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

Reply of Seth T. Kaplan, Ph.D.

December 6, 2019

CWS-Kaplan-2

Table of Contents

I. II.	Introduction
II. III.	The December 2018 Kaplan Report
A. B.	The Comparative Statics Approach
V.	9 Response to Criticisms of the Kaplan Report
A. B. C.	5
	1. The analysis in my initial report was based on conditions of competition in the SCP industry. 14 14 2. My initial report properly defines the relevant market as a North American market for SC paper. 3. The analysis in my initial report properly accounts for substitute products. 23 PHP's re-entry did not have to affect Resolute's cost position to cause damages. 24 The results of my but for analysis are consistent with SCP pricing immediately before and after re-entry of PHP.
D.	
	 My measure of benefits was clearly explained
E.	Response to Additional Criticisms in the Pöyry Expert Report
	 My analysis of the PHP re-entry considered the role of PHP's management
VI.	Conclusion

Public Version

I. Introduction

- I am Seth T. Kaplan, President of International Economic Research, LLC and Senior Economic Advisor at Capital Trade, Inc. I submitted a report in this proceeding on December 28, 2018 and incorporate by reference the disclosures required by paragraphs 11.4 and 12.2 of Procedural Order No. 1. In this second report, I am replying to the analyses and criticism of my initial report made in the Government of Canada's submissions: *SC Paper Market in North America*, prepared by Saara Söderberg, Timo Suhonen, Lauri Tenhunen, and Minna Luukka of Pöyry Management Consulting Oy, dated April 16, 2019 ("the Pöyry Expert Report"); and the *Expert Report of Peter Steger* submitted on April 17, 2019 ("the Steger Report").
- 2. First, I summarize the key facets of my original report. Second, I assess a report about the

, which uses the same conceptual "but for" framework that I used in my initial report. Third, I summarize and respond to the various criticisms made in the Pöyry Expert Report and Steger Report submitted in this proceeding.

II. Summary of Opinions

- 3. The two reports criticizing my liability report seek to undermine my analysis by attacking the "but for" approach of assessing liability, redrawing long held market boundaries, and criticizing my framework of analysis as being too simple to capture the complexities of the Supercalendered paper ("SC paper" market. They fail.
- 4. Enabled by a substantial benefits package provided by NSG, the PHP mill re-entered the North American SC paper market as a low cost producer with approximately 360,000 MT of capacity and went from a market share of zero percent to a market share exceeding 22

percent. Basic SCP-industry economics, captured in my analysis, and contemporaneous industry analyses agree that such large and increased volumes of SC paper could only be absorbed at lower price levels than would have prevailed if PHP had not re-entered the market. This identical conclusion was also reached by a study prepared outside the context of this litigation.

5. My analysis continues to rely on economic science, a preferred framework for measuring the effects of market disruptions such as the re-entry of PHP. I employ the comparative static framework, a foundation for much of the analysis in microeconomics, including the fields of industrial organization and international economics, to compare market equilibria with and without PHP's re-entry. Specifically, I compared the world as it currently is and the world as it would have been "but for" re-entry. I used a conventional parsimonious model of the North American SC paper market fully informed by the conditions of competition in that market.¹ In particular, this market is characterized by an upward sloping stepped supply curve reflecting the need to operate mills at high levels of capacity utilization and a downward sloping demand curve reflecting the presence of substitute

¹ The economic terms used in my expert and rebuttal reports are meant to reflect their precise meanings in the field of economics. Supply and demand are terms of art within the profession. They are frequently misused in common parlance. Their misapplication can lead to incorrect conclusions and faulty analysis. Thus, when I refer to demand for SCP, I mean market demand as illustrated by a downward sloping demand curve, which relates price to quantity in the market for SCP. An *increase in demand* refers to a rightward shift in the demand curve, which occurs when consumers in the market are willing to buy greater quantities at any given price. This differs from an *increase in the quantity demanded*, which occurs when prices decline and the quantity consumed increases along the existing demand curve. As Mankiw explains in his introductory economics textbook, "The demand curve shows what happens to the quantity demanded of a good when its price varies, holding constant all other variables that influence buyers. When one of these other variables changes, the demand curve shifts." *See* C-305, N. Gregory Mankiw. (2016) *Principles of Economics, Eighth Edition*. Cengage Learning, Boston, (hereafter, "Mankiw") at 67-71. Parallel logic applies to the distinction between my usage of the terms *increase in supply* (or *increasing supply*) and an increase in the quantity supplied. The former refers to a shift in the supply curve while the latter refers to a movement along the existing supply curve. In particular, production from a new entrant or re-entrant will increase supply, shifting the supply curve to the right. *See* Mankiw at 73-76.

products. The re-entry of the PHP mill and its increase in production was a textbook example of an increase in supply.

