ITC is responsible for identifying the corresponding universe of items produced in the United States that are like[,] or in the absence of like, most similar in characteristics and uses with the items in the scope of the investigation.” *See* 19 U.S.C. § 1673(i); 19 U.S.C. § 1671(a); *Int’l Imaging Materials, Inc. v. U.S. Int’l Trade Comm’n*, 30 CIT 1181, 1183 (2006) (alteration in original) (citation omitted) (internal quotation marks omitted) (citing 19 U.S.C. § 1677(10)). Thus, the ITC begins a material injury investigation by “determin[ing] the scope of the ‘domestic industry’ by defining the ‘domestic like product’ under investigation.” *Cleo Inc. v. United States*, 30 CIT 1380, 1382–83 (2006) (citing 19 U.S.C. § 1677(4)(A)), *aff’d*, 501 F.3d 1291 (Fed. Cir. 2007); *see also Int’l Imaging*, 30 CIT at 1183.

Under certain conditions, the Commission's decision as to the companies that make up the domestic industry is guided by 19 U.S.C. § 1677(4)(B)(i). This subsection provides, in relevant part, "[i]f a producer of a domestic like product and an exporter or importer of the subject merchandise are related parties, or if a producer of the domestic like product is also an importer of the subject merchandise, the producer may, in appropriate circumstances, be excluded from the industry." 19 U.S.C. § 1677(4)(B)(i); *see also Allied Mineral Prods., Inc. v. United States*, 28 CIT 1861, 1863 (2004).

Following the Commission's determination as to what constitutes the domestic like product and its determination as to which companies qualify as members of the domestic industry, "it must next examine the volume of imports, their effect on prices for the domestic like product, and their impact on domestic producers of the domestic like product." *Int'l Imaging*, 30 CIT at 1183 (citation omitted) (internal quotation marks omitted) (citing 19 U.S.C. § 1677(7)(B)(i)(I)–(III)). As part of its analysis, "[t]he Commission may also consider 'such other economic factors as are relevant in the determination.'" *JMC Steel Grp. v. United States*, 38 CIT ___, ___, Slip Op. 14-120, at 8 (2014) (quoting *Hynix Semiconductor, Inc. v. United States*, 30 CIT 1208, 1210, 431 F. Supp. 2d 1302, 1306 (2006)); *see also* 19 U.S.C. § 1677(7)(B)(ii). Upon completion of this analysis, should the ITC make a final affirmative material injury determination, and Commerce make an affirmative determination with respect to countervailing duties or dumping, an order will result.

II. THE COMMISSION'S DOMESTIC LIKE PRODUCT ANALYSIS IS SUPPORTED BY SUBSTANTIAL EVIDENCE

As part of its investigations, the Commission sought to define the domestic like product in order to determine whether a domestic industry was materially injured as a result of subject

imports. Here, the Commission's domestic like product analysis balanced the six factors² typically used to determine whether a specific product should be included within the scope of the Commission's investigation. Upon completing this analysis, the Commission determined that thin-film products fell outside the scope of the domestic like product. Final Determination at 16. "The 'like product' determination is a factual issue that the Commission resolves by weighing six factors relating to the products in question." *Cleo Inc. v. United States*, 501 F.3d 1291, 1295 (Fed. Cir. 2007). Therefore, in order to establish the facts, the Commission relied, in part, on information obtained from a survey it conducted of domestic producers, importers, and purchasers of CSPV products regarding perceived similarities between the products based on each of the six factors.

Plaintiffs argue that the Commission's Final Determination, which excluded thin-film products from the scope of the domestic like product, was not supported by substantial evidence because thin-film products are sufficiently similar to the subject merchandise to be included within the scope for purposes of 19 U.S.C. § 1677(10). Mem. of P. & A. in Supp. of Mot. for J. on the Agency R. 7 (ECF Dkt. No. 31) ("Pls.' Br."). Plaintiffs claim that "the Commission erroneously focused on small technical distinctions that obscured the fundamental similarities between the two solar technologies." Pls.' Br. 7. Specifically, they point to evidence that indicates that CSPV and thin-film modules are made of glass, can be used in solar shingles, and compete with each other. *See* Pls.' Br. 38–39. They also note, in support of their argument, that

² As shall be seen, the ITC used its ordinary methodology, in which it weighed six factors as part of its evaluation of whether thin-film products should be included within the scope of the domestic like product: "(1) physical characteristics and uses; (2) common manufacturing facilities and production employees; (3) interchangeability; (4) customer perceptions; (5) channels of distribution; and, where appropriate, (6) price." *See Cleo Inc. v. United States*, 501 F.3d 1291, 1295 (Fed. Cir. 2007) (citations omitted); Final Determination at 9–16.

twelve of nineteen United States producers and thirty-four of forty-nine importers polled by the ITC reported that the two products share the same channels of distribution. Pls.' Br. 39.

Therefore, for plaintiffs, the ITC's analysis makes clear that it found similarities in each of the six factors that it is directed to use in making its "like product" determination, except for "manufacturing facilities." Pls.' Br. 7. As such, plaintiffs reason that, despite the Commission's finding that the products differed in several respects, the similarities between them rendered it impossible to find any clear dividing line between the two. Pls.' Br. 7.

The court finds plaintiffs' arguments unconvincing and thus holds that the ITC's determination to exclude thin-film products from the scope of the domestic like product is supported by substantial evidence. In doing so, the court has reviewed the methodology employed by the ITC and the record evidence it considered.

As noted, the ITC normally resolves its "like product" determination "by weighing six factors relating to the products in question: (1) physical characteristics and uses; (2) common manufacturing facilities and production employees; (3) interchangeability; (4) customer perceptions; (5) channels of distribution; and, where appropriate, (6) price." *Cleo*, 501 F.3d at 1295 (citations omitted). No single factor is dispositive and the Commission is permitted to consider other relevant factors. *Cleo*, 30 CIT at 1384 & n.5 (citing S. REP. NO. 96-249, at 90-91 (1979), reprinted in 1979 U.S.C.C.A.N. at 476-77). "When weighing those factors, the Commission disregards minor differences [between the products] and focuses on whether there are any clear dividing lines between the products being examined." *Cleo*, 501 F.3d at 1295 (citing *Nippon Steel Corp. v. United States*, 19 CIT 450, 455 (1995)).

A. Physical Characteristics, Uses, and Interchangeability

As an initial matter, the court notes that the “physical characteristics and uses” and “interchangeability” factors are particularly relevant to the ITC’s domestic like product determination, where, as here, these products’ primary use is to create electricity. The respective capacities of CSPV cells and modules and thin-film products to produce electricity are naturally significant for determining whether the products are sufficiently similar to one another for thin-film products to be included within the scope of the investigations.

In its Final Determination, the Commission found a variety of important differences between the two products’ physical characteristics, uses, and interchangeability, such as differences in physical length, thickness, and rigidity of CSPV and thin-film products. *See* Final Determination at 9–11, 14–15. While plaintiffs maintain that the differences are insignificant, these variations create substantially different capabilities of CSPV and thin-film products. Indeed, eleven of nineteen U.S. producers of CSPV and/or thin-film products and twenty-seven of forty-nine importers that responded to the ITC’s questionnaires stated that the two products were not interchangeable. Final Determination at 14. For example, the ITC found that thin-film products possess different balance of system³ requirements, lower conversion efficiency, and lower wattage output than CSPV products and thus that more thin-film modules than CSPV modules are needed in order to produce the same amount of electricity. *See* Final Determination at 10, 14.

³ The “balance of system” is used to refer to “[t]he other components of solar CSPV system installations,” which “are items such as the inverter and the racking on which the system is installed as well as the labor costs, permitting fees, and other expenses associated with installing a photovoltaic . . . system.” Final Determination at 7. In other words, the “balance of system” refers to the other materials that go into the installation of the merchandise. In addition to module costs, installers consider balance-of-system costs of the racking on which the systems are installed.

The Commission also found “significant differences in physical characteristics and capabilities between CSPV and thin-film products . . . related to differences in their underlying raw materials and production processes.” Final Determination at 9. It observed that on-grid CSPV modules typically “consist of a 34- to 62-pound framed glass laminate that measures 62 to 78 inches long, 32 to 39 inches wide, and 1.2 to 2 inches thick and that is comprised of 60 to 72 cells,” and “[o]ff-grid CSPV modules are often smaller.” Final Determination at 9–10. On the other hand, the ITC found that “[t]hin-film modules consist of a glass or flexible substrate such as stainless steel or plastic with a surface layer of amorphous silicon (‘a-Si’), cadmium telluride (‘CdTe’), and/or copper indium (gallium) (di)selenide (‘CIGS’) . . .” and are generally smaller in dimension, thinner, and tend to weigh less. Final Determination at 10. Thus, it concluded that “the variety of substrates used to make thin-film modules provides more flexibility and a broader range of possible sizes, including some that are considerably longer than on-grid CSPV modules.” Final Determination at 10. Overall, the ITC found that “thin-film products tend to have a considerably lower conversion rate, despite the fact that thin-film products are able to generate power in low-light conditions.” Final Determination at 10. Indeed these findings were consistent with the questionnaire responses received from U.S. producers and importers, which “pointed to thin-film products’ thinness and lighter weight, the fact that CSPV modules are silicon-based whereas thin-film products are chemical-based, . . . differences between the two products in terms of sizes, proportion, voltage, conversion efficiency, and quality,” and that “CSPV modules tend to be framed whereas thin-film modules tend to be frameless,” as important differences. Final Determination at 11.

As a result of these physical differences and varying capabilities, thin-film products require a greater surface area of exposure to generate the same amount of electricity as CSPV

modules. Final Determination at 14 (“Moreover, due to their lower conversion efficiencies and lower wattage output, thin-film products need more surface area to generate the same energy as CSPV modules, making thin-film products somewhat more attractive for projects in environments with high temperatures and significant amounts of sunlight.”). Hence, the ITC found that physical characteristics and capabilities make thin-film products naturally more attractive for projects where there are fewer space constraints, higher temperatures, and significant amounts of sunlight, whereas CSPV products are better-suited for larger, standalone projects. *See* Final Determination at 11, 14.

Thus, the Commission found that CSPV modules are more attractive for “projects in the eastern United States, where land is more expensive and less available.” Final Determination at 14–15. In addition, through the questionnaires, it was reported that CSPV products are more commonly used in residential and non-residential rooftops than thin-film products, and that thin-film products produce insufficient power for use in residential applications. *See* Final Determination at 14 n.82. Thus, it is hard to argue with the Commission’s conclusion that thin-film products “may be more suitable for utility as opposed to residential and smaller non-residential applications, except for those projects needing a lighter product for mounting on a lower-strength roof or a more flexible product.” Final Determination at 14. Therefore, although both products are used to make electricity, the ITC supported with substantial evidence its conclusions that, while there is some overlap, each is particularly suited for different applications.

Accordingly, the ITC reasonably determined, based on record evidence, that the two products do not share similar physical characteristics and end uses. Indeed, the Commission found that the products’ respective capacities to produce electricity were not comparable, and

thus that both products were not consistently interchangeable for one another, thereby favoring exclusion of thin-film products from the scope of the domestic like product.

