# IN THE ARBITRATION UNDER CHAPTER ELEVEN OF THE NORTH AMERICAN FREE TRADE AGREEMENT ("NAFTA") AND THE 1976 UNCITRAL ARBITRATION RULES BETWEEN

Resolute Forest Products,

Claimant/Investor,
-and
Government of Canada,

Respondent/Party.

PCA Case No. 2016-13

Expert Witness Report of Seth T. Kaplan, Ph.D.

December 28, 2018

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#### I. Introduction and Qualifications

#### A. Experience and Qualifications

- I have been retained as an expert on behalf of Resolute Forest Products ("Resolute",
   "Claimant") in connection with the above-cited matter.
- I am an economic consultant with over 30 years of experience in economic analysis. I am currently President of International Economic Research, LLC and am also a *Senior Economic Advisor* at Capital Trade, Inc. ("Capital Trade"), where I specialize in international trade and international patent disputes in addition to consulting in arbitration, damages, and antitrust matters. I have testified in over 100 matters involving a wide range of high-tech, industrial, consumer, and agricultural products. Capital Trade is an economic consultancy with offices in Washington, D.C. specializing in patent disputes, trade disputes, and trade policy.
- 3. I have a Ph.D. in Economics from Michigan State University.
- 4. While I was completing my Ph.D., I taught at Aquinas College and University of Michigan at Dearborn. I was also a Professorial Lecturer at The George Washington University, teaching international trade and international finance at the undergraduate and graduate levels for nine years, those nine years spanning both my work for the government and my work as a private consultant.
- 5. After obtaining my Ph.D., I joined the government as an economist in the Research Division of the Office of Economics at the U.S. International Trade Commission ("USITC"), where I was also detailed to be the Economist to the Chairman of the Commission. After leaving the USITC, I entered economic consulting.
- 6. As an economic consultant, I have held the positions of *Director of Economic Research* at Trade Resources Company, *Vice President and Head of the International Trade Practice*

at CRA International, *Principal and Director* at The Brattle Group, and *Senior Economic Advisor* at Capital Trade. I am also the *President* of my own consultancy, International Economic Research LLC.

- 7. I have been an Economic Expert Witness for the print and paper industries for multiple paper products, including Supercalendered Paper ("SCP"). I provided expert testimony on behalf of the petitioning coalition in the Preliminary and Final Phase investigations of Supercalendered Paper from Canada before the USITC, where I had access to the confidential record under the Commission's Administrative Protective Order.<sup>2</sup>
- 8. Additional details about my employment history, fields of expertise, publications, and prior testimony are described or listed in my curriculum vitae, provided as **Exhibit 1**. I have no interest or relationship to Claimants other than my work as an expert in this case. My address is 1200 18<sup>th</sup> Street NW, Suite 601, Washington, DC 20036.

<sup>&</sup>lt;sup>1</sup> C-229, Supercalendered *Paper from Canada*. Inv. No. 701-TA-530 (Preliminary), USITC Pub. 4529 (April 2015) and C-237, Inv. No. 701-TA-530 (Final), USITC Pub. 4583 (December 2015).

<sup>&</sup>lt;sup>2</sup> The confidential record was extensive. "Three firms that accounted for all known U.S. production of SC paper from January 2012 to June 2015 (the period of investigation or "POI") submitted questionnaire data. (Confidential Report, Memorandum INV-NN-082 (Nov. 4, 2015) ("CR") at I-4; Public Report ("PR") at I-3.) Importer questionnaire data are based upon responses from seven firms accounting for all U.S. imports of SC paper from Canada and \*\*\* percent of nonsubject imports during the POI. (CR at IV-1, PR at IV-1.) Data on the Canadian SC paper industry are based on the questionnaire responses from four known Canadian producers/exporters, whose reported U.S. exports accounted for all U.S. imports of subject merchandise during the POI. (CR at VII-3, PR at VII-3.)" C-237, USITC Pub. 4583, Views of the Commission at 3.

# II. Background and Assignment

#### A. Background

#### 1. The Parties

- 9. Resolute Forest Products Inc. ("Resolute" or "Claimant"), the disputing investor, is incorporated in the State of Delaware, in the United States of America, and is registered at 1209 Orange Street, Wilmington, DE, 19801, USA. Resolute wholly owns and controls Resolute FP Canada Inc., a Canadian corporation registered at 111 Robert-Bourassa Blvd., Suite 5000, Montreal, Québec, H3C 2M1, Canada. Resolute FP Canada Inc. has been directly affected by acts for which the Canadian government is responsible under NAFTA.<sup>3</sup> Resolute FP owned the Laurentide SCP mill ("Laurentide mill") and owns SC paper mills Dolbeau and Kénogami, all of which are located in Québec, Canada.
- 10. The Government of Canada ("Canada" or "Respondents") is the Respondent in this arbitration.

#### 2. Other Entities

11. Port Hawkesbury Paper ("PHP") is neither Claimant nor Respondent in this matter. However, PHP was the beneficiary of a series of Measures implemented by the Government of Nova Scotia ("Nova Scotia"), Measures that Resolute claims violate Articles 1102 and 1105 of NAFTA. PHP operates as a subsidiary of Pacific West Commercial Corporation ("PWCC"), 4 and is located at 120 Pulp Mill Road, Point Tupper,

<sup>&</sup>lt;sup>3</sup> Notice of Arbitration at ¶¶ 11-12.

<sup>&</sup>lt;sup>4</sup> Notice of Intent at ¶28.

Port Hawkesbury, NS, B9A 1A1, Canada.<sup>5</sup> PWCC purchased the Port Hawkesbury ("PH") mill on September 28, 2012; prior to the sale to PWCC, NewPage Corporation owned the PH mill.<sup>6</sup> The PHP mill's capacity of 360,000 MT produces SCP grades SCA++, SCA+, SCA, and SCAB paper, and currently represents approximately 25 percent of the North American capacity for SCP.<sup>7</sup>

#### 3. The Product

12. SCP is an uncoated printing paper made of mechanical pulp, chemical pulp, fillers, and additives. SCP is used for printed materials such as magazines, flyers, catalogs, retail inserts, direct mail materials, coupons, and brochures. SCP is generally sold in rolls, <sup>8</sup> and has a glossy finish. <sup>9</sup> It is sold in the following grades: SCA++, SCA+, SCA, SCB, and SNC. Typically, SCP is made to order, with little product held in inventory. <sup>10</sup> Retailers, publishers, catalogers, printers, and paper merchants/brokers are the main customers.

#### 4. The Claim

13. Resolute claims that it suffered economic harms to its SCP operations because of the full re-entry<sup>11</sup> of the PH SCP paper mill. Resolute alleges that Nova Scotia implemented a

<sup>7</sup> C-248 – Port Hawkesbury Mill Datasheet.

<sup>&</sup>lt;sup>5</sup> C-250, Company Overview of Port Hawkesbury Paper LP. Bloomberg.

<sup>&</sup>lt;sup>6</sup> Notice of Arbitration at ¶3.

<sup>&</sup>lt;sup>8</sup> C-237, USITC Pub. 4583, Views of the Commission at 6.

<sup>&</sup>lt;sup>9</sup> C-237, USITC Pub. 4583, Views of the Commission at 5.

<sup>&</sup>lt;sup>10</sup> C-237, USITC Pub. 4583, Views of the Commission at 15-16.

<sup>&</sup>lt;sup>11</sup> PWCC received the benefits package in September 2012, hereafter "benefits date", which allowed PHP to begin qualifying product in preparation for 2013. I refer to the mill's restart after the hot idle in September 2012 as the "restart"; however, the mill's full commercial entry into the SCP market did not occur until 2013, and PHP itself stated

series of Measures in 2012 to ensure that PH would have competitive advantages relative to Resolute and other North American producers of SCP. These Measures include preserving PH so that it could be sold as a going concern, providing electricity to PH at a discounted rate, and providing PH with more than C\$124 million in various forms of assistance. Resolute alleges that such Measures violate NAFTA's minimum standard treatment and national treatment standards.

#### **B.** Assignment

- 14. I have been retained by Claimant to opine on 1) whether the alleged Measures and benefits package ("benefits package") received by PHP resulted in the full market re-entry of the SCP mill and 2) whether the full re-entry of the mill into the North American market caused economic harms to Resolute's SCP operations.
- 15. I reserve the right to supplement and/or amend my statement if other information relevant to my assignment becomes available in this proceeding, or to respond to additional positions taken by Respondents before or during any evidentiary hearing in this arbitration.

#### **III.** Information Relied Upon

16. In forming my opinion, I have considered (all of which are cited in this report) information from a variety of sources that is reasonably relied upon by an economic expert addressing these issues. In addition, I rely upon my own knowledge, experience, and education.

that it was not fully in the market until 2013. The full commercial operation of PHP had deleterious financial effects for Resolute; throughout this statement I refer to the full commercial entry of the mill in 2013 as the "full re-entry" of

the mill.

#### **IV.** Summary of Opinions

17. The Port Hawkesbury SCP mill was restarted only because it received a benefits package that assured the new owner it would be

North American SCP market. Given the conditions of competition for SCP – a North American market; the secular decline in demand for SCP driven by the shift in advertising from print to digital media and declining circulation of magazines; <sup>13</sup> the commodity-like nature of the product; and the need to operate SCP mills at or near full capacity – the significant increase in SCP supply from PHP depressed SCP prices below the levels that would have otherwise occurred. As a consequence, and directly attributable to the benefits package that enabled PHP to fully re-enter the market, Resolute suffered lost profits through lower prices and lower shipments than it otherwise would have enjoyed. This is the simplest of economic stories: "but for" the increased SCP supply from PHP, Resolute's SCP operations would have experienced higher prices and shipments, and enjoyed a concomitant increase in profits.