- 6. The evidence of a stepped, upward-sloping SCP supply curve is consistent with the fact, acknowledged by all North American producers during the U.S. International Trade Commission investigation of SC Paper (or "SCP"), that SCP mills need to operate at high levels of capacity utilization to be viable.² It is also consistent with analysis presented by Pöyry in several of their reports including their rebuttal report in this proceeding.³ Similarly, as I describe below, the evidence of a downward sloping SCP market demand curve is demonstrated by an ITC analysis informed by a confidential record including all North American SCP producers, and many of the largest SCP purchasers covering the period both before and after the re-opening; the price correlation of different grades of SCP; and the views of independent industry analyssts.
- 7. The "but for" conclusion that an increase in SCP supply would lead to higher equilibrium quantities and lower equilibrium prices remains unrebutted. Instead, Pöyry argues that factors other than the reopening of PHP explain the movement of SCP prices and that the price changes after the re-opening show that PHP did not lower prices.⁴ They are wrong. As a threshold matter, the "but for" or comparative statics analysis is designed to isolate the effects of the re-opening from other supply and demand factors obviating the need to trace the disparate impacts of the many SCP supply and demand factors over time. Second,

² C-237, USITC, Supercalendered Paper from Canada, Inv. No. 701-TA-530 (Final) (Pub. 4583) (hereafter, "USITC Inv.") Commission Opinion at p. 14, Staff Report at pp. III-4.

³ R-161 at 5 and 15; and Pöyry Expert Report at Annex 2, pp. 49-51.

⁴ Pöyry Expert Report at \P 101 and \P 106.

SCP prices remained below their 2012 levels in 2013 and 2014 albeit with some expected fluctuation.

8. As such, my opinion remains that PWCC would not have purchased and re-started the PHP mill without NSG's benefits package, that the resumption of production and subsequent sales of SC paper by PHP depressed prices of SC paper in the North American market, and that the resulting lower prices and lost volumes caused harm to Resolute. But for the benefits package, Resolute's SC paper mills would have achieved higher volumes at higher prices, and therefore greater profits. The observed changes in equilibrium quantities and prices after the re-entry are consistent with conclusions derived from applying the but for test within the comparative statics framework. Resolute's injuries were foreseeable and in consequence of the benefits package.

III. The December 2018 Kaplan Report

A. The Comparative Statics Approach

9. In my initial report, I opined on whether the measures and benefits package received by Port Hawkesbury Paper ("PHP") resulted in the SC Paper mill's re-entry and whether this re-entry caused economic harms to Resolute Forest Products Inc. ("Resolute" or Claimant") SC Paper mills.⁵ I concluded that "but for" the increased supply of supercalendered paper ("SCP" or "SC paper") consequent to the reopening of the Port Hawkesbury mill by PHP, Resolute's SCP operations would have experienced higher prices, greater shipments, and increased profits.⁶

⁵ Kaplan report at ¶ 14.

⁶ Kaplan report at ¶ 17.

- 10. It is my understanding that "but for" reasoning forms the basis of any liability and damages analysis in this dispute because "reparation {for an illegal act} must, as far as possible, wipe-out all the consequences of the illegal act and reestablish the situation which would, in all probability, have existed if that act had not been committed."⁷ From a logical perspective, this is only common sense: one would not want to conflate the effects of other factors with the effects of the prohibited measures. The "but for" approach avoids this error by comparing the observed equilibrium in the relevant market to the unobserved equilibrium that would have existed "but for" the prohibited measures.
- 11. The use of economic science is a preferred framework for measuring the effects of market disruptions. Comparative statics the frame of reference put forward in the Kaplan Report measures the effects of changes in exogenous supply and demand factors on equilibrium prices and quantities. In this matter, the re-entry of PHP was the exogenous supply shock. This framework dates back to the origins of the economics profession and has been a staple of economic analysis since the time of Hume in the 1700s.⁸
- 12. The "but for" test remains a common mode of analysis throughout the discipline to establish and measure the effects of exogenous factors to market equilibrium. In the economic disciplines that are analytically related to this industrial organization, antitrust, and international trade partial and general equilibrium models are used to assess changes to prices, quantities, profits, and other economic indicia resulting from exogenous shifts in economic or policy variables.

⁷ *E.g.*, Resolute Memorial ¶¶ 290-291.

⁸ C-301, Kehoe T.J. (1989) Comparative Statics. In: Eatwell J., Milgate M., Newman P. (eds) General Equilibrium. The New Palgrave. Palgrave Macmillan, London

- 13. Apposite to this dispute, comparative statics is used to analyze the effects of entry and exit in markets.⁹ In a "but for" analysis, the theoretical framework is informed by the conditions of competition particular to the market being investigated.
- 14. Comparative statics is the foundation for many important analyses conducted in the discipline of international economics. For example, *The Handbook of International Economics* and *Applied Methods for Trade Policy Analysis: A Handbook* is replete with comparative statics models and references to the vast economic literature using these techniques. These types of methods have been adopted in the administration of trade law as well. For example, since at least the 1990s, the United States International Trade Commission ("USITC") has used such comparative-statics simulation models to estimate the change in the price and shipment quantity of the domestic like product but for competition with unfairly traded subject imports. Similarly, these types of models are used to measure the price and quantity effects of proposed trade remedies tariffs, quota, and tariff-rate quotas on fairly traded imports in Safeguard investigations.