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

The ITC also found that there was little or no overlap in the manufacturing facilities, production processes, or employees used to manufacture thin-film and CSPV products. Final Determination at 11. Out of nineteen domestic “producers of CSPV and/or thin film products, eighteen reported that the production process of thin film solar products differed from that of CSPV cells and modules.” Crystalline Silicon Photovoltaic Cells and Modules from China, Staff Report to the Commission on Inv. Nos. 701-TA-481 and 731-TA-1190 (Final) (Oct. 25, 2012) at I-36 (ECF Dkt. No. 20-2) (“Final Staff Report”). Additionally, “[o]f the forty-nine responding U.S. importers, thirty-seven reported that the production processes between the two product types differed substantially.”⁴ Final Staff Report at I-36.

The Commission further observed that

CSPV products are made from refined polysilicon that is formed into ingots, sliced into wafers, converted into cells, and then assembled into modules. The cells in CSPV modules use either mono- or multi-crystalline silicon; when sunlight hits the modules, it knocks loose electrons that flow into the cells’ thin metal “fingers” and conduct electricity to the busbars. The CSPV cells are soldered together in strings and arranged in a rectangular matrix, sealed with an EVA sheet, joined to a back sheet, laminated, framed, and then mounted to a junction box. In contrast, manufacturers generally make thin-film products by

⁴ Further, the ITC noted that only one questionnaire respondent, [[]], reported producing both CSPV and thin-film products, but even that respondent reported that “[[]].” Final Determination at 12.

applying a layer of photosensitive material such as a-Si, CdTe, and/or CIGS to glass or to a flexible substrate such as stainless steel or plastic.

Final Determination at 12.

Based on the questionnaire responses and the clear differences in how they are manufactured, it is evident that the ITC reasonably reached the conclusion that thin-film and CSPV products do not overlap in manufacturing facilities, production processes, or employees. It is worth noting that plaintiffs do not dispute this finding, which tends to support the conclusion that CSPV cells and modules and thin-film products are not like products.

C. Customer Perceptions

Consistent with its findings related to physical characteristics, uses, and interchangeability, the Commission also found that consumers and producers perceive CSPV and thin-film modules as different products. Eleven of nineteen U.S. producers of CSPV and/or thin-film products and twenty-three of forty-nine importers that responded to the Commission's questionnaires, "reported that their customers perceive the products to have different physical characteristics, flexibility, efficiency, power outage, space requirements, bankability, environmental concerns, climate suitability, performance characteristics, reliability, durability, and established nature." Final Determination at 15.

In addition, it was reported to the ITC that, although thin-film is less expensive per watt than CSPV modules, it does not produce enough power for residential applications, whereas CSPV modules are commonly used for residential purposes. *See* Final Staff Report at II-23. Also, although a number of purchasers reported that they considered both CSPV and thin-film products for the same project, "many reported that they considered either CSPV or thin-film products but not both." *See* Final Determination at 15. For example, twenty-three of fifty-two

responding purchasers reported evaluating only one of the two products for the same end use or project. *See* Final Staff Report at II-23. Thus, the ITC found that customers and producers perceive important and significant differences between CSPV and thin-film products, thereby supporting the Commission's exclusion of thin-film products from the scope of the domestic like product.

Plaintiffs maintain that the questionnaire responses indicate "that almost half of U.S. producers and a majority of importers did not agree that there were differences between the two technologies in these areas," and thus that this factor favored the inclusion of thin-film products as part of the scope of the domestic like product. *See* Pls.' Br. 39 n.10. At best, however, the questionnaire responses show that there is no clear consensus among consumers as to these products' interchangeability, and thus this evidence does not aid plaintiffs' case. Indeed, this disagreement among consumers and purchasers as to the substitutability of thin-film and CSPV products actually lends support to the ITC's determination that the products are not sufficiently similar to one another to be consistently directly competitive, thereby favoring exclusion of thin-film products from the scope of the domestic like product.

D. Channels of Distribution

Next, while hardly conclusive, the Commission found that CSPV products and thin-film products did not share the same channels of distribution during the POI because they were not sold into precisely the same markets. Specifically, "CSPV shipments to the residential segment in 2011 totaled 715 [megawatts] compared to 1,346 [megawatts] for non-residential shipments and 631 [megawatts] for utility shipments." Final Determination at 14 n.76. On the other hand, it found that shipments of thin-film products in 2011 to all three segments totaled 35 megawatts

to the residential sector, 50 megawatts to the non-residential sector, and 86 megawatts to the utility sector. *See* Final Determination 14. Thus, the Commission observed that CSPV products were shipped primarily to the non-residential segment toward the end of the POI (i.e., in 2011), whereas thin-film products were primarily sold to the utility segment during the same time period.

Further, questionnaire responses also indicated “that ‘CSPV modules are used more commonly in the space- and weight-constrained commercial and residential market segments than thin-film modules (thus requiring different distribution channels), while thin-film modules are used more commonly in the utility-scale market (and are thus dependent on the distribution channels serving that market).’”⁵ *See* Final Determination at 14 (quoting Final Staff Report at App. E). Based on these findings, the Commission determined that there was evidence demonstrating that, at least toward the end of the POI, both products were primarily used in different market segments and by different segments of consumers, and thus concluded that this would require the use of different channels of distribution for thin-film modules and CSPV modules. This finding is consistent with the ITC’s physical characteristics and interchangeability findings and its findings related to customer perceptions.

⁵ That CSPV modules are more commonly used in space- and weight-constrained commercial and residential market segments compared to thin-film modules, which are more commonly used in the utility-scale market segment, was reported to the ITC by [[]], in its questionnaire response. Final Determination at 14. Plaintiffs object to the ITC’s reliance on [[]] responses because, in 2010, [[]] identified CSPV producers among its main competitors. *See* Pls.’ Reply in Supp. of their Mot. for J. on the Agency R. 20–21 (ECF Dkt. No. 46). The ITC, however, did not rely solely on [[]] responses to its questionnaires to reach its conclusions. Rather, as is clear, the Commission relied on a number of sources on the record, among which included [[]] responses and the questionnaire data reported by other companies. Moreover, that [[]] competes with CSPV producers, on its own, is not grounds for the ITC to disregard its submission, nor can the court conclude that the Commission’s reliance on this submission, in part, renders its determination unsupported by substantial evidence.

Taking all of the foregoing evidence into account, the ITC was not unreasonable in finding that, because there was evidence tending to demonstrate that both products were sold by different actors into different market segments, the channels of distribution factor, too, modestly supported a finding that thin-film products be excluded from the domestic like product's scope.

E. Price

Last, the ITC found that prices charged for CSPV and thin-film products also demonstrated important differences between the two products. A majority of domestic producers and importers of CSPV and/or thin-film products (twelve of nineteen U.S. producers and thirty-five of forty-nine importers) reported that CSPV products are generally priced higher on a per-watt basis than thin-film products. *See* Final Determination at 15. Further, the Commission noted that, although the price of CSPV products declined during the POI due to a decrease in raw material costs (i.e., for polysilicon), the price differential per watt between CSPV and thin-film products narrowed, but was not eliminated entirely. Final Determination at 15.

Thus, the ITC reasonably concluded that the price differential, particularly the price per watt, between CSPV and thin-film products, supported the conclusion that the products did not directly compete with one another. That is, because thin-film products tended to be less expensive per watt, some other factor such as incomplete interchangeability accounted for purchasers choosing to buy CSPV products at all. Thus, this factor favors the exclusion of thin-film products from the scope of the domestic like product.

F. Conclusion

When the six factors are considered as a whole, the differences between CSPV and thin-film products are evident, outweighing any broad similarities that the products might otherwise share. As the ITC observed,

[t]he record demonstrates a number of differences between CSPV and thin-film products. Specifically, the two products are manufactured using different raw materials, manufacturing facilities, manufacturing processes, and production employees. Differences between the two products in terms of chemical composition, weight, size, conversion efficiency, output, inherent properties, and other factors limit their interchangeability after the design phase and in specific projects, and they also limit overlap in distribution channels, particularly for non-utility sales. A number of market participants reported viewing CSPV and thin-film products as sometimes competitive, but generally different products; they reported CSPV products to be generally higher-priced than thin-film products. On balance, we find that the differences between CSPV and thin-film products are more significant than their similarities in today's evolving marketplace and weigh in favor of a finding of a single domestic like product consisting of the CSPV products within the scope of the investigations.

Final Determination at 16. Thus, it is clear that the differences in physical characteristics and uses, interchangeability, manufacturing facilities, production processes, production employees, consumer and producer perceptions, channels of distribution, and price all supply the substantial evidence needed to support the ITC's determination to exclude thin-film products from the scope of the investigations. Accordingly, the ITC reasonably determined, based on record evidence, that the two products do not share similar physical characteristics and end uses. Importantly, the Commission found that the products' respective capacities to produce electricity were not comparable, and thus that both products were not consistently interchangeable for one another, thereby favoring exclusion of thin-film products from the scope of the domestic like product. Accordingly, the Commission's determination of the scope of the domestic like product, including its decision to exclude thin-film products from the scope of the domestic like product, is supported by substantial evidence and is sustained.

III. THE COMMISSION'S DOMESTIC INDUSTRY ANALYSIS IS SUPPORTED BY SUBSTANTIAL EVIDENCE

Where appropriate, in the course of its investigation, the ITC must determine whether to exclude certain companies from the domestic industry because they are related to an exporter or importer of subject merchandise, or because their interests lie primarily in importing merchandise rather than domestic merchandise production. This provision was enacted “so that domestic producers whose interests in the imports were strong enough to cause them to act against the domestic industry would be excluded from the ITC’s consideration and investigation into material injury or threat thereof.” *USEC, Inc. v. United States*, 25 CIT 49, 61, 132 F. Supp. 2d 1, 12 (2001) (citing *Empire Plow Co. Inc. v. United States*, 11 CIT 847, 852, 675 F. Supp. 1348, 1353 (1987)). Following the ITC’s preliminary investigations, the Commission preliminarily determined that it would not be appropriate to exclude Suntech Arizona⁶ or Motech Americas LLC (“Motech”)⁷ from the domestic industry. *See* Preliminary Determination at 24; 19 U.S.C. § 1677(4)(B).

In the final investigations, however, SolarWorld urged the Commission to exclude Suntech Arizona and Motech from the domestic industry because their interests did not lie primarily in domestic production. Final Determination at 19 (“In these final investigations, Petitioner argues that two U.S. producers, Suntech and Motech, import subject merchandise from their affiliates in China and asks the Commission to exclude both from the domestic industry as

⁶ Plaintiff Suntech Arizona is a U.S. producer that does not manufacture CSPV cells in the United States, but is an assembler of CSPV modules. Final Determination at 21.

⁷ Motech is a U.S. producer that does not manufacture CSPV cells in the United States, but is an assembler of CSPV modules. Final Determination at 22.

related parties based on the claim that these firms' interests do not principally lie in domestic production.”).