#### V. Analysis of The Benefits Package

18. PHP would not have fully re-entered the market in 2013 without the entire benefits package it received from the Nova Scotia Government ("NSG"). I reach this conclusion for several reasons. First, the PH mill was a high-cost mill with large pension liabilities, and generated significant losses under previous ownership. With demand for newsprint and SCP in

<sup>&</sup>lt;sup>12</sup> C-163, CAN000004 0001

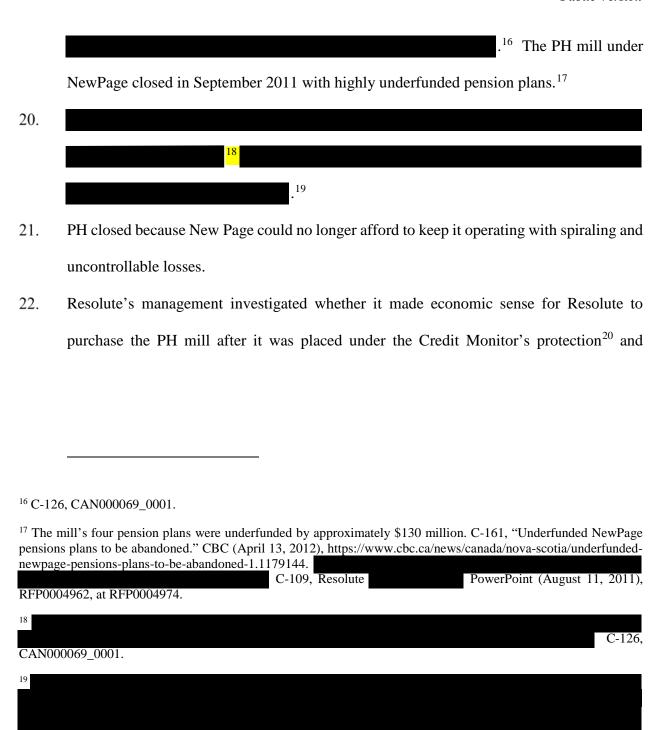
<sup>&</sup>lt;sup>13</sup> C-237, USITC Pub. 4583, Staff Report at IV-5.

secular decline, there is no reason to expect these cost disadvantages would have disappeared under new ownership. Second, PWCC itself indicated through its statements and actions that the mill would not be profitable without significant reductions in the cost structure of the mill. Third, numerous other potential purchasers, including Resolute, analyzed the mill's operations and determined that it could not operate profitably. Fourth, the purchasers who obtained the mill did so only after receiving a large benefits package that dramatically lowered the mill's costs, including costs associated with keeping the mill running prior to the commencement of operations, the cost of power, the cost of land, the cost of harvesting, the cost of borrowing, training costs, and taxes. The benefits in this package converted the mill from a high cost producer to becoming the low cost producer in North America. Absent these significant benefits, PWCC would not have invested \$33 million to purchase the mill.

19. The inability of the mill to operate profitably was previously demonstrated. It had, under different ownership, secured government incentives to continue operating. <sup>14</sup> Yet, despite these incentives, the mill's owners eventually closed the facility due to its high operating costs and high transportation costs. <sup>15</sup> The NewPage Port Hawkesbury mill was a financial disaster leading to its closure; NewPage reported losses of \$4 million per month,

<sup>&</sup>lt;sup>14</sup> C-105, Stora Enso's Port Hawkesbury Mill to restart, Sept. 29, 2006, http://www.marketwired.com/press-release/stora-ensos-port-hawkesbury-mill-to-restart-nyse-seo-708390.htm.

<sup>&</sup>lt;sup>15</sup> C-119, RFP0011516, at RFP0011517, 18, 21, 25; C-109, RFP0004962, at RFP0004974; C-112, Affidavit of Tor Sutherland; C-111, *Newpage announces indefinite shutdown at Point Tupper mill*, Cape Breton Post (Aug. 23, 2011); C-110, *NewPage to Initiate Downtime at Port Hawkesbury Mill*, NewPage Press Release (Aug. 22, 2011).



The Credit Monitor contacted 110 potential parties, including Resolute. Eight parties submitted offers, and four were invited to continue bidding. Only two, including PWCC's bid, of the four final bids were to keep the mill open, the other two were to scrap the mill. C-120, Second Monitor Report, In re A Plan of Compromise or Arrangement of NewPage Port Hawkesbury Corp. ¶ 15 (Oct. 3, 2011) ("Second Monitor Report", C-150, Sixth Monitor Report, In re A plan of Compromise or Arrangement of NewPage Port Hawkesbury (Jan. 13, 2012) ("Sixth Monitor Report) ¶ 17-19; C-133, Fifth Monitor Report, In re A plan of Compromise or Arrangement of NewPage Port Hawkesbury (Nov. 24, 2011) ("Fifth Monitor Report") ¶ 16.

C-126, CAN000069 0003.

determined it did not make economic sense.<sup>21</sup>

- 23. Even the NSG recognized that the mill was a high cost producer and that it had to help solve<sup>23</sup> the mill's inherent cost disadvantages for it to restart.<sup>24</sup>
- 24. PWCC paid \$33 million for the mill, and the NSG eventually granted PHP over \$124.5 million in aid.<sup>25</sup> The benefits package included:<sup>26</sup>
  - \$36.8 million for hot idle and forest infrastructure funding

C-119, RFP0011516, at RFP0011525.
C-119, RFP0011530.

<sup>22</sup> C-119, RFP0011516, at RFP0011529.

<sup>&</sup>lt;sup>23</sup> Premier Dexter made it clear during the bidding process that the NSG would take extraordinary measures to keep the mill open: "Mr. Speaker, the government has been involved in the process right from day one. . . . As I think all members of the House would know, I was in Port Hawkesbury, I announced the seven-point plan that was designed to keep that facility, that plant, in an operating condition so that a new buyer would be able to come in and bring it back on-line. In some senses, that is already an investment by government in ensuring that a new buyer has an asset that they're able to operate. . . . We're working with the monitor who is in place under the creditor protection Act. We, like everyone else, are doing everything that we can to ensure that that mill remains an operating mill - not just for the Strait area." C-124, Nova Scotia Legislature House of Assembly Debates and Proceedings Third Session, Wednesday, November 2, 2011, p. 3009: <a href="https://nslegislature.ca/legislative-business/hansard-debates/assembly-61-session-3/house 11nov02">https://nslegislature.ca/legislative-business/hansard-debates/assembly-61-session-3/house 11nov02</a> ("Nova Scotia House Third Session").

<sup>&</sup>lt;sup>24</sup> These included "problem{s} for the mill" such as "increased fibre costs, increased electricity costs, {and} labour costs that are not consistent with what they're getting in other places. C-124, Nova Scotia Legislature House of Assembly Debates and Proceedings Third Session, Wednesday, November 2, 2011, p. 3009: <a href="https://nslegislature.ca/legislative-business/hansard-debates/assembly-61-session-3/house\_11nov02">https://nslegislature.ca/legislative-business/hansard-debates/assembly-61-session-3/house\_11nov02</a> ("Nova Scotia House Third Session").

<sup>&</sup>lt;sup>25</sup> My analysis does not consider the hot idle and forest infrastructure funding, where over \$22 million came after PWCC was announced as the winning bidder. In addition, the \$124.5 million does not include the: benefits PHP received from the reduced taxes; ability to use tax losses; indemnification payments; forestry license and silviculture funding; and favorable electricity rate (including additional components).

<sup>&</sup>lt;sup>26</sup> All 2012 CAD values are essentially the same in USD. All loans and financing were negotiated and received in Canadian dollars. The annual 2012 CAD to USD exchange rate was 1.009611, and the September 2012 CAD to USD exchange rate was 1.022. *See* C-251, St. Louis Federal Reserve Bank Exchange Rates – Monthly and Annual, USD to CAD.

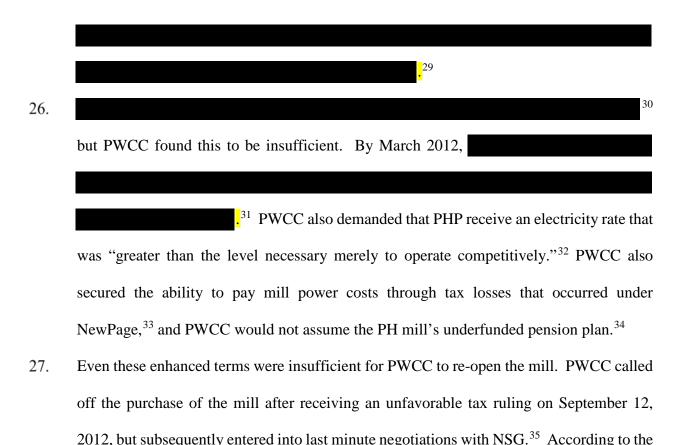
- \$24 million forgivable loan to improve productivity and efficiency
- \$40 million forgivable loan for working capital
- \$1.5 million to train workers
- \$1 million marketing grant
- \$20 million for the NSG's purchase of 51.5 thousand acres of land
- to support sustainable harvesting and forest land management
- Reduced property taxes by \$1.3 million<sup>27</sup>
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- Favorable forestry license and payments for silviculture activities
- Reduced electricity rate, including NSG's: (1) promise and subsequent enactment of regulations to run the biomass facility on site for 76% of the time with costs charged to ratepayers; and (2) promise that PHP would not have to absorb additional renewable energy costs occasioned by adding the mill to the power grid
- Ability to harvest \$1 billion in Nova Scotia tax losses to offset taxes on assets outside of the province
- Indemnification for all costs associated with deciding whether to complete the transaction if PWCC were to decide not to go forward.<sup>28</sup>

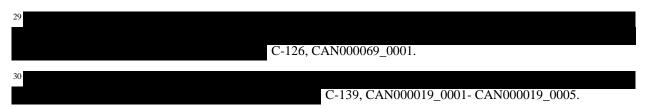
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<sup>&</sup>lt;sup>27</sup> Taxes were scheduled to be \$2.6 million for 2012, PHP's tax deal was to pay \$1.3 million. C-214, Nova Scotia Legislature House of Assembly Debates and Proceedings Fourth Session, November 30, 2012, Debate on Bill 155 at Page 4646. <a href="https://nslegislature.ca/legislative-business/hansard-debates/assembly-61-session-4/house\_12nov30#HPage4645">https://nslegislature.ca/legislature.ca/legislative-business/hansard-debates/assembly-61-session-4/house\_12nov30#HPage4645</a> ("Nova Scotia House Fourth Session").

<sup>&</sup>lt;sup>28</sup> Notice of Arbitration at 10; See, e.g., C-212, CAN000017; C-195, CAN000003; C-194.





<sup>&</sup>lt;sup>31</sup> C-158, CAN000087 0001.

<sup>&</sup>lt;sup>32</sup> C-160, Apr. 2012 Nova Scotia Power Evidence ¶ 40 at page 24.

<sup>&</sup>lt;sup>33</sup> "One of the key elements in the PWCC business plan was to reduce and manage power rates in order to become a low cost producer. After several months of negotiations with NSPI and Pacific West Commercial, a new corporate structure was developed to substantially reduce power costs through the utilization of the tax losses of NPPH. One of the steps in completing this restructuring requires NSPI to become [REDACTED] shareholder of NPPH." C-176, CAN000027\_0002.