⁹ See C-300, Joskow, Paul L, and Nancy L Rose. "The effects of economic regulation." Handbook of Industrial Organization, Edited by Richard Schmalensee and Robert Willig, vol. 2, 1989, pp. 1449–1506., doi:10.1016/s1573-448x(89)02002-9, and C-302, Feenstra, Robert C. "Estimating the effects of trade policy." Handbook of International Economics, Edited by Gene M Grossman and Kenneth Rogoff, vol. 3, 1995, pp. 1553-1595., doi:10.1016/s1573-4404(05)80002-4. I understand that within a policy context, these methods form the basis of antitrust economics. For example, the "but for" test is also part of the Horizontal Merger Guidelines used by the Department of Justice and the Federal Trade Commission to determine whether a proposed merger is likely to lessen competition substantially. See C-310, U.S. Department of Justice and the Federal Trade Commission, "Horizontal Merger Guidelines," August 19, 2010. Specifically, the agencies assess whether either party to a transaction is likely to fail but for the merger or, alternatively, whether the merger would cause market prices to unacceptably increase. I understand that Canadian courts apply the "but for test." See CL-220, Resurfice Corp. v. Hanke, [2007] 1 SCR 333, 2007 SCC 7. I also understand that the "but for" test is used in international law. For example, the Chorzow Factory case requires reparation that "wipe[s] out all the consequences of the illegal act and reestablish[es] the situation which would, in all probability, have existed if that act had not been committed." This "but for" principle is also reflected in Article 31 of the International Law Commission's Articles on State Responsibility. CL-145. The commentary to these Articles also states that causation can be found when the damage is the foreseeable consequence of the breach or that the injury should be in consequence of the wrongful act.

- 15. Whether it is used to assess commercial effects in the context of market entry, antitrust analysis, international trade, liability, or damages, the but for test contains two components, the world as it currently is and the world as it would be but for the action being examined. In the present matter, the PHP mill has re-entered the North American SCP market with 360,000 MT of capacity after the mill's prior owners had shut it down. This is the world as it currently is. The "but for" world is one where the government of Nova Scotia has not taken measures to allow the re-entry of the PHP mill and the PHP mill had remained closed. The question I address using a comparative statics framework of analysis is whether Resolute would have been better off if PHP remained closed.
- 16. I do not claim that nothing else happened in the North American SCP market since the reopening of the PHP mill. To the contrary, I have put forth a framework of analysis to directly assess how re-entry of a large, low-cost SCP mill affects the prices and shipments in that market. As I demonstrate below, my analysis is conventional, informed by the conditions of competition particular to the affected market, and is valid regardless of whether other events occur.¹⁰

B. The Application of Comparative Statics to the North American SCP Market

17. First, there is a North American market for SCP. PHP and Resolute compete for sales in this market along with other SCP producers. The impact of PHP's re-entry, an increase in

¹⁰ A common misconception in the application of comparative statics is thinking the but for is a temporal concept that reflects a "before and after" separated by time. Rather, the concept refers to a "with and without" at a point in time. In this matter, for example, we can ask what prices would have been in 2014 or 2015 with and without the re-entry at the same time, not how prices changed from 2012 to 2015 over time. The former isolates the effect of the reopening. The latter traces the effects of all the supply and demand factors that occurred over time, factors in addition to the reopening. Graphically, one can think of the comparative statics exercise as the vertical difference between the actual and the "but for" point in time (or many points in time) while the other approach traces a line over time.

See R-

SCP supply, affects Resolute through changes in North American market prices but for its re-entry.¹¹

- 18. Second, the supply curve for the SCP market is stepped and upward sloping because SCP mills need to operate at full or nearly full capacity and have different cost structures.¹²
- 19. Third, the demand curve for the SCP market is downward sloping based on the imperfect substitutability of SCP alternatives.¹³ As the market price for SCP declines, SCP becomes a more attractive alternative to certain consumers of coated paper, other mechanical papers, and other mediums of advertising. Thus, an increase in sales quantities of SCP occurs in concert with the decline in the price of SCP along the demand curve. As the market price of SCP increases, alternatives to SCP become more attractive and sales quantities of SCP decline. Put differently, the downward sloping demand curve captures substitutability between SCP and different types of non-SCP paper (and other SCP alternatives).
- 20. Fourth, the re-opening of PHP caused an increase in supply. This is shown in Figure 2 of my initial report, which depicts the upward sloping supply curve shifted out to the right.¹⁴ The addition of capacity is a textbook example of an increase or outward shift in supply.¹⁵
- 21. Fifth, this increase in supply led to a new equilibrium price P**, which is at a lower level than the "but for" price of P*, and a new equilibrium quantity of Q**, which exceeds the

¹¹ Kaplan Report at ¶ 35.