In its Final Determination, although the ITC found that both companies were related⁸ to Chinese producers and/or exporters of subject merchandise, the Commission found that appropriate circumstances existed to exclude Suntech Arizona from the domestic industry but not Motech. *See* Final Determination at 22, 23, 24. Although the Commission found that Motech, a domestic assembler of CSPV modules, was a related party “because it [was] wholly owned by the same firm that wholly own[ed] a subject producer/exporter in China,”⁹ it nonetheless concluded that Motech’s primary interest was in domestic production, observing, for instance, that, in January 2010, Motech acquired a Delaware CSPV module manufacturing facility, in which it made significant investments in the same year.¹⁰ Final Determination at 22, 23. The ITC further found that Motech should be included in the domestic industry based on the

⁸ Pursuant to 19 U.S.C. § 1677(4)(B)(ii), a producer and an exporter or importer shall be considered to be related parties, if—

(I) the producer directly or indirectly controls the exporter or importer,
 (II) the exporter or importer directly or indirectly controls the producer,
 (III) a third party directly or indirectly controls the producer and the exporter or importer, or
 (IV) the producer and the exporter or importer directly or indirectly control a third party and there is reason to believe that the relationship causes the producer to act differently than a nonrelated producer.

19 U.S.C. § 1677(4)(B)(ii).

⁹ “Motech reported sourcing the cells used in its U.S. CSPV module operations from [[]].” Final Determination at 23.

¹⁰ Suntech invested [[]] in the U.S. facility in 2010. Final Determination at 22 n.122.

company's ratio of imports to domestic production,¹¹ because it had invested in research and development in its U.S. facility,¹² and based on its performance relative to the industry average during the POI.¹³ *See* Final Determination at 23. The ITC thus determined that, based on Motech's financial performance during the POI (i.e., whether the company benefitted from its importing activities), its capital expenditures, and research and development expenses, that it was not "appropriate to exclude Motech from the domestic industry as a related party." *See* Final Determination at 24.

As to Suntech Arizona, also a U.S. assembler of CSPV modules, however, the ITC reached a different conclusion and determined to exclude the company from the domestic industry. In doing so, the ITC found that the company was "a related party both by virtue of its imports of subject merchandise and because its corporate grandparent also wholly own[ed] four subsidiaries in China that produce[d]/export[ed] subject merchandise to the United States." Final Determination at 22. In addition to its close relationship with Chinese companies involved in the production and exportation of subject merchandise, the Commission excluded Suntech Arizona from the domestic industry because of the company's U.S. investment history and its financial

¹¹ The Commission found that, "[a]s a ratio to domestic production, [Motech's] total subject imports from China were [[]] percent in 2009, [[]] percent in 2010, [[]] percent in 2011, [[]] percent in interim 2011, and [[]] percent in interim 2012." Final Determination at 23.

¹² The Commission found that Motech incurred [[]].
Final Determination at 23.

¹³ The Commission found that Motech's operating performance was [[]], and [[]] the industry average [[]]. Final Determination at 23.

performance.¹⁴ *See* Final Determination at 22. To support these findings, the Commission pointed to several different factors, including Suntech Arizona’s reported level of financial investment in research and development at its U.S. facility, its importing activities related to subject merchandise, and its overall financial performance during the POI in relation to the domestic industry.¹⁵ *See* Final Determination at 21–22.

Plaintiffs argue that the Commission erred in its exclusion of Suntech Arizona from the domestic industry and that this error rendered the ITC’s Final Determination unsupported by substantial evidence. Plaintiffs contend that, except for one minor difference,¹⁶ Suntech Arizona’s activities were akin to those of other domestic producers, which the Commission did not exclude. *See* Pls.’ Br. 44. Plaintiffs further maintain that the Commission applied the factors of its analysis inconsistently between Suntech Arizona and Motech, resulting in Motech’s inclusion in, and Suntech Arizona’s exclusion from, the domestic industry. *See* Pls.’ Br. 44–45.

¹⁴ That is, the ITC concluded that Suntech Arizona [[
]]. *See* Final Determination 22.

¹⁵ In addition, the Commission considered Suntech Arizona’s [[
]]. *See* Final Determination at 21.
The Commission found that Suntech Arizona [[
]] in the United States during the POI, was importing the cells used in its CSPV modules from [[
]] imported a volume of subject imports that were [[
]] and had [[
]]. *See* Final Determination at 21, 22. In addition, the Commission found that Suntech Arizona’s financial performance, [[
]]. Final Determination at 22.

¹⁶ Plaintiffs insist that the only difference between Suntech Arizona and other companies, such as Motech, which the Commission determined not to exclude from the domestic industry, was that Suntech Arizona [[
]]. *See* Pls.’ Br. 44.

The court holds that the ITC's determination as to the composition of the domestic industry, including its decision to exclude Suntech Arizona from the domestic industry, is supported by substantial evidence.

“[A]lthough little legislative history behind the related parties provision exists, the provision's purpose is to exclude from the industry headcount domestic producers substantially benefitting from their relationships with foreign exporters.” *USEC*, 25 CIT at 61, 132 F. Supp. 2d at 12. The statute defines “[t]he term ‘industry’ [to] mean[] 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.” 19 U.S.C. § 1677(4)(A). According to the statute, “[i]f a producer of a domestic like product and an exporter or importer of the subject merchandise are related parties, or if a producer of the domestic like product is also an importer of the subject merchandise, the producer may, in appropriate circumstances, be excluded from the industry.” *Id.* § 1677(4)(B)(i).

The Commission will find that a producer and an exporter or importer are related parties if

- (I) the producer directly or indirectly controls the exporter or importer,
- (II) the exporter or importer directly or indirectly controls the producer,
- (III) a third party directly or indirectly controls the producer and the exporter or importer, or
- (IV) the producer and the exporter or importer directly or indirectly control a third party and there is reason to believe that the relationship causes the producer to act differently than a nonrelated producer.

Id. § 1677(4)(B)(ii). Further, the Commission will find that a party “directly or indirectly control[s] another party if the party is legally or operationally in a position to exercise restraint or direction over the other party.” *Id.* § 1677(4)(B).

In addition, “19 U.S.C. § 1677(4)(B) permits the Commission to exclude domestic producers who import subject merchandise from the definition of domestic industry, if it determines that appropriate circumstances exist for exclusion.” *Allied Mineral*, 28 CIT at 1864. This Court has found that “[t]he most significant factor . . . in making the ‘appropriate circumstances’ determination is whether the domestic producer accrued a substantial benefit from its importation of the subject merchandise.” *Id.* (citing *Empire Plow*, 11 CIT at 853, 675 F. Supp. at 1353). This Court has also repeatedly upheld the Commission’s use of the particular factors as part of its determination as to whether to exclude producers who have accrued a substantial interest in the subject merchandise:

(1) the percentage of domestic production attributable to the importing producer; (2) the reason the U.S. producer has decided to import the product subject to investigation (whether to benefit from unfair trade practice or to enable them to continue production and compete in the domestic market); (3) whether inclusion or exclusion of the importing producer will skew the data for the rest of the industry; (4) the ratio of import shipments to U.S. production for the importing producer; and (5) whether the primary interest of the importing producer lies in domestic production or importation. The Commission is not required to make findings as to each specific factor.

Id. at 1865 (citation omitted) (citing *Sandvik AB v. United States*, 13 CIT 738, 748, 721 F. Supp. 1322, 1332 (1989), *aff’d*, 904 F.2d 46 (Fed. Cir. 1990); *Torrington Co. v. United States*, 16 CIT 220, 224, 790 F. Supp. 1161, 1168 (1992)).

Here, the Commission considered the benefit the company received as a result of its relationship with exporters from China and reasonably determined that Suntech Arizona was enjoying substantial benefits from its importation of solar cells from China. *See* Final Determination at 22. To support its determination, the Commission relied on record evidence that indicated that Suntech Arizona’s interests rested primarily with the importation of CSPV products rather than with domestic production of the domestic like

product. For example, it evaluated Suntech Arizona's ratio of total subject imports from China to its domestic production (based on kilowatts) throughout the POI.¹⁷ *See* Final Determination at 21.

Although plaintiffs argue that the decrease in Suntech Arizona's ratio of subject imports to domestic production demonstrates that the company had developed a more substantial commitment to domestic production, even if true, this trend does not undermine the ITC's conclusion that, during the POI, based on the entire record before it, Suntech Arizona's interests did not lie primarily with the domestic industry. While the ratio of subject imports to domestic production decreased during the latter part of the POI, the Commission found that Suntech Arizona's importing activity remained substantial relative to its domestic production. Final Determination at 22.

In addition to its high ratio of imports to domestic production, the ITC also looked to Suntech Arizona's robust operating performance when compared to the industry average during the POI, particularly in the latter part of the POI.¹⁸ *See* Final Determination at 21, 22. Also, the Commission examined the company's level of investment in research and development in its

¹⁷ The ITC found that Suntech Arizona imported [[]]. Specifically, the Commission found that the ratio of Suntech Arizona's total subject imports to its domestic production was [[]] percent in 2009, [[]] percent in 2010, [[]] percent in 2011, [[]] percent in the first six months of 2011, and [[]] percent in the first six months of 2012. Final Determination at 21.

¹⁸ The Commission found that Suntech Arizona's operating performance [[]] the industry average [[]]. Final Determination at 21.

U.S. facilities during the POI¹⁹ and reasonably concluded that these findings also supported its conclusion that Suntech Arizona's interests were primarily in importing rather than domestic production.²⁰ Final Determination at 21–22. Having reviewed these findings, the court finds that the ITC reasonably determined, based on substantial record evidence, that Suntech Arizona, although a “domestic producer[,] accrued a substantial benefit from its importation of the subject merchandise.” *See Allied Mineral*, 28 CIT at 1864 (citing *Empire Plow*, 11 CIT at 853, 675 F. Supp. at 1353).

Next, the court finds plaintiffs' argument that the factors were not applied in a consistent manner to both Suntech Arizona and Motech unconvincing. This is because the facts that the Commission found were dramatically different for Suntech Arizona and Motech. For instance, the ITC observed differences²¹ between the two companies during the POI, including (1) Motech's ratio of subject imports to domestic production,²² (2) Motech's financial performance

¹⁹ The ITC found that Suntech Arizona invested [[]], but it did [[]] during the POI. Final Determination at 21.

²⁰ Although plaintiffs maintain that Suntech Arizona's U.S. capital expenditures of [[]] demonstrate that the company “was evolving from an importer to a committed domestic producer,” the [[]] suggests that Suntech Arizona's interests were primarily with importing rather than with domestic production. *See* Pls.' Br. 43.

²¹ Suntech Arizona's [[]] in these investigations is also relevant record evidence on which the Commission reasonably relied, as plaintiffs have pointed to no precedent or law, and the court can find none, that would prohibit the ITC from considering a company's actions where it [[]]. Indeed, unlike Suntech Arizona, Motech [[]]. *See* Final Determination at 23.

²² The ITC found that, “[a]s a ratio to domestic production, [Motech's] total subject imports from China were [[]] percent in 2009, [[]] percent in 2010, [[]] percent in (footnote continued)

relative to the industry average,²³ and (3) Motech's levels of investment in research and development in its domestic facilities.²⁴ Each of these factors distinguished Motech from Suntech Arizona, supporting the ITC's finding that these two companies' experiences during the POI were not comparable to one another and thus that Motech and Suntech Arizona did not require similar treatment. Based on the foregoing, the Commission was reasonable in its decision to include Motech in the domestic industry and to exclude Suntech Arizona. Accordingly, the Commission's domestic industry analysis is sustained.