<sup>&</sup>quot;Representatives for Pacific West Commercial Corp. have said the company would not assume the pension's unfunded liability — about \$130 million — because picking up a bill that size would make it impossible for the mill to become a low-cost producer." C-161, "Underfunded NewPage pensions plans to be abandoned." CBC (April 13, 2012), https://www.cbc.ca/news/canada/nova-scotia/underfunded-newpage-pensions-plans-to-be-abandoned-1.1179144.

<sup>&</sup>lt;sup>35</sup> The Minister of Transportation and Infrastructure Renewal Maurice Smith described the last minute negotiations in the NSG legislature as such: "As well, another point I wanted to raise is this package that came forward didn't come

Court Monitor's report, alternative arrangements were reached on the last day of negotiations on several items.<sup>36</sup>

- 28. These modifications benefited PWCC. Among other things, the \$40 million credit facility was converted into a forgivable credit facility and PWCC was allowed to use its acquired tax losses on assets outside of Nova Scotia.<sup>37</sup>
- 29. The substantial benefits conferred on PH were intended to convert the mill into the low cost producer in the North American market in order to ensure its future viability in the face of falling demand for SCP. This lowest-cost status was important to both NSG and PWCC, and ensured that the PHP mill would have competitive advantages unavailable to Resolute and other North American SCP producers.

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recognized and app	proved of PWC	C's CEO Ro	n Stern's objec	tive	
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	<sup>37</sup> (emp	phasis added)			

forward without a tremendous amount of input from all those parties that had to come to the table and make agreements. It was a hard slog to get where we got. In fact, up until hours before the final agreement came, people were working on it into the wee hours of the morning." C-214. Nova Scotia Legislature House Fourth Session, at p. 4670.

<sup>&</sup>lt;sup>36</sup> The alternative arrangements related to the nature of the financial assistance, NSPI's involvement in the PHP operations, and that PHP and the NSG also reached arrangements relating to the Tax Agreement and to PWCC's discussions with the Nova Scotia Utility and Review Board. C-204, Sixteenth Report of the Monitor, at ¶¶ 32-37.

<sup>&</sup>lt;sup>37</sup> C-195, CAN000003\_0001- CAN000003\_0007.

<sup>&</sup>lt;sup>38</sup> C-158, CAN000087\_0004.

<sup>&</sup>lt;sup>39</sup> C-158, CAN000087\_0002 - CAN000087\_0004.



- 31. NSG officials at the highest levels knew in July 2012 that PWCC planned to restart the mill as the low-cost producer. <sup>42</sup> NSG officials publicly touted the PH mill as being the low-cost producer in North America during the negotiation process. <sup>43</sup>
- 32. PWCC also stated "from the beginning of its discussions" with the NSG and other entities that its "objective is to be the lowest cost operator in North America."

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For the sake of comparison, Resolute's net sales price was \$832 per MT in 2012. 47

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<sup>40</sup> C-158, CAN000087 0004.

41 C-158 CAN000087 0006.

see C-163, CAN000004 \_ 0025. . C-159, CAN000121\_0059.

<sup>&</sup>lt;sup>42</sup> The Minister and Deputy Minister for Economic and Rural Development and Tourism noted that a major part of the PWCC business plan was to reduce power rates to "become a low cost producer." C-176, CAN000027\_0002

<sup>&</sup>lt;sup>43</sup> C-187, Premier's Office. Province Invests in Jobs, Training and Renewing the Forestry Sector. (August 20, 2012). Nova Scotia Press Release. https://novascotia.ca/news/release/?id=20120820001.

<sup>&</sup>lt;sup>44</sup> C-160, NSPI Evidence at 9.

<sup>&</sup>lt;sup>45</sup> PWCC submitted its business plan to the Utilities and Rate Review Board of Nova Scotia in April 2012. C-163, CAN000004\_0011

<sup>&</sup>lt;sup>47</sup> See Scorecards of Mills: C-252, RFP0009307, C-255, RFP0009302 and C-261, RFP0009311, converted to USD using annual CAD to USD exchange rate of 1.0004.

33. At every stage in the negotiation process, PWCC marketed its intentions for restarting the PH mill as the lowest cost producer in the SCP industry. When the NSG gave the benefits package to PWCC, it was with the intention of restarting a mill that was going to disrupt the entire SCP North American market. The NSG made the PHP mill a national champion by conferring upon it benefits that were not presented to other SCP mills, with the intention of choosing this mill to be the low-cost supplier. The NSG knew that this decision would have consequences for other SCP producers in the industry, including Resolute.

### VI. The Full Re-Entry of PH Damaged Resolute

#### A. Conditions of Competition in the Supercalendered Paper Market

- 34. The conditions of competition distinctive to the SCP industry made Resolute's SCP operations particularly vulnerable to economic harms by the large scale market re-entry of the Port Hawkesbury mill. Specifically, both Resolute and Port Hawkesbury compete in the North American market for SCP; the demand for SCP is in secular decline; SCP is a commodity-like product that competes primarily on the basis of price; and SCP mills need to operate at or near full capacity.
- 35. As a threshold matter, the SCP market is a North American market and both PHP and Resolute compete in that market.<sup>48</sup> Further, the majority of Canadian production is exported to the U.S. consistent with a single market encompassing both countries.<sup>49</sup> In

<sup>&</sup>lt;sup>48</sup> Decision on Jurisdiction and Admissibility. (January 30, 2018). ¶174-176.

<sup>&</sup>lt;sup>49</sup> "Canadian producers primarily export SC paper to the United States, but also sell a small share of their production in their home market and to other markets." fn. 22 ("According to Irving, Canadian producers of SC paper have "always" focused on the U.S. market not only because of the size of the U.S. market, but also because many large Canadian retailers (e.g., Hudson Bay and Target) produce and print their retail flyer inserts in the United States for shipment to Canada for distribution. Conference transcript, p. 119 and p. 146 (Mosher)".) C-237, USITC Pub. 4583, at II-6.

addition, Canadian and U.S. SCP producers regularly compete for the same customers.<sup>50</sup> Finally, independent analysts view North America as a single SCP market.<sup>51</sup> Thus, the effects of the PHP full re-entry were transmitted to Resolute's SCP operations through changes in North American market prices.

36. Second, the demand for SCP is in secular decline.<sup>52</sup> SCP is used in printed materials, such as newspaper inserts, coupons, magazines and catalogs where these end uses are suffering from "(1) the continued migration of commercial advertising from print to digital media; and (2) the rapid decline in subscription rates for print periodicals such as newspapers and magazines."<sup>53</sup> The decline has been occurring since 2007 and is expected to continue into the foreseeable future. Under such demand conditions, the entry of a low-cost producer

<sup>&</sup>lt;sup>50</sup> C-237, USITC Pub. 4583, at II-2 and II-14-II-15.

<sup>&</sup>lt;sup>51</sup> RISI's monthly Paper Trader publication reports on the North American SCP market and reports on SCP supply and demand in North America, for example *see* C-216, RISI Paper Trader January 2013 at p. 9 and C-237, USITC Pub. 4583 fn. 11 at I-6 referencing "Port Hawkesbury's postconference brief, exh. 1, attachment F (citing statistics from the Pulp and Paper Counsel)."

<sup>52</sup> There is no dispute that the industry is facing a secular decline.

, and the NSG acknowledged the decline of the industry. See C-163, CAN00004\_001923; C-124, Nova Scotia House Third Session (November 2, 2011), p. 3009: https://nslegislature.ca/legislative-business/hansard-debates/assembly-61-session-3/house\_11nov02.

<sup>53 &</sup>quot;The parties agree that U.S. demand for SC paper has been declining in recent years and will continue to decline with the migration from print to electronic media. Commercial advertising has increasingly moved from print to digital online media as the circulation of print periodicals such as newspapers and magazines has declined. The record indicates that the trend is not unique to SC paper; printed paper products have generally experienced a decline in demand." C-237, USITC Pub. 4583, Views of the Commission, at 13 (internal citations omitted); "All parties have attested to a secular decline in consumption of SC paper during the period of investigation. This secular decline is primarily caused by two cultural shifts in the market: (1) the continued migration of commercial advertising from print to digital online media; and (2) the rapid decline in subscription rates for print periodicals such as newspapers and magazines. Petitioner's prehearing brief, pp. 14-15, and 22; Petitioner's postconference brief, p. 15; Respondent Port Hawkesbury's prehearing brief, p. 11; Respondent Port Hawkesbury's postconference brief, p. 3; Conference transcript, p. 64 (Johnston)("The industry, I think, would tend to be happy if the demand decline were only 5 percent. But it continues to be even greater than that from year to year. There have been blips here and there, but the overall trend since 2007, which was at the peak in the market, has been down significantly since then.")." C-237, USITC Pub. 4583, fn. 13 at IV-5.

funded by a Government-sponsored benefits package creates additional downward price pressure, lowers competitor's profits, creates market-related downtime, and hastens the exit of higher cost producers.

37. Third, SCP products from all North American producers are commodity-like products that are highly substitutable and sold primarily on the basis of price.<sup>54</sup> While the industry sells products ranging from grades SNC to SCA++, "the grades, however, are not established industry standards, and vary from producer to producer."<sup>55</sup> Further, "there is significant competition between adjacent grades of SC paper"<sup>56</sup> and "{p}urchasers indicated that relatively small price differences are sufficient to lead a purchaser to switch to an adjacent grade of SC paper."<sup>57</sup> Thus, prices for SCP grades tend to move together<sup>58</sup> and typically price cuts in one grade are quickly transmitted throughout all SCP prices. Individual producers are not insulated from market conditions as customers generally contact multiple producers before placing an order.<sup>59</sup> Since SCP is almost always made to order and not shipped out of inventory,<sup>60</sup> there is considerable pricing transparency as the negotiation process repeats itself on a regular basis as customers place new orders. And customers use

<sup>&</sup>lt;sup>54</sup> "The record indicates a relatively high degree of substitutability between domestically produced SC paper and SC paper imported from Canada." C-237, USITC Pub. 4583, Views of the Commission at 16.

<sup>&</sup>lt;sup>55</sup> C-237, USITC Pub. 4583, Views of the Commission at 15.

<sup>&</sup>lt;sup>56</sup> C-237, USITC Pub. 4583, Views of the Commission at 15.

<sup>&</sup>lt;sup>57</sup> C-237, USITC Pub. 4583, Views of the Commission at 15.

<sup>,</sup> see C-163, CAN000004\_0024.

<sup>&</sup>lt;sup>59</sup> "U.S. producers and subject importers both reported that 100.0 percent of their commercial shipments were produced-to-order." C-237, USITC Pub. 4583 at II-14. *See*, also, II-18; Tr. at 76 (McGill).