¹² Kaplan Report at ¶¶ 38-40161 at pp. 37

¹³ C-304, Jerison M., Quah J.KH. (2008) Law of Demand. In: Palgrave Macmillan (eds) The New Palgrave Dictionary of Economics. Palgrave Macmillan, London.

¹⁴ Kaplan Report at ¶ 43, Figure 2.

¹⁵ C-305, N. Gregory Mankiw. (2016) Principles of Economics, Eight Edition. Cengage Learning, Boston, at 75-76.

"but for" quantity $Q^{*.16}$ As shown in Figure 2 of my initial report, the increase in supply is caused by the re-entry of PHP and shifts the supply curve out to the right. Demand remains unchanged while the quantity demanded increases and the price falls as the equilibrium shifts down along the existing demand curve.

- 22. Sixth, the PHP mill would not have re-opened without the benefits package that PWCC received from the Nova Scotia Government.¹⁷ Thus, the "but for" world is properly characterized as a North American SCP market that excludes PHP's 360,000 MT in SCP capacity.
- 23. dated July 23, 2012, was submitted to the Government of Nova Scotia's Department of Natural Resources.¹⁸ It finds that the **Second Scotia** in stark contradiction of the rebuttal prepared for this dispute. Unlike the Pöyry Expert Report, **Second Scotia** is consistent with my findings reported in the initial expert report. Further, I had not seen the **Second Scotia** at the time I submitted my expert report.
- 24. I find this **and the second secon**

¹⁶ Id.

¹⁸ R-161.

¹⁷ Kaplan Report at ¶ 17.

in which it compares expected outcomes with and without a PHP re-start. Markedly, the authors reach similar conclusions about the shape of the supply and demand curves and the effect of re-entry on equilibrium prices.

25.	As a threshold matter,	,	19
			20

Further, while the report never illustrates a demand curve, it does agree that consumers of

	SCP are
	· ²¹
	.22
26.	I note that
	. This analysis is consistent with my
	conclusions from my initial report: the re-entry of PHP was predicted to cause SCP prices

¹⁹ R-161 at 39-43.

²⁰ R-161 at 5 ("); and R-161 at 15 (
)		
²¹ R-161 at 26. (
²² D 161 - 5 (4		")
²² R-161 at 5 ("		
").		

Page 10 of CWS-Kaplan-2

to decline, force other high-cost SCP producers to shutter capacity earlier than they otherwise would have and depressed prices to levels below what would have occurred but for the re-entry. ²³ In essence, both reports agree that the increased PHP capacity could only be absorbed by the market if equilibrium SCP prices fell relative to the base case of no re-entry.

27. Markedly,

. In fact, this "but for" estimate was close to the actual gap of \$26 per MT (in nominal terms) based upon RISI prices for SCA, which I demonstrate below.

V. Response to Criticisms of the Kaplan Report

A. Summary of Criticisms

28. The Pöyry Report for this proceeding ("Pöyry Expert Report") criticizes my initial report under the headings of general findings, financials, supply curves, and pricing.²⁴ These criticisms of my report can be summarized as follows: 1) it is based on a purely theoretical framework divorced from other market factors;²⁵ 2) it defines the product market incorrectly;²⁶ 3) it fails to properly incorporate substitute products and imports;²⁷ 4) it fails to consider that the PHP exit and re-entry has not altered the relative cost positions of

²³ Kaplan Report at ¶ 50.

²⁴ Pöyry Expert Report at ¶¶ 86-102.

²⁵ Pöyry Expert Report at ¶ 103.

²⁶ Pöyry Expert Report at ¶ 87.

²⁷ Pöyry Expert Report at ¶¶ 88-89.

Resolute's SC Paper machines;²⁸ 5) it fails to explain price trends, especially the price recovery in 2013.²⁹

29. The Steger Report also criticizes my initial report. Some of these criticisms mirror those in the Pöyry Expert Report. In particular Mr. Steger claims the Kaplan Report: 1) fails to measure the benefit correctly; 2) relies on the increase in PHP's SCP capacity instead of the increase in PHP's production/shipments; 3) fails to consider other competitors in the market; 4) fails to measure the loss in Resolute's profitability; and 5) fails to consider other market factors in determining SCP prices.