IV. THE COMMISSION'S AFFIRMATIVE MATERIAL INJURY DETERMINATION IS SUPPORTED BY SUBSTANTIAL EVIDENCE AND IN ACCORDANCE WITH LAW

At the conclusion of its investigations, the ITC sought to ascertain whether the domestic industry, which manufactured the domestic like product of the subject merchandise, was materially injured or threatened with material injury by reason of the subject imports. *See* 19 U.S.C. §§ 1673, 1671(a). The Commission considered the volume, price effects, impact of subject imports, and other external market factors, and determined that the domestic industry was

2011, [[]] percent in interim 2011, and [[]] percent in interim 2012." Final Determination at 23.

²³ The Commission observed that "Motech's ratio of operating income to net sales was [[]]". Final Determination at 23. In addition, the ITC found that Motech's "operating performance was [[]] the industry average [[]]". Final Determination at 23.

²⁴ The Commission found that, "[i]n terms of capital expenditures, Motech invested [[]]". Final Determination at 23.

being materially injured by reason of the entry of subject imports into the United States. *See* Final Determination at 3.

A. “By Reason of” and “But for” Causation Standard

Plaintiffs challenge the ITC’s material injury determination, claiming that it failed to consider the special circumstances of the solar panel industry and marketplace as part of its determination. *See* Pls.’ Br. 12. Specifically, plaintiffs insist that the Commission should have undertaken a “but for” causation inquiry and that the failure to do so rendered its determination contrary to law. *See* Pls.’ Br. 12 (“Plaintiffs submit that the Commission’s determination that the U.S. CSPV industry ‘is materially injured by reason of subject imports’ was unsupported by substantial evidence, and therefore not in accordance with law. . . . That is, the Commission failed to undertake any analysis to consider whether, given these conditions of competition, subject imports could truly be the ‘but for’ cause of the injury suffered by the domestic industry.” (citation omitted) (quoting Final Determination at 58)).

In making their argument, plaintiffs assert that three considerations demonstrate that the conditions of the domestic industry would have been the same irrespective of whether their products were available in the U.S. market because (1) the price and demand for CSPV products are tied to the need to achieve grid parity, (2) the government incentives that stimulated demand for CSPV products in the United States were being phased out during the POI, and (3) the fastest growth in demand during the POI was in the utility sector where grid parity and government incentives had the greatest effect. *See* Pls.’ Br. 4–5. Thus, for plaintiffs, had the ITC undertaken a proper “but for” causation analysis, it would have determined that the domestic industry had suffered injury, not as a result of the sale of subject imports at low dumped prices (i.e., “but for”

the imports of subject merchandise), but rather, as a result of other factors extant in the marketplace. Therefore, for plaintiffs, the ITC's chosen methodology was unreasonable and its conclusions unsupported by substantial evidence.

After considering plaintiffs' arguments, the court finds that it cannot agree with parts of plaintiffs' characterization of the ITC's legal obligation when making its material injury determination.

For an antidumping duty order to issue, in addition to Commerce's finding of sales at less than fair value, the Commission must make an affirmative injury determination, which "requires both (1) present material injury^[25] and (2) a finding that the material injury is 'by reason of' the subject imports." *Gerald Metals, Inc. v. United States*, 132 F.3d 716, 719 (Fed. Cir. 1997) (citations omitted). "Material injury is defined as 'harm which is not inconsequential, immaterial, or unimportant.'" *Nucor Corp. v. United States*, 414 F.3d 1331, 1335 (Fed. Cir. 2005) (quoting 19 U.S.C. § 1677(7)(A)). The ITC, when making a materiality determination, is directed by 19 U.S.C. § 1677(7)(B)(i) to weigh factors identified by the statute, including "the volume of imports, the price effects of those imports, and the impact of those imports on the affected domestic industry." *Caribbean Ispat Ltd. v. United States*, 450 F.3d 1336, 1337 (Fed. Cir. 2006) (citing 19 U.S.C. § 1677(7)(B)(i)). When making its "by reason of" determination, the ITC is also directed to "evaluate all relevant economic factors . . . within the context of the business cycle and conditions of competition that are distinctive to the affected industry." 19 U.S.C. § 1677(7)(C)(iii). "In addition to those factors, the Commission may consider 'such other

²⁵ Although not relevant here, an antidumping duty order may also issue should the Commission find that "an industry in the United States is threatened with material injury by reason of imports . . . of the subject merchandise." See 19 U.S.C. § 1677(7)(F)(i).

economic factors as are relevant to the determination.” *Caribbean Ispat*, 450 F.3d at 1337–38 (quoting 19 U.S.C. § 1677(7)(B)(ii)).

The Federal Circuit has explained that, at least in cases involving commodity products, i.e., merchandise that is “interchangeable regardless of its source,” “in which non-[less-than-fair-value] imported goods are present in the market, the Commission must give consideration to the issue of ‘but for’ causation by considering whether the domestic industry would have been better off if the dumped goods had been absent from the market.” *Bratsk Aluminium Smelter v. United States*, 444 F.3d 1369, 1371 (Fed. Cir. 2006); *Mittal Steel Point Lisas Ltd. v. United States*, 542 F.3d 867, 876 (Fed. Cir. 2008). Thus, in such instances, “where commodity products are at issue and fairly traded, price competitive, non-subject imports are in the market,” “inquiry into ‘but for’ causation [is] a proper part of the Commission’s responsibility to determine whether the injury to the domestic industry is ‘by reason of’ the subject imports.” *Mittal Steel*, 542 F.3d at 877, 878 (quoting *Bratsk*, 444 F.3d at 1373) (internal quotation marks omitted).

In establishing this rule, the Federal Circuit was concerned that, when reviewing the conditions of a domestic industry for a commodity product, an overwhelming presence of price competitive and interchangeable non-subject imports in the market during the period of investigation might escape the ITC’s proper consideration. That is, in such cases, the ITC might incorrectly attribute the domestic industry’s injury to the subject imports when the industry’s damaged condition was actually “by reason of” substantially similar non-subject imports. Hence, when presented with price competitive and highly substitutable non-subject imports of a commodity product, in order to satisfy its statutory duty, *Mittal Steel* requires the ITC “to consider the ‘but for’ causation analysis . . . to determine whether the subject imports were a substantial factor in the injury to the domestic industry, as opposed to a merely ‘incidental,

tangential, or trivial’ factor.” *Id.* at 879 (quoting *Nippon Steel Corp. v. Int’l Trade Comm’n*, 345 F.3d 1379, 1381 (Fed. Cir. 2003)).

Here, plaintiffs urge the court to extend the application of the “but for” causation analysis to the facts of this case. Plaintiffs attempt to liken their case to that of *Mittal Steel* and its predecessors, arguing that, although their subject merchandise is not a commodity product, the marketplace in which it was sold presents analogous “unique circumstances” as those found by the Federal Circuit to be present in each of those cases. *See* Pls.’ Br. 22 (“[T]he present case involves subject imports of *technology used to produce a commodity product*—i.e., electricity—which the Commission recognized competes with non-subject technologies used to produce the same commodity product in the U.S. market.” (emphasis added)).

Although the Federal Circuit has limited the use of the “but for” test to injury determinations involving (1) commodity products and (2) where there were non-subject, price competitive imports in the domestic market during the period of investigation, this Court has found that, where, as here, the case does not involve a commodity product, the Commission, nevertheless, is not relieved of its responsibility to “consider potential alternate causes of harm in its . . . analysis.” *See LG Electronics, Inc. v. U.S. Int’l Trade Comm’n*, 38 CIT ___, ___, 26 F. Supp. 3d 1338, 1351 (2014) (citing *Mittal Steel*, 542 F.3d at 878).

Moreover, although the Federal Circuit has used the phrase “but for” in several cases, it is apparent that the statutory “by reason of” standard, which applies to every injury determination, has not been materially altered. *See NSK Corp. v. United States*, 33 CIT 1185, 1189, 637 F. Supp. 2d 1311, 1317 (2009) (“[T]he Federal Circuit’s opinion in *Mittal* did not constitute an intervening change in the controlling law.” (citing *NSK Corp. v. United States*, 32 CIT 1497, 1508–16, 593 F. Supp. 2d 1355, 1367–72 (2008))); *see also Mittal Steel*, 542 F.3d at 879 n.2

(“Commissioners Pearson and Okun have noted that interpreting *Bratsk*^[26] in that manner, i.e., as ‘a reminder that the Commission, before it makes an affirmative determination, must satisfy itself that it has not attributed material injury to factors other than subject imports,’ is consistent with the Commission’s obligation to ‘analyze the effects of the unfairly traded imports and other relevant factors in a way that enables the Commission to conclude that it has not attributed the effects of other factors to the subject imports.’” (citation omitted)).

Thus, the words “but for” merely point out that, when making a material injury determination, the Commission must take into account all record evidence that has a bearing on the factors considered in reaching its determination. Therefore, if there is non-subject merchandise present in the market that competes with subject imports, or record evidence that might supply some other reason for the cause of injury to the domestic industry, the ITC must take it into account. *See Mittal Steel*, 542 F.3d at 878; *Nucor Corp. v. United States*, 32 CIT 1380, 1449, 594 F. Supp. 2d 1320, 1382, 1383 (2008) (“Nevertheless, this holding should not be read to provide the Commission license to unilaterally disregard data related to non-subject imports during a sunset review, if it finds that such imports are a ‘relevant economic factor[]’ to its determination. . . . To be sure, it would be an abuse of discretion for the ITC to ignore such important factors if they were relevant.” (alteration in original) (footnote omitted) (citations

²⁶ In *Bratsk*, the Federal Circuit vacated and remanded the ITC’s material injury determination with respect to silicon metal imports from Russia, finding that the Commission had failed to “address whether the non-subject imports would have replaced subject imports during the period of investigation” and continued to cause injury to the domestic industry. *See Bratsk*, 444 F.3d at 1376. The *Bratsk Court* explained that, “under *Gerald Metals*, the Commission is required to make a specific causation determination and in that connection to directly address whether non-subject imports would have replaced the subject imports without any beneficial effect on domestic producers.” *Id.* at 1375. The Court further explained that “[t]he obligation under *Gerald Metals* is triggered whenever the antidumping investigation is centered on a commodity product, and price competitive non-subject imports are a significant factor in the market.” *Id.*

omitted) (quoting 19 U.S.C. § 1675a(a)(2), (4) (2000)), *aff'd*, 601 F.3d 1291 (Fed. Cir. 2010); *NSK Corp. v. United States*, 32 CIT 966, 973, 577 F. Supp. 2d 1322, 1332–33 (2008) (“Moreover, application of *Bratsk* to sunset review causation analysis would compel the ITC to address significant increases in market share by non-subject imports and thereby examine the effectiveness of the underlying antidumping order in relation to fundamental changes in the marketplace that might be more likely to cause injury to the domestic industry than unrestrained subject imports. The court views this analysis as a necessary step in establishing causation under [19 U.S.C.] § 1675a(a)(1). To hold otherwise would permit the ITC to ignore a significant factor affecting the domestic industry when conducting a sunset review.” (citation omitted)).