<sup>&</sup>lt;sup>60</sup> C-237, USITC Pub. 4583, Views of the Commission at 16 and at VI-3.

price offers from rival suppliers in these negotiations, again contributing to price transparency. In addition, purchasers typically have meet-or-release clauses built into their contracts further propagating the transmission of lower prices through the market. In conclusion, any increase in the supply of PHP's SCP will negatively affect the price of all SCP sold in the North American market consistent with straightforward economic analysis.

38. Finally, SCP mills must operate at or near full capacity. SCP is a capital-intensive industry where mills must be built to an efficient minimum scale, and where production is concentrated in a few large producers. Because of the machinery required to produce SCP, producers run their paper machines on a near continuous basis to maximize efficiency. Since producers must run at or near full capacity, mills will produce at capacity regardless of changes in price until prices fall below variable costs and the mill is shut down. Once a mill is opened or reopened, it must ramp up to full capacity.

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<sup>&</sup>lt;sup>61</sup> C-237, USITC Pub. 4583, Views of the Commission at 16.

<sup>&</sup>lt;sup>62</sup> In 2015, the USITC identified six North American SCP producers, two U.S. Producers, Madison and Verso, and four Canadian producers: Catalyst, Irving, Port Hawkesbury, and Resolute. Resolute was identified as a U.S. and Canadian producer in the USITC investigation, but for the purposes of this discussion, I consider Resolute to be a U.S. entity with production in Canada. Since the USITC hearing, it is my understanding that Madison closed in May 2016, leaving five remaining producers in North America. I am not aware of any Mexican SCP producers. *See* C-239, "Paper Market Update: April 2016." Quad Graphics.

<sup>&</sup>lt;sup>63</sup> "The production of SC paper is capital intensive, and the parties agree that producers seek to run their paper machines on a near continuous basis to maximize efficiency." C-237, USITC Pub. 4583, Views of the Commission at 14.

<sup>&</sup>lt;sup>64</sup> "Both petitioner and respondents agreed that the production of SC paper is a capital-intensive activity and that high, virtually 100 percent, capacity utilization rates are necessary for the economic viability of individual paper mills. fn. 12 (... All parties testified that paper mills are designed to run "24/7" with very little scheduled downtime for maintenance. Petitioner's prehearing brief, pp. 10-11; Petitioner's postconference brief, pp. 14-15; Port Hawkesbury's postconference brief, p. 8.) C-237, USITC Pub. 4583, Views of the Commission at 16.

<sup>&</sup>lt;sup>65</sup> Mills can close either temporarily on hot idle or permanently depending on expectations of future prices.

- 39. The supply conditions described above result in a stepped industry supply curve. The lowest cost mill will produce at its capacity once price exceeds its variable cost or, alternatively, remain idled (or shuttered) at prices below variable cost. <sup>66</sup> The second most efficient firm will then begin production once price exceeds *its* higher variable cost. Likewise, with each successive mill as ranked by efficiency. This cost structure results in a supply curve where production is stepped rather than continuous as prices increase, each mill supplies its full capacity once its variable cost is reached.
- 40. The graph below shows a theoretical stepped supply curve with three producers, where each vertical segment represents a mill supply curve and the horizontal segments represent the variable cost threshold. Above variable cost, a mill produces at capacity. So, Mill 1 begins production of Q<sub>Mill 1</sub> when prices exceed VC<sub>Mill 1</sub>, its variable cost, Mill 2 produces Q<sub>Mill 2</sub> when prices reach VC<sub>Mill 2</sub>, and so on. With the addition of a market demand curve, D, we can see that equilibrium output is Q\* and equilibrium price is P\*. Market prices remain above Mill 3's variable cost so it produces to capacity. However, should the market price fall below the variable cost of Mill 3, i.e. P\*< MC<sub>Mill 3</sub>, Mill 3 ceases production. 67

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<sup>&</sup>lt;sup>66</sup> For purposes of exposition, we assume that individual firm supply is perfectly inelastic, meaning the mill either operates at full capacity or is idle. Actual SCP mills can take market downtime (in addition to regular maintenance downtime) under severe market conditions. Typically, however, this downtime is sporadic and short lived. The data reviewed on this record suggest that plants still operate at over 90 percent of capacity even when taking market downtime. Consistent with the discussion above, significant expected downtime leads either to the hot idling of the mill, like the PHP facility before its restart, or permanent shuttering.

<sup>&</sup>lt;sup>67</sup> Under these circumstances, the equilibrium price will be determined by the intersection of the supply curve of the least productive mill (Mill 2) and the demand curve.

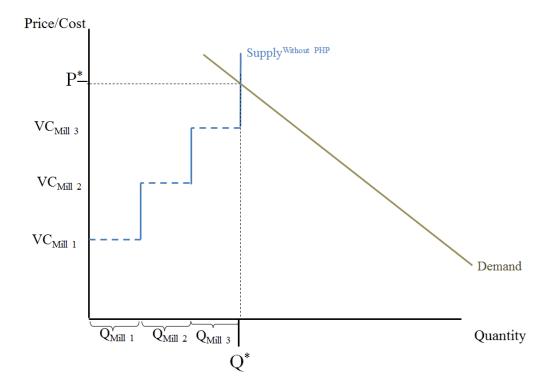


Figure 1: Theoretical Supply Curve in the SCP Market

#### B. The Effects of PHP's Full Re-Entry on the SCP Market

41. The full re-entry of the Port Hawkesbury SCP mill in 2013<sup>68</sup> added significant low-cost capacity<sup>69</sup> to the market in direct competition with the other North American SCP producers, including Resolute.<sup>70</sup> PHP has accounted for about 20 to 25 percent of North

<sup>68</sup> As stated above, while the mill restarted in 2012, the effects of the restart occured in 2013. "With the passage of time we will now be in the fourth quarter of this year before the Mill restarts, and the remainder of 2012 will be primarily recommencement and ramp-up of Mill operations to commence filling 2013 orders. We do not anticipate positive net earnings in 2012, and the first true operational year is 2013." C-197; PWCC Evidence at 4; *see also* C-236, USITC Final Transcript at 239:22-241:3. This is consistent with the Tribunal's findings in the SOL phase of this

proceeding.

 $<sup>^{69}</sup>$  The purchase of the Port Hawkesbury mill was contingent on it being the lowest cost SCP mill in the world. Section V of this report.

<sup>&</sup>lt;sup>70</sup> PHP has accounted for about 20 to 25 percent of North American SCP capacity since its full re-entry in 2013. According to a competing paper company executive, PHP's capacity is about 25 percent of the market. C-236, USITC Final Hearing Transcript at 52:7-9; PHP's mill data sheet states that PHP's capacity is 21 percent of the North

American SCP capacity since 2013. The sheer magnitude of the capacity increase; the fact that the capacity must be put to use;<sup>71</sup> the secular decline of the SCP industry; and the commodity-like nature of the product; reinforce the economic conclusion that the supply increase had large negative effects on PHP's competitors.<sup>72</sup>

- 42. As an economic matter, the question I address is the "but for" effect of PHP's full re-entry on market prices. Basic economics instructs that market prices are set at the intersection of supply and demand. An increase in supply will lower market prices and increase equilibrium quantities. *Microeconomics*, a well known undergraduate economics textbook by Pindyck and Rubinfeld, explains the basic elements of supply and demand analysis in Chapter 2, as it is a basic fundamental tenet of microeconomics.<sup>73</sup>
- 43. In Figure 2 below, I graph the effect of PHP on equilibrium prices and quantities in the North American SCP market. As in Figure 1, each vertical line represents a single mill. The dashed horizontal lines represent when price equals variable cost at a particular mill, *i.e.*, the minimum price at which that individual mill would operate.<sup>74</sup> The mill at the far

American market. C-248, (Port Hawkesbury Mill Datasheet). Quad Graphics estimates PHP accounted for 25 percent of North American capacity in 2016. *See* C-239, "Paper Market Update: April 2016." Quad Graphics.

<sup>71</sup> C-228, Supercalendered Paper from Canada, Inv. No. 701-TA-530 (Preliminary): Post-Conference Brief of Port Hawkesbury Paper LP (March 25, 2015).

<sup>72</sup> The Commission found that: "{b}ecause the Canadian producers have a \*\*\* and over \*\*\* percent of their shipments were to the United States during 2013 and 2014, *the reopening of the PHP mill effectively added supply to the U.S. market*." (emphasis added.) C-237, USITC Pub. 4583, Views of the Commission at 14-15 and "PHP argues that the restart of its mill at the end of 2012 did not change the demand/supply balance. PHP's Prehearing Brief at 23-25. We disagree." C-237, Views of the Commission at 18, fn. 109.

<sup>73</sup> As explained by Pindyck and Rubinfeld, "When the supply curve shifts to the right, the market clears at a lower price...and a larger quantity. "Robert Pindyck and Daniel Rubinfeld. "Chapter 2: The Basics of Supply and Demand." C-104, *Microeconomics*. Sixth Edition. (2005) page 25.

<sup>74</sup> It is a basic tenet of economics that 1) the industry supply curve is the summation of each firm's individual supply curve and 2) in a competitive market, prices are equal to the marginal cost of the most inefficient firm, *i.e.*, the intersection of the industry's supply and demand curves. Pindyck and Rubinfeld explain: "The short-run industry

left of the graph has the lowest variable costs.<sup>75</sup> The equilibrium price and quantity without PHP is P\* and Q\*, the intersection of the market demand curve, Demand, and the supply curve, Supply<sup>Without PHP</sup>. Note that the market supply without PHP is equal to the output of all three existing mills operating at full capacity.

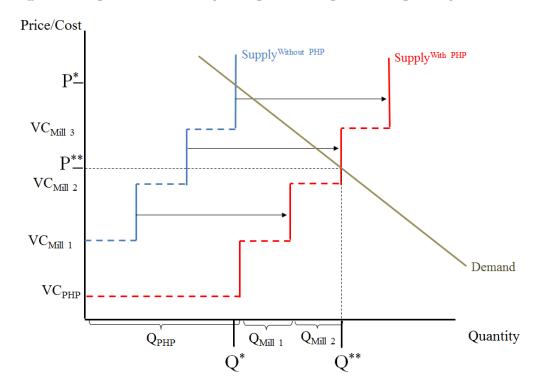


Figure 2. Impact of PHP entry on equilibrium price and quantity in the SCP market

44. The entry of PHP is illustrated by the entry of a new lost-cost producer at the lower left of the graph with a VC of  $VC^{PHP}$ . This causes the whole supply curve to shift to the right to Supply With PHP. Equilibrium prices fall from  $P^*$  to  $P^{**}$  while equilibrium quantities increase from  $Q^*$  to  $Q^{**}$ . Note that while equilibrium quantities increased, prices have fallen below

supply cuve is the summation of the supply curves of the individual firms." C-104, *Microeconomics*. Sixth Edition. (2005) page 277.