B. A Fundamental Flaw of the Pöyry Expert Report

30. Before addressing the enumerated criticisms to my report, I need to identify a mistake made repeatedly in the Pöyry Expert Report that calls into question their basic understanding of the application of economic reasoning to the SCP market On no less than eight separate occasions they erroneously refer to changes in *consumption* as changes in *demand*. This could not be more wrong. Further, this is not a trivial semantic distinction but rather an error that renders their analysis deeply flawed and their conclusions analytically unsupported. Specifically, the Current Poyry Report refers to the decrease in SCP consumption in 2012 and the increase in SCP consumption (or quantity) in 2013 as changes in SCP demand.

²⁸ Pöyry Expert Report at ¶ 100.

²⁹ Pöyry Expert Report at ¶ 101.

"When PHP temporarily exited the market in 2012, the demand for SC-paper plunged by 21%...With PHP's re-entry in 2013, SCA demand jumped by 21%."³⁰

"Port Hawkesbury PM2 re-entry coincided with the rapid cyclical expansion of demand in North America, and therefore had little or no significant effect on regional supply/demand balances and prices."³¹

"In 2013, when PHP resumed full production, demand for SC-paper recovered by 238,000 Mt (14.0%/a), before resuming its continuing decline." $^{32, 33}$

31. While there is agreement that *consumption* fell in 2012 and increased in 2013, the question is why: was it due to a change in market supply, a change in market demand, or both? This is not a mystery. The prime driver of the decrease in SCP consumption in 2012 was the decrease in SCP supply caused by the exit of the Port Hawkesbury mill. Similarly, the increase in SCP consumption in 2013 was caused primarily by an increase in SCP supply due to the re-entry of the PHP mill. This conclusion is only made more the obvious by the fact that all parties agree that the new PHP capacity would need to be operated at high levels of utilization to be viable. An increase in capacity or number of suppliers is a

See, also, ¶ 48 and ¶51.

³⁰ Pöyry Expert Report at ¶ 7

³¹ Pöyry Expert Report at ¶ 14

³² Pöyry Expert Report at ¶ 46

³³ This mistake occurs repeatedly throughout the report. Several additional instances are included here.

[&]quot;[Dr. Kaplan's] statement that the significant addition of supply was not met with an increase in demand is simply wrong. The actual data is reported by the PPPC, showing that overall SC-paper demand increased by 238,000 Mt in 2013." (Pöyry Expert Report at ¶ 91)

[&]quot;The demand of SC-A increased by 225,000 Mt and shipments from North American SC paper mills to North American end users increased by 191,000 Mt in 2013, coinciding with the re-entry of PHP PM2." (Pöyry Expert Report at \P 93)

textbook definition of an increase in supply.³⁴ In a "but for" context, an increase in supply will cause equilibrium prices to fall and equilibrium quantity (consumption) to increase.³⁵ In the instant matter, the 25 percent increase in North American SCP capacity attributable to the PHP re-entry resulted in the same outcome.

C. Responses to Common Criticisms

1. The analysis in my initial report was based on conditions of competition in the SCP industry.

- 32. The Pöyry Expert Report and the Steger Report incorrectly criticize my reliance on a theoretical framework that does not take into account market factors. In fact, in my original report, I used the actual market conditions particular to the SCP industry to inform my application of a very conventional economic analysis. The problem is not that my analysis is too theoretical, but rather that the two critics fail to appreciate the application of a parsimonious partial equilibrium model and how it incorporates the key market factors they claim I ignored.
- 33. As an initial matter, as I have already noted, my "but for" analysis is based on a comparative statics framework that is widely used in economic analysis and designed to reflect the conditions of competition in the SCP industry. It mirrors actual supply conditions by using an upward-sloping, stepped supply curve that reflects the fact that producers of SC paper have different costs, that mills are required to operate at high levels

³⁴ C-305, N. Gregory Mankiw. (2016) Principles of Economics, Eight Edition. Cengage Learning, Boston, at 75-76.

³⁵ It is not uncommon for "demand" to be used instead of "consumption" or "quantity" in the popular press or even in industry reports. However, in an analytic context these are economic terms of art and their misuse can lead to both faulty reasoning and faulty conclusions. In this matter there is little doubt that the market experienced an increase in supply which, *ceteris paribus*, is associated with increasing quantity and decreasing prices.

of capacity utilization to remain viable, and that they shut down when prices decline below variable costs. The this investigation, also use upward-sloping, stepped supply curves to analyze the SC paper market. As mentioned above, the

Finally, I cite to the USITC

investigation of SCP where the Commission states there is agreement among all parties that mills need to operate at high levels of capacity utilization.³⁶ Consequently, the claim that my characterization of the SCP market supply curve is "too theoretical" and detached from actual market conditions fails to pass even minimal scrutiny.