In this case, although it has chosen not to use the specific words “but for” in its Final Determination, the ITC has properly framed the legal basis upon which to determine whether the material injury sustained by the domestic industry is “by reason of” subject imports. *See* Final Determination at 58 (“Based on the foregoing trends, we find that there is a causal nexus between subject imports and the poor condition of the domestic industry and that the domestic industry is materially injured by reason of subject imports.”). Before the court, in addition to properly framing the legal basis of its determination, the ITC must support with substantial evidence any findings it makes about the conditions in the marketplace.

The court, in turn, must determine whether the Commission properly considered the impact of those factors present in the marketplace (i.e., grid parity, incentive programs, and utility sales) claimed by plaintiffs to have caused the injury to the domestic industry when reaching its determination that the material injury sustained by the domestic CSPV industry was “by reason of” subject imports. Here, it is apparent that the Commission properly took into account evidence demonstrating that the injury sustained by the domestic industry was “by

reason of” subject imports and not caused by other claimed marketplace factors present in the United States during the POI.

B. The Commission Properly Considered the Claimed Conditions of Competition

“When evaluating challenges to the ITC’s choice of methodology, the court will affirm the chosen methodology as long as it is reasonable.” *JMC Steel*, 38 CIT at ___, Slip Op. 14-120, at 13 (citations omitted). That is, “[w]hen presented with a challenge to the Commission’s methodology, the court examines ‘not what methodology [plaintiffs] would prefer, but . . . whether the methodology actually used by the Commission was reasonable.’” *Id.* (alteration in original) (citing *Shandong TTCA Biochemistry Co. v. United States*, 35 CIT ___, ___, 774 F. Supp. 2d 1317, 1329 (2011)). “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.” *Mittal Steel*, 542 F.3d at 873. Thus, “[i]f the methodology is valid, then the question simply resolves to whether analysis of the substantiality of the evidence of record supports the conclusion drawn.” *Swift-Train Co. v. United States*, 38 CIT ___, ___, 999 F. Supp. 2d 1334, 1345 (2014).

As noted, plaintiffs insist that, had the Commission properly considered the roles of grid parity, declining incentive programs, and increased growth in demand in the utilities sector during the POI, it would have found that the condition of the domestic industry would have been the same even if subject imports were not present in the U.S. market. *See* Pls.’ Br. 26 (“Taken together, this means that even if subject imports had not been present in the U.S. market, the picture of the domestic industry would have been the same as the one observed by the

Commission in its Views—i.e., domestic producers would have: (1) equally been unable to sell their products; (2) equally faced pressure to lower prices; (3) equally lost money throughout the POI; (4) equally experienced declines in many of its performance indicators; and (5) equally recognized asset write-offs and/or increased costs.”). Plaintiffs contend that the ITC did not evaluate material injury “within the context of the business cycle and conditions of competition that are distinctive to the affected industry” as required by 19 U.S.C. § 1677(7)(C)(iii), and thus that “the Commission’s evaluation of volume, price effects, impact, and causation, within the context of the relevant conditions of competition, is unsupported by substantial evidence.” *See* Pls.’ Br. 14–15; 19 U.S.C. § 1677(7)(C)(iii).

The court is unpersuaded by this argument and finds that the Commission adequately addressed the claimed conditions of competition that were present in the U.S. market in accordance with its obligations under the statute, and reasonably determined, based on substantial record evidence, that the material injury sustained by the domestic industry during the POI was “by reason of” subject imports. *See Mittal Steel*, 542 F.3d at 879.

As shall be seen, the Commission informed its analysis by evaluating a number of conditions of competition present in the U.S. CSPV market and the role that each played during the POI with respect to the injury sustained by the domestic CSPV industry: (1) the emergence of alternative energy technologies, such as the increased supply, and declining price, of natural gas; (2) the declining cost of polysilicon, a primary input used in the manufacture of CSPV products; (3) the availability of federal, state, and local government incentives to the CSPV domestic industry; (4) the supply and demand conditions for CSPV products in the United States, which were characterized by high demand and subject imports obtaining domestic market share at the expense of the domestic industry; (5) the growing demand for CSPV products in the utility

sector; (6) the decline in market share of non-subject imports (i.e., imports of CSPV products from countries other than China); and (7) the impetus toward grid parity (i.e., CSPV products' ability to generate electricity at a price matching the cost of power from the electric grid and thus compete for electricity sales with other energy sources). Having reviewed its analysis, the court finds that the ITC reasonably reached its conclusion with respect to injury and adequately took into account the "novel conditions of competition" with which plaintiffs claim it failed to "come to grips." *See* Pls.' Br. 12. Accordingly, its determination is sustained.

1. Alternative Energy Technologies and Polysilicon Prices

The first two conditions analyzed by the ITC were the impact of alternative energy technologies and the declining cost of polysilicon on the domestic CSPV industry. Although, importantly, plaintiffs do not challenge these aspects of the Final Determination, the ITC relied, in part, on its findings regarding the impact of alternative energy technologies and the decline in cost of polysilicon during the POI to reach its determination that the domestic industry was materially injured "by reason of" subject imports. Consequently, although the ITC's findings relating to these conditions of competition are not at issue in this case, they are nonetheless worthy of some examination in order to demonstrate that the ITC properly took into account record evidence bearing on the conditions in the marketplace during the POI.

With respect to energy technologies other than solar, the Commission observed that, "[d]uring the POI, increases in the use of 'fracking' technologies and shale drilling expanded the supply of natural gas in the United States." Final Determination at 32. It found that this increase in supply "caused natural gas prices to decline and stimulated demand for natural gas-fueled electricity for peak periods at the expense of other electricity sources such as CSPV products."

Final Determination at 32. In addition, the Commission found that “[c]ompetition with renewable-energy electricity-generators such as thin-film solar systems . . . affect[ed] demand for CSPV solar systems and their components.” Final Determination at 32. In other words, as to this latter consideration, the ITC found that electricity provided by CSPV products competed for sales in the United States with electricity generated from natural gas and renewable energy sources. Therefore, the ITC found that price competition between energy-producing technologies was present in the marketplace.

As to polysilicon, it is a key raw material input used in the manufacture of CSPV products, accounting for nearly one quarter of the production cost to manufacture a finished CSPV module, and thus, high prices for polysilicon can have adverse effects on the profit margins of manufacturers. *See* Final Determination at 42 n.247. Lower prices for polysilicon, on the other hand, would have a positive effect on the bottom line.

The ITC found that “[d]eclining polysilicon prices eroded the advantage thin-film products may have had over CSPV products in terms of price, but thin-film producers . . . continued to improve their efficiencies to stay competitive.” Final Determination at 32. The Commission stated that, “as technology improved, the price of [photovoltaic products²⁷] ha[d] trended downward since the 1990s, despite a period of increasing prices between 2003 and 2008.” Final Determination at 51. Further, it found that, since 2003, “when global supply of polysilicon was inadequate to meet demand by both the semiconductor and CSPV industries, polysilicon prices rose substantially. Spot prices of polysilicon rose from \$35/[kilogram] in 2003

²⁷ Photovoltaic products encompass all electricity-producing devices “that use[] the basic properties of semiconductor materials to transform solar energy into electrical power,” including those using CSPV and thin-film technologies. *See* Pre-Hearing Br. of China Chamber of Commerce for Import and Export of Machinery and Electronic Products (Volume I of I), Ex. 1 at 1, CD 396 at Doc. No. 491422 (Sept. 20, 2012), ECF Dkt. No. 67-2.

to a high of \$500/[kilogram] in 2008 (and contract prices rose from \$25/[kilogram] to \$85/[kilogram] in this period).” Final Determination at 51. The Commission also commented, though, that, “[b]y 2008, global supply [of polysilicon] exceeded global demand, and polysilicon spot and contract prices then fell substantially . . . in 2011 . . . and . . . 2012.” See Final Determination at 51. Thus, the ITC observed that polysilicon costs began to decline well before the POI and continued to do so. Moreover, the Commission explained that, although “the price of solar modules sold in the United States also declined dramatically during the POI, by 50 percent in 2011, this decline (and the declines in prices of the domestic like product observed in the pricing data) exceeded declines in the cost of the polysilicon raw materials used to produce CSPV products.”²⁸ Final Determination at 51. Hence, the Commission concluded that the declining cost of polysilicon and thus the declining cost to manufacture CSPV products, improved CSPV products’ ability to compete with other products that generate electricity, such as thin-film. Indeed, as shall be seen, this increased capability to compete for sales as a result of declining production costs improved CSPV products’ ability to compete for grid parity during the POI against other energy sources.

Accordingly, although it found that price competition from technologies that produced electric energy, such as electricity produced by natural gas, increased, CSPV products nonetheless were not priced out of the market due, in large part, to the declining cost of polysilicon, a key input used in the manufacture of CSPV products.

²⁸ Specifically, the ITC found that the cost of polysilicon raw materials used to produce CSPV products experienced declines of “up to [[]] percent between 2010 and 2011 based on published polysilicon pricing data or about [[]] percent based on reported domestic industry costs of polysilicon ingots and wafers.” Final Determination at 51–52.

2. Government Incentives

The ITC next examined the role of government incentives in the domestic CSPV industry during the POI. *See* Final Determination at 33 (“Changes in the availability and scope of Federal, state, and local government incentives . . . played an important role in demand for CSPV products during the POI.”). Plaintiffs maintain that, although the ITC analyzed the role that government incentives played in stimulating demand for CSPV products in the United States, the Commission failed to appreciate that these incentives declined during the POI and thus that the domestic industry lost the ability to compete with subject imports and would not have obtained any additional sales even if there were no subject imports present in the U.S. market. *See* Pls.’ Br. 4–5.

The Commission began its analysis of this market condition by explaining that, “[i]n order to help make solar a viable alternative energy source, Federal, state, and local governments created programs intended to reduce the cost of solar-generated electricity (and electricity generated by other renewable energy sources)” with the purpose of “assisting solar power developers to achieve sufficient economies of scale to become competitive with conventional energy sources.” *See* Final Determination at 33. In addition, as plaintiffs point out, the ITC acknowledged that “[t]hese programs and their benefits were designed to decline over time, as the cost to generate solar-powered electricity declined.” Final Determination at 33. Contrary to plaintiffs’ assertions, however, the Commission found that, “[d]uring the POI, Federal, state, and local incentives successfully stimulated demand for CSPV products in the United States, with industry publications reporting that Federal incentives caused an ‘application boom’ and an ‘installation boom’ of solar projects.” Final Determination at 33. Further, the ITC found that the questionnaire respondents confirmed this finding, as they “generally report[ed] that Federal,

state, and local incentives increased demand for CSPV products since 2009.”²⁹ Final Determination at 33. Put another way, the Commission found that these incentives increased the demand for CSPV products during the POI.

More specifically, with respect to federal incentives, the Commission found that, “during the POI, the United States had in place two major tax incentives that provided benefits to systems owners (as opposed to manufacturers of solar products): the Federal Investment Tax Credit (‘FITC’) and the Grant in Lieu of Tax Credit, also known as the Section 1603 Treasury Program (‘GLTC’).” Final Determination at 33–34. The FITC program, which was established in 2005 and extended under the Emergency Economic Stabilization Act of 2008 (“EESA”), initially “provided a 30-percent investment tax credit to commercial and residential customers installing solar energy systems, but did not extend the credit to public utilities.” Final Determination at 34. The EESA extended this tax credit through 2016, after which, the ITC found the credit was to decline to 10 percent. Final Determination at 34. Importantly, “[t]he EESA also waived the public utility exemption [after 2008], thereby allowing utilities to invest directly in solar facilities for the first time.” Final Determination at 34.