<sup>&</sup>lt;sup>75</sup> As in all such graphs, the lower cost producers are to the left of the higher-cost producers.

- the variable costs of the high-cost mill on the upper right of the curve, Mill 3, and it ceases operations.
- 45. As discussed above, the SCP industry is facing a secular decline in demand. The graph below illustrates the gradual inward shift of the demand curve and the consequent declines in equilibrium prices and quantities. A decline in demand causes the demand curve to shift to the left, as shown by the shift of the curve from Demand<sub>1</sub> to Demand<sub>2</sub>. This causes the equilibrium price to decline from P<sub>1</sub> to P<sub>2</sub> with quantity remaining unchanged as Mill 3 continues to produce.
- 46. As demand continues to decrease, the equilibrium price will decrease below the marginal cost of the high cost firm, Mill 3, and it would exit the market. The new equilibrium price and quantity would now be at the intersection of Demand<sub>3</sub> and the vertical supply curve of Mill 2. The equilibrium quantity now becomes Q<sub>3</sub>. Prices may temporarily increase above the prior equilibrium, P<sub>2</sub>, given the amount of capacity that leaves the market by the closure of the high cost mill. However, as the secular decline in demand continues, prices will decrease below the prior equilibrium price. This process will continue unil the equilibrium price falls below the variable cost of Mill 2, now the new high cost mill at which point it would exit the market. The process would repeat itself as long as demand continues to decline with the remaining highest cost mill exiting along the stepped supply curve.

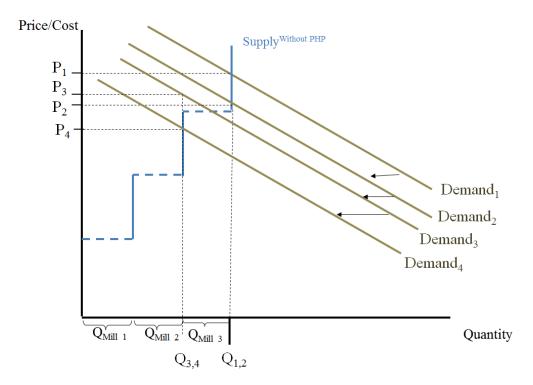


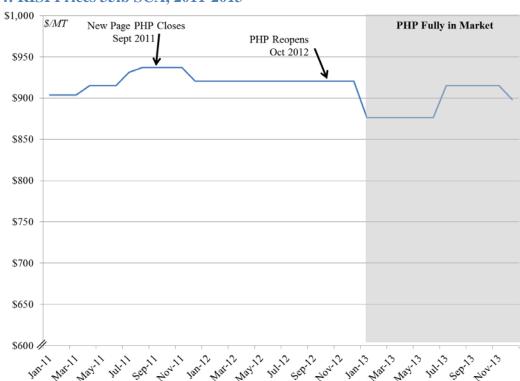
Figure 3: Theoretical Demand Curve in SCP Market without PHP

47. Based on the conditions of competition laid out above, it is easy to understand how PHP's full re-entry had significant negative effects for SCP producers, including Resolute's three SCP mills in Kénogami, Laurentide, and Dolbeau. PHP added over 20 percent to industry capacity in 2013 that resulted in negative effects on Resolute's prices and shipments.<sup>76</sup>

<sup>&</sup>lt;sup>76</sup> The USITC reached a similar conclusion: PHP increased market supply and that increase in supply depressed market prices. "PHP argues that the restart of its mill at the end of 2012 did not change the demand/supply balance. PHP's Prehearing Brief at 23-25. We disagree." C-237, USITC Pub. 4583, Views of the Commission at 18, fn. 109; "Because the Canadian producers have a \*\*\* and over \*\*\* percent of their shipments were to the United States during 2013 and 2014, the reopening of the PHP mill effectively added supply to the U.S market." C-237, USITC Pub. 4583, Views of the Commission at 14-15.

<sup>&</sup>quot;As noted, the record also indicates that, because domestic producers seek to run their mills at high capacity utilization, domestic mills have priced their product competitively to maintain their sales volumes. Consequently, the need to match or beat competition from the significant and increasing volume of low-priced subject imports explains the magnitude of the price declines. We therefore find that subject imports depressed prices for domestically produced SC paper to a significant degree." (footnotes suppressed) C-237, USITC Pub. 4583, Views of the Commission at 21-22." While the ITC referenced the impact of the increased volume on U.S. producer prices, as is its charge, the impact was on North American producer prices because the relevant market is North America. Thus, the increase in PHP supply depressed prices for all North American producers.

- Today, PHP represents about 25 percent of industry capacity as demand has continued to decline.
- 48. Another way to illustrate the negative price effects of PHP's full re-entry is to look at market prices soon after PHP's ramp-up in production.<sup>77</sup> The addition of 360,000 MT of capacity of SCP from the low-cost producer led to a substantial price decrease, as shown in the graph below of RISI prices.<sup>78</sup>



**Figure 4: RISI Prices 35lb SCA, 2011-2013** 

Source: RISI

<sup>77</sup> "With the passage of time we will now be in the fourth quarter of this year before the Mill restarts, and the remainder of 2012 will be primarily recommencement and ramp-up of Mill operations to commence filling 2013 orders. We do not anticipate positive net earnings in 2012, and the first true operational year is 2013." C-197, PWCC Evidence at 4; see also C-236, USITC Final Transcript at 239:22-241:3.

<sup>&</sup>lt;sup>78</sup> RISI prices are a standard source of price data in the industry.

49. Prior to PHP's full re-entry, prices were stable following the closure of the then NewPage Port Hawkesbury Mill in September 2011.<sup>79</sup> After PHP's full re-entry with costs lowered through the NSG's benefits package measures, it was able to ramp up to produce high quality SCP at artificially low costs. These downward price pressures resulted in lost profits for Resolute.<sup>80</sup>

#### VII. Conclusion

- The full re-entry of the PH mill introduced 360,000 MT of SCP capacity to a declining market with moderately elastic demand. This significant addition of supply was not due to, or met with, a significant increase in demand, thus, prices for SCP fell. This fall in prices caused higher-cost mills to exit the market and led to profit declines for the mills that remained in the market. The PHP mill would not have opened were it not for the entire benefits package the NSG gave PWCC. It is clear in the documents submitted and in public statements that it was essential for the NSG and PWCC that the PHP mill open as the lowest cost producer of SCP in North America.
- The NSG's actions impacted adversely the profitability of Resolute's three mills, Kénogami, Dolbeau, and Laurentide, as the NSG assistance offset the costs for a direct competitor. The benefits package changed over the course of the negotiation process, but it is clear that PWCC received enough aid to restart the mill with artificially low costs.

<sup>&</sup>lt;sup>79</sup> Multiple closures occurred in 2011. However, the decrease in supply was offset by declining demand, and prices were relatively stable.

<sup>&</sup>lt;sup>80</sup> See Dr. Hausman's Expert Witness Statement of December 28, 2018.

I affirm my genuine belief of the opinions expressed in this Expert Report.

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Dr. Seth T. Kaplan is an expert in the economics of international trade disputes, including antidumping, countervailing duty, and escape clause Section 337 investigations. He has provided expert testimony and prepared submissions for petitioners and respondents in over 100 investigations involving a wide range of high-tech, industrial, consumer, and agricultural products. He has also worked on behalf of clients in international arbitrations, antitrust matters, intellectual property litigation, and commercial damages.

Dr. Kaplan is President of International Economic Research LLC. He also acts as a Senior Economic Advisor to Capital Trade, Incorporated. Dr. Kaplan has served as Principal and Director of The Brattle Group, and as Vice President and head of the International Trade Practice at CRA International. He also served as a Staff Economist at the U.S. International Trade Commission and as Director of Economic Research at Trade Resources Company. Dr. Kaplan taught international economics at The George Washington University from 1990 to 1998 and has published numerous articles on issues involving international trade and commercial policy. Dr. Kaplan has a Ph.D. in Economics from Michigan State University.

#### PROFESSIONAL EXPERIENCE

2011-present	President, International Economic Research LLC
2011-present	Senior Economic Advisor, Capital Trade, Incorporated
2007-2011	Principal and Director, The Brattle Group
1998–2007	Vice President and Head of the International Trade Practice, CRA International
1991–1998	Director of Economic Research, Trade Resources Company
1990–1998	Professorial Lecturer, Department of Economics, The George Washington University
1987–1991	Economist, Research Division, Office of Economics, U.S. International Trade Commission
1987–1988	Economist for the Chairman, (Detail), U.S. International Trade Commission
1986–1987	Visiting Assistant Professor, Aquinas College
1984–1986	Visiting Instructor, University of Michigan-Dearborn

#### EXPERT BEFORE THE U.S. INTERNATIONAL TRADE COMMISSION

#### **Section 337 Investigations**

- Certain Electrical Connectors, Components Thereof, and Products Containing the Same, Investigation No. 337-TA-1043. J.S.T. Corporation v. Robert Bosch GmbH; Bosch Automotive Products (Suzhou) Co., Ltd.; Robert Bosch LLC; Robert Bosch, Sistemas Automotrices, S.A. de C.V.; Robert Bosch Ltda.; Hon Hai Precision Industry Co., Ltd.; and Foxconn Interconnect Technology, Ltd. Retained by Complainant. Expert Report, Deposition, and Trial Testimony
- Sulfentrazone, Sulfentrazone Compositions, and Processes for Making Sulfentrazone, No. 337-TA-914. FMC Corporation v. Beijing Nutrichem Science and Technology Stock Co., Ltd.; Summit Argo USA, LLC; Summit Argo North America; and Jiangxi Hey Chemicals Co. Ltd. Retained by Summit Argo USA, LLC and Summit Argo North America. TEO Phase: Rebuttal Expert Report, Deposition, and Trial Testimony. Final Phase: Rebuttal Expert Report and Trial Testimony
- Certain Lithium Silicate Materials and Products Containing the Same, No. 337-TA-911. Ivoclar Vivadent AG, Ivoclar Vivadent Inc., and Ivoclar Vivadent Manufacturing Inc. v. Dentsply International Inc., Dentsply Prosthetics U.S. LLC, and DeguDent GmbH. Retained by Respondents. Rebuttal Expert Report
- Acousto-Magnetic Electronic Article Surveillance Systems, Components Thereof, and Products
  Containing Same, No.337-TA-904. Tyco Fire & Security GmbH; Sensomatic Electronics, LLC;
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  Signatronic Corporation. Retained by Complainants. Expert Report and Deposition
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   International, Inc. v. Veteria Laboratories; BioVeteria Life Sciences, LLC; Instituto Bioclon S.A. de C.V.; Laboratorios Silanes SA de CV; The Silanes Group; and Rare Disease Therapeutics, Inc. Retained by Instituto Bioclon S.A. de C.V.; Laboratorios Silanes SA de CV; and Rare Disease Therapeutics, Inc. Expert Report, Rebuttal Expert Report, and Deposition