34. My framework of analysis explicitly accounts for substitution among SC paper grades, as well as between SC papers and other mechanical papers. For example, I stated that SC papers are commodity-like products that compete on the basis of price, and that prices for SCP grades tend to move together.³⁷ My initial report quoted the USITC opinion which stated that there is significant competition between adjacent grades of SC paper and that small changes in prices lead purchasers to switch to adjacent grades of SC paper.³⁸ I conclude from this that prices of SC paper grades tend to move together, an insight supported by Figure 1 of this reply report. Thus, my framework also includes a downward sloping demand curve, which explicitly takes into account the possibility of substitution

³⁶ C-237, USITC, Supercalendered Paper from Canada, Inv. No. 701-TA-530 (Final) (Pub. 4583) (hereafter, "USITC Inv.") Commission Opinion at p. 14, Staff Report at pp. III-4.

³⁷ Kaplan Report at ¶ 37.

³⁸ Id.

into SC paper as SCP prices decline relative to other grades of paper, and substitution out of SC paper as SCP prices increase relative to other grades. Figure 3 in my initial report illustrates the impact of a secular decline in demand. It is true that I do not assess the impact of every other event identified in the Steger Report, but that is because my charge is to establish whether, *ceteris paribus*, the full re-entry of the PHP mill into the North American market has caused economic harms to Resolute's SCP operations.

35. It is clear that the authors of the Pöyry Expert Report, and Mr. Steger since he relies on the Pöyry Expert Report, do not understand the difference between supply and demand. For example, ¶ 7 of the Pöyry Expert Report states, "When PHP temporarily exited the market in 2012, the demand for SC-paper plunged by 21%. Coated mechanical paper declined as well in 2012, but at a significantly lower rate than the rate at which it had been declining annually since 2010, an indication that SCA/A+ customers turned to coated grades. With PHP's re-entry in 2013, SCA demand jumped by 21%." This analysis wrongly attributes annual changes in the equilibrium quantity of SC paper to changes in demand. The correct analysis is that the exit and re-entry of PHP capacity, represented by shifts in the supply curve illustrated in Figure 2 of my initial report, caused movements along the demand curve, resulting in a reduction in the quantity consumed.³⁹ The Pöyry Expert Report's failure to correctly distinguish between supply and demand undermines the credibility of the whole Pöyry analysis, in particular the Report's criticism of my conclusion that the

³⁹ I recognize that other factors are also at play, such as the secular decline in demand, represented by the inward shift of the demand curve in Figure 3 of my initial report. But that does not change the fact that the large shifts in the supply curve caused by the exit of the PHP mill were primarily responsible for the change in consumption that the Pöyry Expert Report wrongly characterizes as a decline in demand.

significant addition of supply caused by PHP's re-entry was not due to, or met with, a significant increase in demand.⁴⁰

2. My initial report properly defines the relevant market as a North American market for SC paper.

36. Both the Pöyry Expert Report and the Steger Report argue that I incorrectly defined the relevant market for analysis because I did not properly consider limitations on the substitutability between higher grade SCP and other grades of SCP, substitutability between lower grade SCP and other uncoated mechanical papers, and substitutability between higher grade SCP and certain coated mechanical papers. These criticisms are wrong. The relevant market for analysis in the instant matter is the North American SCP market, and my framework of analysis, as I explain below, takes intra- and inter-grade substitutability into account.

a. The USITC found a single SCP market.

37. Because of the U.S. countervailing duty investigations against SCP from Canada during 2015, the U.S. market for SCP has been closely analyzed by the USITC and its staff. I was the economic expert for the U.S. industry in that investigation, had general access to the confidential record, and am knowledgeable about issues of substitutability generally and with respect to specific instances of "lost sales" and "lost revenues".⁴¹

⁴⁰ Pöyry Expert Report at ¶ 90.

⁴¹ The Commission issued detailed questionnaires to foreign producers, U.S. producers, and importers in both the preliminary and final phase investigations and to purchasers in the final phase investigation. The preliminary phase record covers the full years 2012-2014 while the final investigation collected data from full years 2012-2014 and January-June 2015. The U.S. Producers' Questionnaire collected trade data including the volume and value of beginning-of-period inventories, capacity, production, domestic shipments, export shipments and end-of-period inventories; financial data including an income statement, assets, investments, and R&D expenditures; employment

- 38. In every USITC investigation, the Commission must define a *domestic like product*, that is, the "product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to investigation."⁴² The determination of the like product for an investigation is a factual one, with the standards of "like" or "most similar in characteristics and uses" applied on a case-by-case basis.⁴³ The Commission generally considers a number of factors in a like product analysis, including: (1) physical characteristics and uses; (2) interchangeability; (3) channels of distribution; (4) customer and producer perceptions of the products; (5) common manufacturing facilities, production processes, and production employees; and, where appropriate, (6) price.⁴⁴
- 39. Many of the claims in the Pöyry Expert Report and the Steger Report about the degree of inter- and intra-grade competition also were made in the USITC's investigation.⁴⁵ For example, in the preliminary investigation, one respondent requested that the Commission should not define SCP as a single like product but instead define two separate like products,

⁴⁴ Id.

data including production workers, wages, and hours worked; pricing data for individual pricing products collected as quarterly volume, revenues and average unit values; and qualitative data on competition with the subject imports. The Importers' Questionnaire collected import data in volume and value; pricing data comparable to the domestic producers, and qualitative data on market competition; the foreign producers questionnaire collected capacity, production, home market and export shipment data as well as inventories; and the purchaser questionnaires collected extensive qualitative information on competition among the domestic and imported products on a variety of dimensions. See "Supercalendered Paper from Canada". https://www.usitc.gov/investigations/title 7/2015/supercalendered paper canada/final.htm. Accessed Aug. 12 2019.