In 2009, Congress passed the GLTC program as part of the American Recovery and Reinvestment Act, providing “30-percent cash grants for commercial solar facilities that were (1) placed in service in 2009 or 2010, or (2) placed in service between January 1, 2010 and January 1, 2017, so long as construction began in 2009 or 2010.” Final Determination at 34. Although the GLTC program was set to expire at the end of 2010, “Congress extended it, allowing applicants to receive cash grants so long as construction of the commercial solar facilities

²⁹ Eleven of fourteen producers, thirty-six of forty-six importers, and twenty-seven of forty-four purchasers reported that state and local incentives had stimulated demand since January 2009. Final Determination at 33 n.185.

commenced by the end of December 2011 and finished by December 2016.” Final Determination at 34–35. Hence, the ITC found that there remained a favorable mix of federal subsidies in effect during the POI for producers and consumers of solar energy in both residential and commercial sectors.

As to the availability of state and local incentives, the Commission found that thirty-six states, the District of Columbia, Puerto Rico, and various local governments stimulated the use of renewable energy sources through renewable energy programs of various scopes and durations across the United States during the POI. *See* Final Determination at 35. The Commission found that “[t]hese programs generally require[d] retail electricity suppliers to procure a minimum amount of renewable energy, such as wind and solar, usually as a percentage of their total energy generation by a given date, or suffer a non-compliance penalty.” Final Determination at 35.

As to plaintiffs’ claim that the Commission failed to appreciate the phasing out of these incentives, the ITC acknowledged the phase-out or partial termination of certain government incentive programs but found “that, during much of the POI, the overall mix of incentives was [nonetheless] very favorable and stimulated demand substantially.” Final Determination at 52. It also observed that various federal, state, and local incentives remained available at the end of the POI and that “apparent U.S. consumption continued to increase.” Final Determination at 52–53. Moreover, the Commission concluded that there was nothing on the record to suggest that any partial termination or phase-out of incentives during the POI “led to any significant imbalance in supply and demand that would have caused the observed declines in prices of the domestic like product.” Final Determination at 53. Thus, although plaintiffs claim otherwise, the ITC considered the presence of government incentives in the marketplace and found that federal, state, and local government incentives remained widely available throughout the POI

and that, as a result, U.S. demand for, and consumption of, CSPV products during the POI continued to increase. That is, the Commission concluded that any effect the availability of government incentives had on the domestic industry during the POI could not explain the injury that they sustained during this time period.

3. Supply and Demand Conditions

The Commission next examined the volume of CSPV products available in the United States. It found that the U.S. market had available shipments of CSPV products from the domestic industry, subject imports (i.e., from China), and non-subject imports (i.e., from foreign countries other than China). Final Determination at 37. While plaintiffs do not question the ITC's findings directly with respect to the conditions of supply and demand, they renew their claim that the Commission's findings regarding the impact of government incentives was unsupported by the evidence and thus that the Commission's failure to appreciate the significance of this condition caused the ITC to reach mistaken conclusions regarding the conditions of supply and demand present in the CSPV market in the United States during the POI. *See* Pls.' Br. 33–34.

With respect to the conditions of supply and demand, the ITC found that both the domestic industry *and* non-subject imports (i.e., imports of CSPV products from countries other than China) lost significant market share during the POI, while subject imports from China gained significant market share during the same period.³⁰ Final Determination at 37–38. The

³⁰ The ITC found that “[t]he domestic industry’s share of the U.S. market declined from [[]] percent in 2009 to [[]] percent in 2011; its share of the market was [[]] percent in interim 2011 and [[]] percent in interim 2012.” Final Determination at 37. It also found that “the market share of non-subject imports declined from [[]] percent in 2009 (footnote continued)

ITC found that domestic demand for CSPV products grew at a rapid rate during the POI, but that the volume of subject imports grew at a substantially faster rate than U.S. consumption and surpassed the domestic industry's U.S. shipments by 2010.³¹ See Final Determination at 42–43. The ITC thus concluded “that subject imports had a significant adverse impact on the domestic industry during the POI” and that “the domestic industry’s financial performance was very poor and deteriorating because of the significant volume and adverse price effects of subject imports.” Final Determination at 54.

In addition, the ITC found that subject imports increased their market share significantly during the POI at the expense of the domestic industry and non-subject imports in each of the major U.S. market segments (i.e., residential, non-residential, and utility).³² Final Determination at 43 & n.256, 44. The ITC found that “the domestic industry progressively increased capacity and had available production capacity throughout the POI,” which indicated that, contrary to plaintiffs’ assertions, the domestic CSPV industry “was capable of supplying additional demand.” Final Determination at 44. The Commission further noted that “the ratio of subject

to [[]] percent in 2011.” Final Determination at 37. It further found that Chinese subject imports’ market share rose from [[]] percent in 2009 to [[]] percent in 2011, and that, “in interim 2011, subject imports’ market share was [[]] percent compared to [[]] percent for non-subject imports, and by interim 2012, subject imports’ share was [[]] percent,” as compared to non-subject imports, whose market share was [[]] percent. Final Determination at 37–38.

³¹ The ITC found that subject imports experienced growth of [[]] percent between 2009 and 2011, more than doubling the [[]] percent growth of U.S. consumption during this period. Final Determination at 43.

³² The ITC found that subject imports increased their market share by [[]] percent between 2009 and 2011, and that, in interim 2012, their market share was [[]] percent higher than in interim 2011. Final Determination at 43. The Commission also found that, between 2009 and 2011, the domestic industry lost [[]] percent of market share and lost an additional [[]] percent of market share between interim 2011 and interim 2012. Final Determination at 43.

imports to domestic production grew significantly over the period” and the domestic industry’s net sales quantities even began to fall toward the end of the POI.³³ Final Determination at 44, 54. Relatedly, the Commission also found that “a substantial number of domestic producers shuttered facilities and/or declared bankruptcy” during the POI and “additional producers continued to fail even after the end of the POI.” *See* Final Determination at 54–55. In other words, “[d]espite remarkable demand increases throughout the [POI], the domestic industry’s financial condition was not strong at the beginning of the period and continued to deteriorate throughout the POI, with the domestic industry incurring operating losses during the entire POI” and experiencing declining net sales during the latter part of the POI.³⁴ *See* Final Determination at 55. Thus, the ITC “conclude[d] that the volume [(i.e., supply)] of subject CSPV products imported into the United States from China [was] significant, absolutely and relative to consumption [(i.e., consumer demand)] and production in the United States.” Final Determination at 44. It reached this conclusion based on its finding that, despite plaintiffs’ claim to the contrary, the domestic industry possessed the capacity during the POI to meet the

³³ The ITC found that the ratio of subject imports to domestic production increased from [[]] percent in 2008 to [[]] percent in 2011, and [[]] percent in interim 2012. Final Determination at 44.

The domestic industry’s net sales were [[]] megawatts in 2009, [[]] megawatts in 2010, [[]] megawatts in 2011, [[]] megawatts in interim 2011, and [[]] megawatts in interim 2012. Final Determination at 54 n.323. The domestic industry’s average production capacity was [[]] megawatts in 2009, [[]] megawatts in 2010, [[]] megawatts in 2011, [[]] megawatts in interim 2011, and [[]] megawatts in interim 2012. Final Determination at 54 n.325.

³⁴ The domestic industry reported operating losses of [[]] in 2009, [[]] in 2010, [[]] in 2011, [[]] in interim 2011, and [[]] in interim 2012. Final Determination at 55 n.332. The domestic industry’s net sales were [[]] in 2009, [[]] in 2010, [[]] in 2011, [[]] in interim 2011, and [[]] in interim 2012. Final Determination at 55 n.333.

significant increase in demand, and thus determined that, absent subject imports, the domestic industry would have increased its own sales volume.

4. Utility Market

Next, the Commission examined the condition of the utility segment of the U.S. market. Here, plaintiffs insist that “the domestic industry failed to compete effectively” for utility sales, where subject imports were the largest supplier, because the domestic industry was unable to meet the increasingly high demand for CSPV products as a result of other external conditions of competition that were present in the U.S. market during the POI. *See* Pls.’ Br. 20. Specifically, plaintiffs contend that demand for CSPV products grew rapidly during the POI, particularly “in the utility sector, which . . . is where grid parity and declining incentives had the greatest impact.” Pls.’ Br. 5. According to plaintiffs, because “subject imports were the predominant source of CSPV modules in the utility segment,” this confirmed that the domestic industry, which “w[as] not poised to take advantage of the surge in utility sector demand[,] . . . failed to compete effectively in this segment.” *See* Pls.’ Br. 5, 20.

Plaintiffs’ claims notwithstanding, the ITC concluded that (1) the domestic industry possessed the capacity to meet the increased demand that resulted from the significant growth in the utility sector during the POI and (2) that the special conditions presented in the utility segment did not account for significant underselling in that segment and did not explain the domestic industry’s injury sustained in the other consumer segments. The Commission began by examining the three grid-connected market segments, residential, non-residential, and utility applications, and found, based on questionnaire data, that, “between January 2009 and June 2011, the largest share of U.S. commercial shipments (up to 45.3 percent) were to commercial

installers, after which time the largest share (42.3 percent) were to utility co-developers.” Final Determination at 37. The Commission found that “[t]he share of shipments from all sources to utility co-developers increased [during the POI] from 5.2 percent in 2009 to 12.3 percent in 2010, and 29.8 percent in 2011, and was 17.6 percent in interim 2011 and 42.3 percent in interim 2012, driven in large part by the availability of incentive programs.” Final Determination at 37. It also found that, “[a]fter increasing 1,977.4 percent between 2009 and 2011, utilities [were] projected to account for 54 percent of total installations by the end of 2012.” Final Determination at 37. Therefore, as maintained by plaintiffs, the ITC observed that purchases by the utility sector experienced the most growth of any sector during the POI, growing “from the smallest segment of the U.S. market in 2009 to the largest by interim 2012.” Final Determination at 44 n.258.

The Commission further found that “[t]he domestic industry participated in all segments of the U.S. market (including the residential, non-residential, and utilities segments)” and “supplied a variety of modules to purchasers in the market,” i.e., both lower- and higher-wattage CSPV modules. *See* Final Determination at 39. In addition, it observed that “industry participants in all market segments purchased CSPV modules of varying types, meaning that products of particular wattage or cell-type or size were not limited to specific segments of the U.S. market.” Final Determination at 39–40. Further, “responding purchasers reported that the U.S. product was comparable to [the] product made in China for all characteristics except for price, for which the product from China was rated as superior ([i.e.], lower-priced).” Final Determination at 41.