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- Certain Rubber Resins and Processes for Manufacturing Same, No. 337-TA-849. SI Group, Inc. v. Sino Legend Chemical Co., Ltd.; RedAvenue Chemical Corp. of America; Precision Measurement International LLC; Thomas R. Crumlish, Jr.; Ning Zhang; Quanhai Yang; and Shanghai Lunsai International Trading Company. Retained by Sino Legend Chemical Co, Ltd. Rebuttal Expert Report and Trial Testimony
- Certain Devices for Mobil Data Communications, No. 337-TA-845. Rovi Corporation; Rovi Guides, Inc.; United Video Properties, Inc.; Gemstar Development Corporation; and Index Systems, Inc. v. LG Electronics; Mitsubishi Electric Corp.; Netflix, Inc.; Roku, Inc.; and Vizio, Inc. Retained by Complainant. Expert Report, Rebuttal Expert Report, Deposition, and Trial Testimony
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- Certain Electronic Devices with Communication Capabilities, Components Thereof, and Related Software, No. 337-TA-799. MyKey Technology, Inc. v. Data Protection Solutions by Arco; CRU Acquisitions Group LLC; CRU-DataPort LLC; Digital Intelligence, Inc.; Diskology, Inc.; Guidance Software, Inc; Guidance Tableau LLC; Ji2, Inc.; MultiMedia Effects, Inc.; Voom Technologies, Inc; and YEC Co. Ltd. Retained by Respondents CRU and Guidance. Rebuttal Expert Report and Trial Testimony
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- Static Random Access Memories and Products Containing Same, Investigation No. 337-TA-792. Cypress Semiconductor Corporation v. GSI Technology, Inc.; Alcatel-Lucent; Alcatel-Lucent USA, Inc.; Telefonaktiebolaget LM Ericsson; Ericsson Inc.; Motorola Solutions, Inc.; Motorola Mobility, Inc.; Arrow Electronics, Inc.; Nu Horizons Electronics Corp.; Cisco Systems, Inc.; Hewlett Packard Company/Tipping Point; Avnet, Inc.; Nokia Siemens Networks US, LLC; Nokia Siemens Networks B.V.; and Tellabs. Retained by Complainant. Expert Report, Rebuttal Expert Report, and Deposition
- Certain Hand Held Electronic Computing Devices, Related Software and Components Thereof, Investigation No. 337-TA-769. Microsoft Corporation v. Barnes & Noble, Inc.; barnesandnoble.com LLC; Hon Hai Precision Industry Co., Ltd; Foxconn Electronics, Inc.; Foxconn Precision Component (Shenzhen) Co.; Foxconn International Holdings Ltd.; and Inventec Corporation. Retained by Complainant. Expert Report, Supplemental Report, Deposition, and Trial Testimony
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- Certain Muzzle-Loading Firearms and Components Thereof, Investigation No. 337-TA-777.
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  Cooperativa Limitada; Bergara Barrels Europe; Blackpowder Products Inc.; Connecticut Valley
  Arms; Bergara Barrels North America; Ardesa Firearms; and Traditional Sporting Goods, Inc..
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  Deposition, and Trial Testimony
- Certain Gaming and Entertainment Consoles, Related Software, and Components Thereof, Investigation No. 337-TA-752. Motorola Mobility, Inc. and General Instruments Corporation v. Microsoft Corporation. Retained by Respondent. Rebuttal Expert Report, Supplemental Report, and Deposition
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  Corporation v. Medical Depot, Inc., d/b/a Drive Medical Design and Manufacturing and
  Shanghai Shunlong Physical Therapy Equipment. Retained by Respondents. Expert Report
  and Rebuttal Expert Report
- Certain Large Scale Integrated Circuit Semiconductor Chips and Products Containing the Same, Investigation No. 337-TA-716. Panasonic Corporation v. Freescale Semiconductor, Inc., Mouser Electronics, Inc., Newark Electronics Corporation, and Motorola Inc. Retained by Panasonic Corporation. Expert Report and Deposition
- Certain Multimedia Display and Navigation Devices and Systems, Components Thereof, and Products Containing Same, Investigation No. 337-TA-694. Pioneer Corporation and Pioneer Electronics (USA) v. Garmin Corporation, Garmin International, Inc, and Honeywell International, Inc. Retained by Garmin Corporation and Garmin International, Inc. Expert Report, Supplemental Report, Deposition, and Trial Testimony
- Printing and Imaging Devices and Components Thereof, Investigation No. 337-TA-690. Ricoh Company, Ltd., Ricoh Americas Corporation and Ricoh Electronics, Inc. v. Oki Data Corporation and Oki Data Americas, Inc. Retained by Respondent. Expert Report
- Certain DC-DC Controllers and Products Containing Same, Investigation No. 337-TA-698.
   Richtek Technology Corporation and Richtek USA, Inc. v. uPI Semiconductor Corp., Advanced Micro Devices, Inc., Sapphire Technology Limited, Diamond Multimedia, Inc., XFX Technology, Inc., Micro-Star International Co., Ltd., MSI Computer Corp., and VisionTek Products LLC.
   Retained by Complainants. Expert Report, Supplemental Report, Second Supplemental Report, and Deposition
- Certain Video Displays, Components Thereof, and Products Containing Same, Investigation No. 337-TA-687. LG Electronics v. Vizio, Inc., AmTRAN Technology Co. Ltd. and AmTRAN Logistics, Inc. Retained by Complainants. Expert Report and Deposition
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- Certain Silicon Microphone Packages and Products Containing the Same, Investigation No. 337-TA-695. Knowles Electronics LLC v. Analog Devices, Inc. Retained by Respondents. Expert Report, Rebuttal Expert Report, Deposition, and Trial Testimony
- Certain Mobile Telephones and Wireless Communication Devices Featuring Digital Cameras, and Components Thereof, Investigation No. 337-TA- 663. Eastman Kodak Company v. Samsung Electronics Company, Ltd., Samsung Electronics America, Inc., Samsung Telecommunications America, Inc., LG Electronics, Inc., LG Electronics USA, Inc., and LG Electronics MobileComm USA, Inc. Retained by Respondents. Rebuttal Expert Report and Deposition

- Certain Short Wavelength Semiconductor Lasers and Products Containing the Same, Investigation No. 337-TA-627. Seoul Semiconductor Company, Ltd. v. Nichia Corporation, Hitachi, Ltd., Hitachi America, Ltd. Panasonic Communications Co., Ltd. Matsushita Electric Industrial Co., Ltd., and LaCie Ltd. Retained by Respondent Nichia Corporation. Expert Report and Rebuttal Expert Report
- Certain Refrigerators and Components Thereof, Investigation No. 337-TA-632. Whirlpool
  Patents Company, Whirlpool Manufacturing Corporation, Whirlpool Corporation, and Maytag
  Corporation v. LG Electronics, Inc., LG Electronics USA, Inc., and LG Electronics Monterrey
  Mexico, S.A., De, CV. Retained by Complainants. Expert Report, Rebuttal Expert Report,
  Deposition, and Trial Testimony
- Certain Liquid Crystal Display Devices and Products Containing Same, Investigation No. 337-TA-631. Samsung Electronics Company, Ltd. v. Sharp Corporation, Sharp Electronics Corporation, and Sharp Electronics Manufacturing. Retained by Complainant. Expert Report, Supplemental Report, Deposition, and Trial Testimony
- Certain Semiconductor Devices, DMA Systems, and Products Containing Same, Investigation No. 337–TA–607. Samsung Electronics Company, Ltd., Korea v. Renesas Technology Corporation, Japan and Renesas Technology America, Inc. Retained by Complainants. Expert Report, Supplemental Report, Deposition, and Trial Testimony
- Certain Dynamic Random Access Memory Devices and Products Containing Same, Investigation No. 337–TA–595. Renesas Technology Corporation, Tokyo Japan v. Samsung Electronics Company, Ltd., Korea, and Samsung Electronics America, Inc. Retained by Respondents. Expert Report and Deposition
- Certain Baseband Processor Chips and Chipsets, Transmitter and Receiver (Radio) Chips, Power Control Chips, and Products Containing Same, Including Cellular Telephone Handsets, Investigation No. 337–TA–543. Broadcom Corporation v. Qualcomm Incorporated. Retained by Respondents. Presidential Review Phase
- Certain Flash Memory Devices and Components Thereof, and Products Containing Such
  Devices and Components, Investigation No. 337-TA-552. Toshiba Corporation v. Hynix
  Semiconductor, Inc. and Hynix Semiconductor America, Inc. Retained by Complainant. Expert
  Report, Supplemental Report, Second Supplemental Report, Deposition, and Trial Testimony
- Certain Insulin Delivery Devices, Including Cartridges Having Adaptor Parts, and Components
  Thereof, Investigation No. 337-TA-572. Novo Nordisk A/S, Novo Nordisk Inc., and Novo
  Nordisk Pharmaceuticals Industries, Inc. v. Sanofi-Aventis Deutschland GmbH, Sanofi-Aventis,
  and Aventis Pharmaceuticals, Inc. Retained by Respondents
- Certain Male Prophylactic Devices, Investigation No. 337-TA-546. Portfolio Technologies Inc.
   v. Church & Dwight Company, Inc. and Reddy Medtech, Ltd. Retained by Church & Dwight Company, Inc. Expert Report and Trial Testimony

- Microlithographic Machines and Components Thereof, Investigation No. 337-TA-468. Nikon Corporation Nikon Precision Inc. and Nikon Research Corporation of America v. ASML Holding N.V., ASML Netherlands B.V., and ASM Lithography, Inc. Retained by Respondents.
   Presidential Review Phase
- Certain Universal Transmitters for Garage Door Openers, Investigation No. 337-TA-497
   Chamberlain Group, Inc. v. Skylink Technologies, Inc., Capital Prospect, Ltd., and Phillip Tsui.
   Retained by Respondents
- Certain Single In-Line Memory Modules, Investigation No. 337-TA-336. Retained by Respondents