⁴² Section 771(10) of the Tariff Act of 1930, as amended (19 U.S.C. § 1677(10)) ("The term 'domestic like product' means a product, which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation under this subtitle.").

⁴³ C-237, USITC Inv. at p. 4.

⁴⁵ The like product analysis overlaps significantly with and includes factors used to define markets. The Pöyry Expert Report takes exception to the Commission's determination stating "SC-papers are not susceptible to substitution between SNC and SC-A, for example or between SC-B and SC-A+. (Pöyry Expert Report at ¶ 32.)

the first consisting of SC-A and coated groundwood no. 5 paper, and the second consisting of SC-B, Hi-Brite and newsprint papers.⁴⁶ The Commission explicitly rejected this argument and defined a single like product consisting of all SC paper within the scope defined by the U.S. Department of Commerce in its parallel investigation.⁴⁷

- 40. There is no clear dividing line between any of the grades of SCP. Unlike metal products where standard-making bodies, such as ASTM International, establish bright lines that plainly distinguish among various grades of products, producers of SCP self-designate their grades based on their own specifications of brightness, gloss, and opacity which frequently overlap. Put differently, there are no bright lines between the various grades of SCP, but instead a continuum of overlapping grades.⁴⁸
- 41. The Commission did not create separate like products for SC-A and SC-B because "{t}here were no established industry standards distinguishing the two grades, which shared similar physical characteristics and uses, were made in the same facilities, and were sold in the same channels of distribution at roughly similar prices."⁴⁹ The Commission also found "there was a clear dividing line between SC paper and coated groundwood paper no. 5 in light of their different physical characteristics, manufacturing processes, prices, and

⁴⁶ C-237, USITC Inv. at pp. 6.

⁴⁷ *Id.* Commerce defined supercalendered paper in the scope as "…uncoated paper that has undergone a calendering process in which the base sheet, made of pulp and filler (typically, but not limited to, clay, talc, or other mineral additive), is processed through a set of supercalenders, a supercalender, or a soft nip calender operation. The scope of this investigation covers all SC paper regardless of basis weight, brightness, opacity, smoothness, or grade, and whether in rolls or in sheets. Further, the scope covers all SC paper that meets the scope definition regardless of the type of pulp fiber or filler material used to produce the paper. Specifically excluded from the scope are imports of paper printed with final content of printed text or graphics."

⁴⁸ C-237, USITC Inv. at I-1 and I-9 to I-10.

perceptions in the marketplace,"⁵⁰ and "there was a clear dividing line between SC paper, on the one hand, and Hi-Brite and newsprint paper, on the other, because of distinctions in physical characteristics and manufacturing processes."⁵¹ In the final phase of the investigation, no party, including PHP, challenged the definition of a single like product consisting of all SC paper within the scope of the investigation.⁵²

b. Pricing data in the record support a single SCP market.

42. Pricing data on the record of this investigation also support a single market for SC paper.
Figure 1 presents quarterly price data from RISI for SC-A and SC-B from 2012 to 2017.
The data show an extremely high correlation between the two grades during the relevant period. The correlation coefficient for the quarterly data series from 2012 to 2017 is 0.997.

⁵⁰ Id.

⁵¹ *Id*.

⁵² C-237, USITC Inv. at 7.

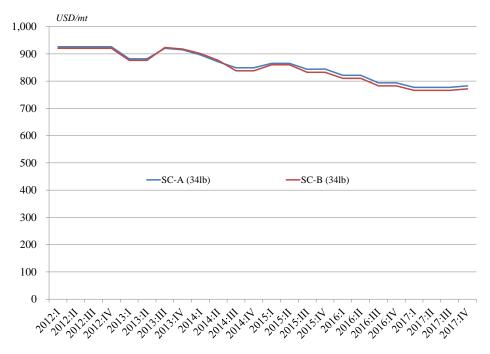
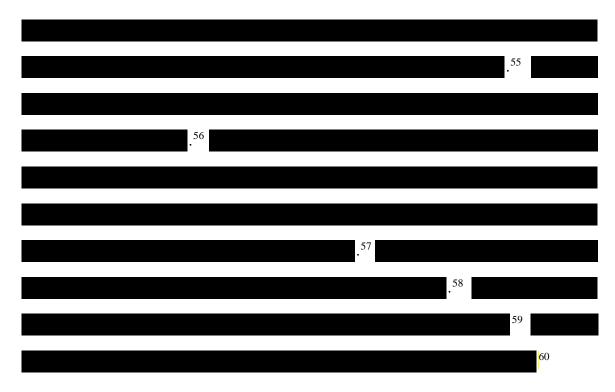