Moreover, as part of its investigations, the Commission collected quarterly net U.S. free on board³⁵ selling price data for five CSPV module products³⁶ during the POI, which it obtained from eight U.S. producers and twenty-three importers of subject merchandise. Final Determination at 46. Based on the questionnaire responses, the ITC found that the higher-wattage pricing products (i.e., crystalline silicon module, with a peak power wattage of 260 to 279, and crystalline silicon module, with a peak power wattage of 280 and above) were “not necessarily sold to the utility segment any more than [the] lower-wattage [pricing] products” (i.e., crystalline silicon module, with a peak power wattage of 220 to 219, crystalline silicon module, with a peak power wattage of 220 to 239, and crystalline silicon module, with a peak power wattage of 240 to 259), which “are necessarily sold to non-utility customers.” Final Determination at 48. In other words, higher wattage modules were sold to other market segments that were not as dominated by subject imports. Therefore, despite plaintiffs’ claim during the administrative proceeding that the utility segment demanded predominantly higher-wattage products during the POI and that the domestic industry failed to offer or manufacture this merchandise during this time period, the ITC found that this was not the case. Rather, it

³⁵ “Free on board” “is a standardized shipping term ‘mean[ing] that the seller delivers the goods on board the vessel nominated by the buyer at the named port of shipment or procures the goods already so delivered. The risk of loss of or damage to the goods passes when the goods are on board the vessel, and the buyer bears all costs from that moment onwards.’” *Beijing Tianhai Indus. v. United States*, 39 CIT __, __, 52 F. Supp. 3d 1351, 1356 n.10 (2015) (alteration in original) (quoting *Cutter & Buck, Inc. v. United States*, 37 CIT __, __ n.1, Slip Op. 13-45, at 2 n.1 (2013)).

³⁶ The five pricing products were “(1) crystalline silicon module, with a peak power wattage of 220 to 219, inclusive, P-max or Wp,” “(2) crystalline silicon module, with a peak power wattage of 220 to 239, inclusive, P-max or Wp,” “(3) crystalline silicon module, with a peak power wattage of 240 to 259, inclusive, P-max or Wp,” “(4) crystalline silicon module, with a peak power wattage of 260 to 279, inclusive, P-max or Wp,” and “(5) crystalline silicon module, with a peak power wattage of 280 and above, P-max or Wp.” Final Determination at 46 n.273.

determined that higher-wattage products were sold frequently by both Chinese exporters and the domestic industry to not only the utility segment but to the other segments as well.

Moreover, contrary to plaintiffs' assertions, the Commission found that "the[] data indicate[d that] the domestic industry offered and sold higher-wattage products during the POI." Final Determination at 47. The Commission further found that the record showed that imports of the two higher-wattage pricing products were sold in all market segments. Final Determination at 48. Thus, the Commission determined that there was "a high degree of substitutability between CSPV products made in the United States and imported from China," and further "reject[ed] the notion that the pricing data illustrate[d] a lack of competition between subject imports and the domestic like product in the utility or any other segment of the U.S. market." Final Determination at 42, 48.

In addition, the ITC found that, "[d]espite numerous closures of U.S. manufacturing facilities, the domestic industry progressively increased capacity and had available production capacity throughout the POI, indicating that it was capable of supplying additional demand." Final Determination at 44. It thus concluded that, "given the high substitutability between the domestic like product and subject imports, . . . competition in the U.S. CSPV market primarily depend[ed] on price." Final Determination at 45. In other words, the Commission determined that the domestic CSPV industry (1) produced the types of CSPV modules that were being demanded by purchasers in the utility segment, (2) possessed the capacity to meet the growing demand in this consumer segment, and (3) manufactured CSPV products that were highly substitutable for subject imports aside from their price. Therefore, the ITC concluded that the domestic like product would have possessed the ability to compete effectively with subject

imports in all three consumer segments, including for utility sales, had subject imports not been sold at dumped prices.

In this connection, the Commission found that “subject imports of both lower- and higher-wattage products pervasively undersold the domestic like product at wide margins in sales to all segments of the U.S. market” (i.e., residential, non-residential, and utility). Final Determination at 48. It observed that any growth in shipments of U.S. merchandise to the utilities sector “pale[d] in comparison to the growth of subject imports,” which were the predominant source of CSPV modules in the utility segment, and that the volume of subject imports drastically increased in every sector, not just in utilities. *See* Final Determination at 44 & n.258. In evaluating the selling price data for the five CSPV module pricing products during the POI, as reported by U.S. producers and importers of subject merchandise, the Commission found that “subject imports pervasively undersold the domestic like product at sizeable margins throughout the POI.” Final Determination at 46. Specifically, it found that “subject imports from China undersold the domestic like product in [thirty-five] of [forty-six] possible quarterly comparisons, or 76.0 percent of the time.”³⁷ Final Determination at 46. The Commission thus concluded that “[t]he record . . . reflect[ed] that domestic producers were forced to lower prices to compete with low-priced subject imports from China.” Final Determination at 49.

Moreover, it found that “record evidence indicate[d] not only that subject imports increased their sales to utilities[,] . . . but also that subject imports were able to do so using lower prices,” and “that domestic producers lost sales and revenues due to competition from low-priced subject imports.” Final Determination at 49. It thus concluded, based on this evidence, “that

³⁷ The Commission found that subject imports undersold the domestic like product 76 percent of the time “at margins ranging as high as [[]] percent.” Final Determination at 46.

there ha[d] been significant underselling of the domestic like product by subject imports from China,” and that “[t]his underselling enabled subject importers to gain market share at the expense of the domestic industry.” Final Determination at 49. In other words, the ITC found that, as a result of significant underselling and increased volumes of sales of low-priced subject imports, the domestic industry lost sales in all segments during the POI, not just the utility sector.

A review of this evidence confirms that the Commission reasonably concluded that the condition of the utility market (i.e., the high demand for CSPV products in this segment during the POI and the domestic industry’s ability to adequately supply the growing demand) demonstrated that the growth in shipments of subject imports relative to U.S. shipments of the domestic like product in the utility sector was not the result of other external conditions of competition in the U.S. market, but rather the result of the low price of the dumped Chinese product. Relatedly, the Commission reasonably found that the condition of the utility segment (i.e., the growth in shipments of subject imports relative to U.S. shipments of the domestic like product in the utility sector) failed to account for the significant growth of subject imports and accumulation of market share in other consumer sectors at the expense of the domestic CSPV industry. Therefore, the Commission supported with substantial evidence its determination that the domestic industry possessed the ability to compete for sales in the growing utility segment during the POI, but was unable to do so because subject merchandise was being offered at dumped prices.

5. The Role of Non-subject Imports During the POI

Next, the Commission reached conclusions after having “closely examined the role of non-subject imports in these investigations” (i.e., imports of CSPV cells and modules in the U.S.

market from countries other than China). Final Determination at 57. It found that “[n]on-subject sources supplying CSPV cells to the U.S. market included Taiwan, Korea, Japan, and Germany, and non-subject sources supplying the U.S. market with CSPV modules included Taiwan, Korea, Mexico, Canada, Singapore, and Japan.” Final Determination at 57. The ITC further found that, despite the large volume of subject imports from China during the POI, “non-subject imports were considerably smaller in magnitude, and their volume declined overall during the POI, both in absolute and relative terms,” and “frequently oversold the domestic like product.”³⁸ See Final Determination at 57, 58. Thus, the ITC concluded that, like the domestic industry, non-subject imports³⁹ experienced declines in U.S. market share and price underselling by subject imports. For the Commission and the court, these facts further support the ITC’s determination that the domestic industry was injured “by reason of” subject imports and not “by reason of some” other external factor, and that the condition of the domestic industry would not, in fact, have been the same absent the presence of low-priced subject imports from the China in the U.S. market.

6. *Grid Parity*

Last, the Commission considered plaintiffs’ grid parity argument. Plaintiffs insist that, although the ITC recognized the goal of solar-power producers, and thus producers of CSPV

³⁸ The ITC found that, “[a]s a share of apparent U.S. consumption, non-subject imports declined from [[]] percent in 2009 to [[]] percent in 2010, and [[]] percent in 2011, and were [[]] percent in interim 2011 and [[]] percent in interim 2012.” Final Determination at 57 n.350. The ITC further observed that, “[a]s a share of total imports, imports of non-subject merchandise decreased from 67.7 percent of total imports in kilowatts in 2009 to 42.9 percent in 2010, and 29.2 percent in 2011, and they were 37.4 percent in interim 2011 and 41.9 percent in interim 2012.” Final Determination at 57 n.350.

³⁹ Indeed, this consideration of non-subject imports satisfied the “but for” requirement found in *Mittal Steel, Bratsk, and Gerald Metals*.

products, to attain grid parity (i.e., that taking into account their cost, CSPV products' ability to generate electricity at a price matching the cost of power produced by other means to supply the electric grid and thus compete for electricity sales with other electricity-generating sources such as natural gas), the ITC failed to consider the impact of seeking to attain this goal on the condition of the domestic CSPV industry during the POI. According to plaintiffs, the Commission's analysis was lacking because the ITC failed to observe that the domestic industry sustained its injury, not as a result of the presence of low-priced subject imports present in the U.S. market, but rather, "by reason of" the declining cost of other energy-producing technologies with which it was unable to compete during the POI. *See* Pls.' Br. 6 ("In the present case, despite the conditions of competition it found to exist, the Commission erred in failing to consider the issue of 'but for' causation in its causation, impact, price effects, or volume inquiries. . . . [S]ubject CSPV imports were merely selling at the prices that the U.S. market would bear for CSPV products in light of the exogenous forces of grid parity and declining government incentives. That is, subject CSPV producers were willing and able to compete with the rapidly declining [levelized cost of electricity] set by electricity generated from natural gas during the POI, and therefore they were successful in making sales in the U.S. market. Meanwhile, domestic CSPV producers were not willing and able to compete with that price, and that situation would be no different in the absence of subject imports. In these circumstances, the Commission could not reasonably have attributed the domestic industry's injury to the subject imports. For this reason this Court should reverse the Commission's material injury determination, including its determinations of causation, impact, price effects, and volume.").

Put another way, plaintiffs' argument is that the domestic industry lost no sales to subject imports because purchasers, particularly utility purchasers, would have turned to technology that

produced lower-priced electricity (i.e., natural gas), rather than purchase the domestic industry's products.

While plaintiffs assert that the ITC erred by failing to properly take their grid parity arguments into account, the ITC specifically rejected these claims in the Final Determination. It “recognize[d] the goal for CSPV products to attain grid parity,” and went on to explain that “grid parity” is “the point at which the levelized cost of electricity generated from renewable sources [(e.g., solar)] equals the cost of conventional electricity from the grid.” Final Determination at 32, 52. The “levelized cost of electricity,” it stated, is “the sum of all costs over the life of an energy system divided by the quantity of electricity that system would be expected to generate during the period the system is financed.” Final Determination at 32 n.171. According to the ITC, “[d]uring periods of non-peak electricity demand in the United States, only lowest-cost ‘baseload’ generators (traditionally coal and nuclear plants) will be able to sell electricity to the grid, whereas during peak electricity demand periods, even generators with somewhat higher costs may be able to sell electricity into the transmission or distribution grid.” Final Determination at 32.