# **Antidumping and Countervailing Duty Investigations**

- Large Diameter Welded Pipe from Canada, China, Greece, India, Korea, and Turkey, Investigation Nos. 701-TA-593-596 and 731-TA-1401-1406 (Witness)
- Plastic Decorative Ribbon from China, Investigation Nos. 701-TA-592 and 731-TA-1400 (Witness)
- Stainless Steel Flanges from China and India, Investigation Nos. 701-TA-585-586 and 731-TA-1383-1384 (Witness)
- Hardwood Plywood from China, Investigation Nos. 701-TA-565 and 731-TA-1341 (Witness)
- Steel Concrete Reinforcing Bar from Japan, Taiwan, and Turkey, Investigation Nos. 701-TA-564 and 731-TA-1338-1340 (Witness)
- Certain Hot-Rolled Steel Flat Products from Australia, Brazil, Japan, Korea, the Netherlands, Turkey, and the United Kingdom, Investigation Nos. 701-TA-545-547 and 731-TA-1291-1297
- Certain Cold-Rolled Steel Flat Products from Brazil, China, India, Japan, Korea, Netherlands, Russia and the United Kingdom, Investigation Nos. 701-TA-540-544 and 731-TA-1283-1290
- Certain Corrosion-Resistant Steel Products from China, India, Italy, Korea, and Taiwan, Investigation Nos. 701-TA-534-538 and 731-TA-1274-1278
- Supercalendared Paper from Canada, Investigation No. 701-TA-930 (Witness)
- Silicomanganese from Australia, Investigation No. 731-TA-1269 (Witness)
- Certain Passenger Vehicle and Light Truck Tires from China, Investigation Nos. 701-TA-522 and 731-TA-1258 (Witness)
- Certain Uncoated Paper from Australia, Brazil, China, Indonesia, and Portugal, 701-TA-528-529 and 731-TA-1264-1268
- Certain Crystalline Silicon Photovoltaic Products from China and Taiwan, Investigation Nos. 701-TA-511 and 731-TA-1246-1247 (Witness)

- Sugar from Mexico, Investigation Nos. 701-TA-513 and 731-TA-1249 (Witness)
- Steel Concrete Reinforcing Bar from Mexico and the Republic of Turkey, Investigation Nos. 701-TA-502 and 731-TA-1227-1228 (Witness)
- Oil Country Tubular Goods from India, the Republic of Korea, the Republic of the Philippines, Saudi Arabia, Taiwan, Thailand, the Republic of Turkey, Ukraine, and the Socialist Republic of Vietnam., Investigation Nos. 701-TA-499-500 and 731-TA-1215-1223 (Witness)
- Crystalline Silicon Photovoltaic Cells from China, Investigation Nos. 701-TA-481 and 731-TA-1190 (Witness)
- Narrow Woven Ribbons with Woven Selvedge from China and Taiwan, Investigation Nos. 701-TA-467 and 731-TA-1164-1165 (Witness)
- Certain Steel Grating from China, Investigation Nos. 701-TA-465 and 731-TA-1161 (Witness)
- Certain Standard Fasteners from China and Taiwan, Investigation Nos. 701-TA-472 and 731-TA-1171-1172
- Certain Coated Paper Suitable for High-Quality Print Graphics Using Sheet-Fed Presses from China and Indonesia, Investigation Nos. 701-TA-470-471 and 731-TA-1169-1170 (Witness)
- Woven Electric Blankets from China, Investigation No. 731-TA-1163 (Witness)
- Oil Country Tubular Goods from China, Investigation Nos. 701-TA-463 and 731-1195 (Witness)
- Circular Welded Carbon-Quality Steel Line Pipe from China and Korea, Investigation Nos. 701-TA-455 and 731-TA-1149-1150 (Witness)
- Sodium Metal from France, Investigation No. 731-TA-1135 (Witness)
- Lightweight Thermal Paper from China, Germany, and Korea, Investigation Nos. 701-TA-451 and 731-TA-1126 and 1128 (Witness)
- Circular Welded Carbon-Quality Steel Pipe From China, Investigation Nos. 701-TA-447 and 731-TA-1116 (Witness)
- Certain Lined Paper School Supplies from China, India, and Indonesia, Investigation Nos. 701-TA-442-443 and 731-TA-1095-1097 (Witness)
- Diamond Sawblades and Parts Thereof from China and Korea, Investigation Nos. 731-TA-1092 and 1093 (Witness)
- Polyvinyl Alcohol from Taiwan, Investigation No. 731-TA-1088 (Witness)
- Certain Color Television Receivers from China and Malaysia, Investigation Nos. 731-TA-1034-1035 (Witness)

- Outboard Engines from Japan, Investigation No. 731-TA-1069 (Witness)
- Certain Aluminum Plate from South Africa, Investigation No. 731-TA-1056 (Witness)
- Oil Country Tubular Goods from Austria, Brazil, China, Colombia, France, Germany, India, Indonesia, Romania, South Africa, Spain, Turkey, Ukraine, and Venezuela, Investigation Nos. 701-TA-428 and 731-992-1105 (Witness)
- Cold-Rolled Carbon Steel Flat Products from Argentina, Australia, Belgium, Brazil, China, France, Germany, India, Japan, Korea, Netherlands, New Zealand, Russia, South Africa, Spain, Sweden, Taiwan, Thailand, Turkey, and Venezuela, Investigation Nos. 701-TA-422-425 and 731-TA-964-983 (Witness)
- Certain Structural Steel Beams from China, Germany, Italy, Luxembourg, Russia, South Africa, Spain, and Taiwan, Investigation Nos. 731-TA-875-880, and 882 (Witness)
- Softwood Lumber from Canada, Investigation Nos. 701-TA-414 and 731-TA-928 (Witness)
- Hot-Rolled Steel Products from Argentina, China, India, Indonesia, Kazakhstan, Netherlands, Romania, South Africa, Taiwan, Thailand, and Ukraine, Investigation Nos. 701-TA-404-408 and 731-TA-898-908 (Witness)
- Certain Cold-Rolled Steel Products from Argentina, Brazil, China, Indonesia, Japan, Russia, Slovakia, South Africa, Taiwan, Thailand, Turkey, and Venezuela, Investigation Nos. 701-TA-393-396 and 731-TA-829-840
- Certain Steel Concrete Reinforcing Bars from Austria, Belarus, China, Indonesia, Japan, Korea, Latvia, Moldova, Poland, Russia, Ukraine, and Venezuela, Investigation Nos. 731-TA-872-883 (Witness)
- Certain Expandable Polystyrene Resins from Indonesia and Korea, Investigations Nos. 731-TA-861-862 (Witness)
- Crude Petroleum Oil Product from Iraq, Mexico, Saudi Arabia, and Venezuela, Investigation Nos. 701-TA-397-400 and 731-TA-842-845
- Certain Seamless Carbon and Alloy Steel Standard, Line and Pressure Pipe from the Czech Republic, Mexico, and Romania, Investigation Nos. 731-TA-846, 848 and 849 (Witness)
- Certain Structural Beams from Germany, Japan, Korea, and Spain, Investigation Nos. 701-TA-401 and 731-TA-852-855 (Witness)
- Certain Non-Frozen Concentrated Apple Juice from China, Investigation No. 731-TA-841 (Witness)
- Creatine Monohydrate from the People's Republic of China, Investigation No. 731-TA-814 (Witness)
- Live Cattle from Canada, Investigation No. 731-TA-812 (Witness)

- Certain Emulsion Styrene Butadiene Rubber from Brazil, Korea and Mexico, Investigation Nos. 731-TA-794-796 (Witness)
- Atlantic Salmon from Chile, Investigation Nos. 701-TA-372 and 731-TA-768
- Static Random Access Memory Semiconductors from the Republic of Korea and Taiwan, Investigation Nos. 731-TA-761-762
- Certain Steel Wire Rod from Canada, Germany, Trinidad & Tobago, and Venezuela, Investigation Nos. 701-TA-368-371 and 731-TA-763-766
- Ultra High Temperature Milk from Canada, Investigation No. 731-TA-767
- Certain Laminated Hardwood Flooring from Canada, Investigation No. 701-TA-367 (Witness)
- Certain Pasta from Italy and Turkey, Investigation Nos. 701-TA-365-366 and 731-TA-734-735
- Open-End Spun Rayon Singles Yarn from Austria, Investigation No. 731-TA-751
- Vector Supercomputers from Japan, Investigation No. 731-TA-750 (Witness)
- Bicycles from the PRC, Investigation No. 731-TA-731 (Witness)
- Manganese Metal from the People's Republic Of China, Investigation No. 731-TA-724
- Phthalic Anhydride from Brazil, Hungary, Israel, Mexico, and Venezuela, Investigation Nos. 303-TA-2 and 701-TA-357-358 and 731-TA-664-668 (Witness)
- Circular Welded Non-Alloy Steel Pipe from Romania and South Africa, Investigation Nos. 731-TA-732-733 (Witness)
- Polyvinyl Alcohol from China, Japan, Korea, and Taiwan, Investigation Nos. 731-TA-726-727 and 729
- Certain Seamless Carbon and Alloy Steel Standard, Line and Pressure Pipe from Argentina, Brazil, Germany, and Italy, Investigation Nos. 701-TA-362 and 731-TA-707-710 (Witness)
- Magnesium from the People's Republic of China, Russia, and Ukraine, Investigation Nos. 731-TA-696-698 (Witness)
- Carbon Steel Pipe Nipples from Mexico, Investigation No. 731-TA-719
- Disposable Lighters from China and Thailand, Investigation No. 731-TA-700
- Furfuryl Alcohol from China, Thailand, and South Africa, Investigation Nos. 731-TA-703-705 (Witness)
- Aramid Fiber Formed of Poly-Phenylene Tereplithalamide from the Netherlands, Investigation No. 731-TA-652 (Witness)