Inexpensive natural gas was indeed affecting the price of electricity. During “peak periods, natural-gas generated electricity sets the levelized cost of electricity that CSPV solar systems and other renewable systems must seek to meet, especially for sales to the utility segment.” Final Determination at 32. In other words, buyers will demand the lowest-priced electricity available at any given time. Thus, CSPV products will be purchased only if the cost of the resulting electricity is price-competitive with the source of electricity that is least expensive during non-peak demand. As a result, electricity producers using CSPV technology will only be able to sell into the grid so long as they possess the ability to remain price-

competitive with electricity that is generated from other technologies at any given time. As noted, here, the Commission found that natural gas-generated electricity set the levelized cost of electricity, due, in large part, to an increase in the supply of natural gas, which resulted from fracking and shale drilling, thereby lowering the cost of natural gas. *See* Final Determination at 32. Consequently, the grid parity price with which CSPV products competed during the POI fell as well.

The story, however, does not end there. The Commission considered record evidence that included a September 2010 publication from Barclays Capital regarding equity research related to solar energy. *See* Pre-Hearing Br. of China Chamber of Commerce for Import and Export of Machinery and Electronic Products (Volume I of I), Ex. 22 (“Solar Energy Handbook”), CD 396 at Doc. No. 491422 (Sept. 20, 2012), ECF Dkt. No. 67-2. This source explained that there are two different grid parity price points, one at the utility level and one at the residential level. *Solar Energy Handbook* at 56. The publication noted that the utility price point was likely to be lower than the residential price point because it was expected that “residential markets [would] have a much higher solar energy price point due to elimination of transmission and distribution costs.” *See* *Solar Energy Handbook* at 56.

As to the utility level, the Commission further relied on evidence indicating that it was “expect[ed that] grid parity [for solar electricity] at the utility level [would] be reached in the [United States during the] 2010–12 time frame depending on the development of fossil fuel generated electricity prices.” *Solar Energy Handbook* at 56. This source also indicated “that solar electricity [was] already competitive with peak power generation capacity in a number of regions” in the United States, and it observed that, “[i]n the United States, several utilities [had already] announced deployment of large-scale solar panels beginning” in 2010, which would be

competitive with intermediate and peak load generation capacities. *See* Solar Energy Handbook at 56. Further, the Barclays Capital publication stated that commercial solar energy projects would generate competitive returns in 2010 in several states. *See* Solar Energy Handbook at 60.

Moreover, the publication anticipated that, due to favorable federal, state, and local government legislation and incentive programs in place to stimulate the demand for solar energy in the United States, and an increased supply of lower-priced solar panels, the United States solar photovoltaic market would triple between 2011 and 2012 and that solar energy would achieve grid parity in several states in the year 2011. *See* Solar Energy Handbook at 125. Indeed, the publication stated that “statewide solar programs [were] likely to make the U.S. one of the fastest-growing markets over the next three to five years.” Solar Energy Handbook at 125.

This evidence thus suggested that plaintiffs’ claim, that “domestic CSPV producers were not willing and able to compete with [the rapidly declining levelized cost of electricity] . . . set by electricity generated from natural gas during the POI” as compared to “subject CSPV producers [that] were willing and able to compete with the rapidly declining” cost, was not the case. *See* Pls.’ Br. 6. Rather, this record evidence indicated that the domestic industry, in some parts of the United States, had achieved grid parity during the POI, as a result of favorable government incentive programs and legislation, and thus, in some cases, was able to compete with the lower levelized cost of electricity. In addition, this evidence indicated that, by 2011, grid parity would be achieved in several states. Based on this trend, the Commission thus found that the conditions of grid parity could not explain the injury sustained by the domestic industry, which was expected to enjoy considerable growth during the POI. *See* Final Determination at 52 (“We further recognize the goal for CSPV products to attain grid parity, which largely means matching the levelized cost of natural-gas-generated electricity provided to the grid during peak

periods, as discussed above. Nevertheless, the impetus toward grid parity fails to explain the significant underselling by subject imports demonstrated on this record.”).

Moreover, as part of its analysis, the ITC also relied on the questionnaire responses⁴⁰ it solicited from the domestic industry during the investigations directed at purchasers, producers,

⁴⁰ Plaintiffs, in their reply brief, argue that the questionnaire responses solicited by the ITC are misleading because the questions posed by the Commission were phrased in a way that failed to distinguish the impact of grid parity from the impact of subject imports. *See* Pls.’ Reply in Supp. of their Mot. for J. on the Agency R. 14 (ECF Dkt. No. 46) (“Pls.’ Reply Br.”). That is, for plaintiffs, the questions posed by the ITC in the questionnaires were not sufficiently probative of the domestic purchasers’ preferences for domestic CSPV products at higher prices in the absence of subject imports, given the decline in prices of competing conventional energy sources. Despite plaintiffs’ citation to their initial brief before the court, this argument was, in fact, raised for the first time in their reply brief. *See* Pls.’ Reply Br. 14 (citing Pls.’ Br. 30–33). It is well-settled that, where, as here, an argument is not raised in a plaintiff’s opening brief, it is waived. *See Amoco Oil Co. v. United States*, 234 F.3d 1374, 1377 (Fed. Cir. 2000) (“[A] reply brief should ‘reply to the brief of the appellee’ and ‘is not the appropriate place to raise, for the first time, an issue for appellate review.’ . . . Because these . . . arguments were not raised in Amoco’s opening brief, we decline to address them.” (quoting *Carbino v. West*, 168 F.3d 32, 34 (Fed. Cir. 1999))). Because plaintiffs failed to raise their argument until their reply brief, it is deemed waived, and will not be considered by the court. *See id.*

The court also finds that this claim was improperly raised by plaintiffs because they failed to exhaust their administrative remedies. A court “shall, where appropriate, require the exhaustion of administrative remedies.” 28 U.S.C. § 2637(d); *Yangzhou Bestpak Gifts & Crafts Co. v. United States*, 716 F.3d 1370, 1381 (Fed. Cir. 2013). “As a general matter, ‘[t]he exhaustion doctrine requires a party to present its claims to the relevant administrative agency for the agency’s consideration before raising these claims to the Court.’” *Hebei Metals & Minerals Imp. & Exp. Corp. v. United States*, 28 CIT 1185, 1195 (2004) (alteration in original) (quoting *Timken Co. v. United States*, 26 CIT 434, 459, 201 F. Supp. 2d 1316, 1340 (2002)). Generally, where, as here, a party “fail[s] to present [an] issue during the applicable comment period,” it is “precluded from raising this issue *de novo* before the court.” *AIMCOR v. United States*, 141 F.3d 1098, 1111 (Fed. Cir. 1998) (citations omitted). Here, during the Commission’s investigations, plaintiffs were given the opportunity to comment on the proposed questions to be included in the questionnaires prior to being sent to domestic and foreign producers, and importers and purchasers of CSPV cells and modules. *See* Comments on Draft Questionnaires, PD 95 at Doc. No. 483863 (June 26, 2012), ECF Dkt. No. 68-4 (“Comments on Draft Questionnaires”); Pls.’ Br. 9. Indeed, plaintiffs played an active role in assisting the Commission in drafting the questions posed in the questionnaires. *See* Comments on Draft Questionnaires. If plaintiffs had concerns regarding the ambiguity or phrasing of certain questions, they could have raised them with the Commission during the comment period. Because they failed to do so, and

(footnote continued)

and importers of CSPV products. The ITC found that twenty-one firms reported that price per watt was the most important factor in making purchasing decisions. *See* Final Determination at 45. Twelve of thirteen respondent producers, thirty-seven of forty-five respondent importers, and thirty-seven of forty-two respondent purchasers indicated that the domestic like product was either always or frequently interchangeable with imports of subject merchandise. Final Determination at 45. Moreover, the ITC found that “most responding purchasers reported that CSPV products made in the United States [were] comparable to subject imports from China for all characteristics except for price, for which the product from China was rated as superior (that is, lower-priced).” Final Determination at 45. Thus, “given the high substitutability between the domestic like product and subject imports,” the ITC found that competition between the two products depended primarily on price. Final Determination at 45.

The ITC further found that the “subject imports [substantially] undersold the domestic like product . . . 76.0 percent of the time, at [high] margins.”⁴¹ Final Determination at 46. The ITC determined the effects of this underselling to be significant because survey results of domestic producers indicated that purchasers of CSPV products “reported initially choosing or switching to imports from China based on price.” Final Determination at 49. With respect to price suppression, the ITC also found that the domestic industry had to lower its prices

instead attempt to raise this argument, now, for the first time, the court holds that they failed to exhaust their administrative remedies.

⁴¹ These margins, at which the domestic like product was undersold 76 percent of the time, ranged as high as [[]] percent. Final Determination at 46.

significantly⁴² to keep up with the major decline in price of the subject imports. Final Determination at 49–50. Thus, the ITC determined that the large and growing volume of undersold subject imports depressed and suppressed the domestic prices to a significant degree. Final Determination at 53.

Relatedly, the Commission observed that, despite the decline in natural gas prices during the POI, “when asked about the role of conventional energy sources such as natural gas and coal on changes in demand during the POI, the majority of questionnaire respondents either reported ‘no change’ in demand for CSPV products related to changes in the price of conventional energy sources or that CSPV product ‘demand increased.’” Final Determination at 52. These questionnaire respondents also reported that the domestic industry lost sales and lowered its prices in order to compete with low-priced subject imports. *See* Final Determination at 50. In other words, the majority of responding U.S. purchasers of CSPV products confirmed that their purchasing decisions were not affected by the price of conventionally-produced electricity but instead by cheap foreign imports. That is, for a majority of the questionnaire respondents doing business in CSPV products, the availability of lower-priced alternative energy-producing technologies, such as natural gas, had no effect on the desirability of solar-producing technology (i.e., CSPV products). Thus, based on the input received from the domestic industry participants, the ITC found that the role of lower natural gas prices and thus grid parity could not explain the decline in subject import prices in the U.S. market during the POI. *See* Final Determination at 52 (“[T]he impetus toward grid parity fail[ed] to explain the significant underselling by subject imports demonstrated on this record.”).

⁴² The ITC found that the domestic industry had to lower its prices by [[]] percent in order to keep up with the [[]] percent decline in price of the subject imports. *See* Final Determination at 49.

It is apparent that the ITC adequately addressed plaintiffs' primary grid parity argument and found it wanting. The ITC found that the suppression in domestic CSPV producers' prices and lost sales were not caused by the availability of lower-cost means of electrical production in the marketplace. Rather, it found that these injurious effects resulted from the presence of low-priced subject imports in the U.S. market. Hence, the Commission reasonably determined, based on (1) evidence that CSPV products had achieved or would soon achieve grid parity and (2) considerable input received from the domestic industry participants, that the push for grid parity could not explain the underselling and price depression of the domestic like product that occurred during the POI. This conclusion was supported by substantial evidence and disposes of plaintiffs' primary claim related to their argument that the injury to the domestic industry was caused by unique aspects of the CSPV marketplace.

7. Conclusion

Based on the foregoing discussions of the ITC's methodology and the record evidence, the court holds that the Commission's determination that the injury to the domestic industry was "by reason of" sales of subject merchandise is supported by substantial evidence on the record and is in accordance with law. Thus, the ITC's injury determination is sustained.

CONCLUSION

Based on the foregoing, it is hereby

ORDERED that the International Trade Commission's Final Determination is sustained.

Plaintiffs' motion for judgment upon the agency record is denied. Judgment will be entered accordingly.

Dated: August 7, 2015
New York, New York

/s/ Richard K. Eaton
Richard K. Eaton