- Color Negative Photographic Paper and Certain Chemical Components from Japan and the Netherlands, Investigation Nos. 731-TA-661--662 (Witness)
- Sulfur Dyes from China and the United Kingdom, Investigation Nos. 731-TA-548 and 551 (Witness)
- DRAMs of One Megabit and Above from Korea, Investigation No. 731-TA-556 (Witness)
- Certain Flat-Rolled Carbon Steel Products from Argentina, Australia, Austria, Belgium, Brazil, Canada, Finland, France, Germany, Italy, Japan, Korea, Mexico, the Netherlands, New Zealand, Poland, Romania, Spain, Sweden, Taiwan, and the United Kingdom, Investigation Nos. 701-TA-319-332, 334, 336-342, 344, and 347-353 and 731-TA-573-579, 581-592, 594-597, 599-609, and 612-619 (Witness)
- Magnesium from Canada, Investigation Nos. 701-TA-309-A-B and 731-TA-528 (Witness)
- Aspherical Ophthalmoscopy Lenses from Japan, Investigation No. 731-TA-518 (Witness)
- Ferrosilicon from Brazil, China Kazakhstan, Russia, Ukraine, and Venezuela, Investigation Nos. 303-TA-23, 731-TA-566-570, and 731-TA-641 and 751-TA-21-27 (Witness)
- Certain Stainless Steel Pipe from Korea and Taiwan, Investigation Nos. 731-TA-540-541
- Circular Welded Non-Alloy Steel Pipe from Korea, Mexico, Venezuela, Romania, and Brazil (Witness)
- High-Tenacity Rayon Filament Yarn from Germany and the Netherlands, Investigation Nos. 731-TA-530-531 (Witness)
- Refined Antimony Trioxide from the People's Republic of China, Investigation No. 731-TA-517
- Silicon Metal from Argentina, Brazil and China, Investigation No. 731-TA-470-472 (Witness)

#### **ITC Sunset Reviews**

- Crystalline Silicon Photovoltaic Cells and Modules from China, Investigation Nos. 701-TA-481 and 731-TA-1190 (Review) (Witness)
- Certain Coated Paper Suitable for High-Quality Print Graphics Using Sheet-Fed Presses from China and Indonesia, Investigation Nos. 701-TA-470-471 and 731-TA-1169-1170 (Review)
- Narrow Woven Ribbons with Woven Selvedge from China and Taiwan, Investigation Nos. 701-TA-467 and 731-TA-1164-1165 (Review) (Witness)
- Lightweight Thermal Paper from China and Germany, Investigation Nos. 701-TA-451 and 731-TA-1126 and 1127 (Review) (Witness)
- Steel Concrete Reinforcing Bar from Belarus, China, Indonesia, Latvia, Moldova, Poland and Ukraine, Investigation Nos. 731-TA-873-875, 877-880, and 882 (Second Review) (Witness)

- Certain Lined Paper School Supplies from China, India, and Indonesia, Investigation Nos. 701-TA-442-443 and 731-TA-1095-1097 (Review) (Witness)
- Tin- and Chromium-Coated Steel Sheet from Japan, Investigation No. 701-TA-860 (Second Review) (Witness)
- Certain Hot-Rolled Flat-Rolled Carbon-Quality Steel Products from Brazil, Japan, and Russia, Investigation Nos. 701-TA-384 (Second Review) and 731-TA-806-808 (Second Review) (Witness)
- Hot-Rolled Steel Products From Argentina, China, India, Indonesia, Kazakhstan, Netherlands, Romania, South Africa, Taiwan, Thailand, and Ukraine, Investigation Nos. 701-TA-404-408 and 731-TA-898-908 (Review) (Witness)
- Steel Concrete Reinforcing Bar from Belarus, China, Indonesia, Korea, Latvia, Moldova, Poland and Ukraine, Investigation Nos. 731-TA-873-875, 877-880, and 882 (Review) (Witness)
- Oil Country Tubular Goods from Argentina, Italy, Japan, Korea and Mexico, Investigation Nos. 701-TA-364 and 731-TA-713-716 (Second Review) (Witness)
- Certain Bearings from China, France, Germany, Italy, Japan, Singapore, and the United Kingdom, Investigation Nos. 731-TA-344, 391-A, 392-A and C, 393-A, 394-A, 396, and 399-A (Second Review) (Witness)
- Tin- and Chromium-Coated Steel Sheet from Japan, Investigation No. 701-TA-860 (Review)
   (Witness)
- Carbon and Alloy Seamless Standard, Line, and Pressure Pipe from Czech Republic, Japan, Mexico, Romania, and South Africa, Investigation Nos. 731-TA-846-850 (Review) (Witness)
- Structural Steel Beams from Japan and the Republic of Korea, Investigation Nos. 701-TA-401 (Review) and 731-TA-835 and 854 (Review) (Witness)
- Gray Portland Cement and Cement Clinker from Japan and Mexico, Investigation Nos. 731-TA-451 and 461 (Second Review)
- Cut-to-Length Carbon-Quality Steel Plate from France, Indonesia, India, Italy, Japan, and Korea, Investigation Nos. 701-TA-388-391 (Review) and 731-TA-816-821 (Review) (Witness)
- Certain Hot-Rolled Flat-Rolled Carbon-Quality Steel Products from Brazil, Japan, and Russia, Investigation Nos. 701-TA-384 (Review) and 731-TA-806-808 (Review) (Witness)
- Oil Country Tubular Goods from Argentina, Italy, Japan, Korea and Mexico, Investigation Nos. 701-TA-364 (Review) and 731-TA-711 and 713-16 (Review) (Witness)
- Ferrovanadium and Nitrided Vanadium from Russia, Investigation Nos. 701-TA-414 (Review) and 731-TA-928 (Review) (Witness)

- Carbon Steel Wire Rod from Argentina, Investigation Nos. 701-TA-A (Review) and 731-TA-157 (Review) (Witness)
- Porcelain-On-Steel Cooking Ware from China, Mexico, and Taiwan and Top-of-the Stove Stainless Steel Cooking Ware from Korea and Taiwan, Investigation Nos. 701-TA-267 and 268 (Review) and 731-TA-297-299, 304 and 305 (Review) (Witness)
- Gray Portland Cement and Cement Clinker from Japan, Mexico, and Venezuela, Investigation Nos. 303-TA-21 (Review) and 731-TA-451, 461, and 519 (Review) (Witness)
- Pressure Sensitive Plastic Tape from Italy, Investigation No. AA-1921-167 (Review)
- Elemental Sulfur from Canada, Investigation No. AA-1921-127 (Review)

# Other Trade Disputes and Investigations

- Crystalline Silicon Photovoltaic Cells (Whether or Not Partially or Fully Assembled Into Other Products), Inv. No. TA-201-75 (Witness)
- Sugar from Mexico, Investigation Nos.704-TA-1 and 734-TA-1 (Review) (Witness)
- Certain Seamless Carbon and Alloy Standard, Line, and Pressure Pipe from the People's Republic of China, U.S. Department of Commerce Inv. No. C-570-957. Retained by Petitioner United States Steel Corporation. Expert Report
- Certain Oil Country Tubular Goods from the People's Republic of China, U.S. Department of Commerce Inv. No. C-570-944. Retained by Petitioner United States Steel Corporation. Expert Report
- Certain Oil Country Tubular Goods from the People's Republic of China, Department of Commerce Investigation C-570-944. Retained by Petitioner United States Steel Corporation. Second Expert Report
- Gray Portland Cement and Clinker from Mexico, Secretariat No. USA-MEX 2000-1904-10,
   Article 1904 Binational Panel Review pursuant to the North American Free Trade Agreement
- Steel Consuming Industries: Competitive Conditions with Respect to Steel Safeguard Measures, Investigation No. 332-452 (Witness)
- Steel: Monitoring Developments in the Domestic Industry, Investigation No. TA-204-9 (Witness)
- Wood Structural Building Components, Investigation No. 332-445
- Tools, Dies and Industrial Molds, Investigation No. 332-435
- Certain Steel Products, Investigation No. TA-201-73 (Witness)
- Certain Steel Wire Rod, Investigation No. TA-201-69 (Witness)

- Broom Corn Brooms from Mexico, Investigation Nos. TA-201-65 and NAFTA-302-1 (Witness)
- Bicycles from the PRC (Section 301) (Witness)
- Certain Cold-Rolled Carbon Steel Flat Products from Germany and The Netherlands, (Section 751), Docket No. 1884
- Wheat Gluten, Investigation No. TA-201-67 (Witness)

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- Gypsum Board from the United States, Inquiry No. NQ-2016-002 and GC-2016-001. Canadian International Trade Tribunal (CITT). Retained by CertainTeed Gypsum Canada Inc. Rebuttal Expert Report, Hearing Testimony. (2016)
- Kyocera Corporation v. Hemlock Semiconductor, LLC, Case No. 15-025786-CK, State of Michigan, Saginaw County Circuit Court, Retained by Kyocera. Affidavit. (2015)
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  District Court for the District of Delaware. Retained by Goodman Global. Expert Report,
  Deposition, Jury Trial Testimony, and Declaration. (2014)
- Secretary of Labor v. Nucor Steel Connecticut, Inc., OSHRC Docket No. 12-1784, Inspection No. 281076, Region I. Retained by Defendant. Expert Report. (December 24, 2013)
- Ayyad, et al. v. Sprint Spectrum L.P., et al., JCCP No. 4332, Superior Court of the State of California for the County of Alameda. Retained by Sprint. Expert Report and Deposition. (2013)
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- Gulf States Reorganization Group, Inc. v. Nucor Corp., et al., Civil Action No. CV 02-P-2600-E, United State District Court for the Northern District of Alabama Eastern Division. Retained by Defendant. Expert Report, Rebuttal Report, and Deposition. (2008)
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   Superior Court of New Jersey, Middlesex County Division. Retained by Claimant. Expert Report and Deposition. (2002)
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"20 Tears of the World Trade Organization" World Trade Forum, Bern, Switzerland, September 25-26, 2015 Invited Participant

"Putting Context into Commercial Success: The Role of the Economic Expert." With Andrew Szamosszegi and Ryan Pinckney. Presented at the 10<sup>th</sup> Annual Advanced Patent Litigation Course, State Bar of Texas, San Antonio, Texas, July 17, 2014.

"The Use of Economics in International Arbitration." Panelist, Meetings for the DISSETTLE Program (Dispute Settlement in Trade: Training in Law and Economics). Università Commerciale "L.Bocconi", Milan, Italy, June 6, 2013.

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"Understanding Licensing-Based Domestic Industries in Section 337 Investigations at the International Trade Commission (ITC)" With Andrew Pratt and Bernard Cassidy. Presented at the 2012 Annual Meeting of the Licensing Executive Society, Toronto, Canada, October 15, 2012.

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"Assessing Damage from Foreign Infringement of U.S. Intellectual Property Rights." With Richard D. Boltuck. Invited paper presented at the International Trade Commission Economic Seminar Series, Spring, 1994.

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"Fishing Downstream: The Political Economy of Effective Protection." With Robert Feinberg.

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# **PROFESSIONAL AFFILIATIONS**

American Economic Association

11/15/18