Figure 1. RISI Quarterly Prices for SCA and SCB, 2012:Q1 to 2017:Q4⁵³

43. Prices for SC-B and newsprint and for SC-A and coated mechanical papers were less highly correlated during this period. The correlation coefficient for quarterly RISI prices for SC-B and newsprint during 2012 to 2017 is only 0.454. The correlation coefficient for quarterly RISI prices of SC-A and lightweight coated paper during 2012 to 2014 was 0.912.

c. Industry analysts define SCP as a single market.

44.	My view of the relevant market is also supported by analysis in a report, dated October 13,		
	2011, submitted to the Government of Nova Scotia by		
	For example, according to the		
⁵³ C-363,	(May 14, 2019).		
⁵⁴ R-146.	(October 11, 2011).		



45. The gerrymandered categories put forth by the Pöyry Expert Report and the Steger Report contradict long-held industry conventions. SC paper is recognized by industry publications and industry experts as distinct from coated papers and other mechanical papers. RISI forecasts for SC paper are presented separately from forecasts for other paper categories.⁶¹ Internal documents from major producers that manufacture multiple paper categories also

⁵⁵ R-146 at p. 48.

⁵⁷ *Id.* at p.55.

⁵⁶ *Id.* at pp. 49 and 52.

⁵⁸ *Id.* at pp. 56 and 85.

⁵⁹ *Id.* at p. 45.

⁶⁰ *Id.* at p. 65.

⁶¹ See, for example, R-236 at pp. 71.

treat SC paper separately from other paper products.⁶² Efforts to create new categories for this proceeding notwithstanding, the weight of evidence supports my choice of the SC paper market as the relevant market for assessing liability in this matter.

3. The analysis in my initial report properly accounts for substitute products

- 46. The Pöyry Expert Report and the Steger Report criticize my initial report for not properly analyzing the price effects of the exit and re-entry of the PHP mill.
- 47. As an initial matter, I did mention that SC grades are highly substitutable and, as a result, their prices tend to move together.⁶³ This is demonstrated in Figure 5-2 of the Pöyry Expert Report and in Figure 1 above. Second, there is overlap in competition because both PHP and Resolute produce and sell SCA and because at the margin SCA competes with SCA+, and is therefore affected by changes in the price of SCA+. Third, because all levels of SCA are considered to have better attributes than SCB, the price of SCA normally sets a cap on the price of SCB. Since PHP's re-entry, the prices of SCB and SCA have moved in tandem and the traditional gap between them was absent during the 2012-to-2017 period.⁶⁴
- 48. As I discussed at length above, my framework of analysis does envision substitution at the margin with other categories of paper. The downward sloping demand curve, as I have already mentioned, does account for imperfect substitution between SC paper and other

⁶² See, for example, C-357.

⁶³ Kaplan Report at ¶ 37.

⁶⁴ Pöyry Expert Report at Figure 5-2.

categories such as coated mechanical paper and newsprint. In fact, the downward slope of *all* demand curves is a measure of the substitutability of the nearest alternatives. The fact that there is a substitutable nearest alternative is a characteristic of *every* market.⁶⁵ It is well understood that even a monopolist faces substitute products.

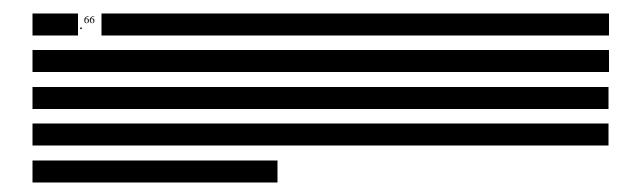
4. PHP's re-entry did not have to affect Resolute's cost position to cause damages.

49. The Pöyry Expert Report claims, for example, that the reentry of PHP had no impact on the relative cost position of Resolute's SCP machines. This criticism is irrelevant to my liability analysis because I have not attempted to show any adverse effect to Resolute's costs. In paragraph 47, I state, "PHP added over 20 percent to industry capacity in 2013 that resulted to negative effects on Resolute's prices and shipments." I did not claim that PHP's reentry caused Resolute to experience increased costs or that PHP's reentry caused Resolute is become higher-cost mills. I did and still do claim that by adding capacity that had previously been removed from the North American market, the re-entry of PHP as a low-cost producer caused SCP prices to decline, and caused higher-cost mills to exit. Since the costs of Resolute's mills were unaffected by entry, and entry caused North American prices for SC paper to decline, the entry of PHP caused margin compression at Resolute's mills. This margin compression, not any exogenous increase in costs, is the source of damages to Resolute.

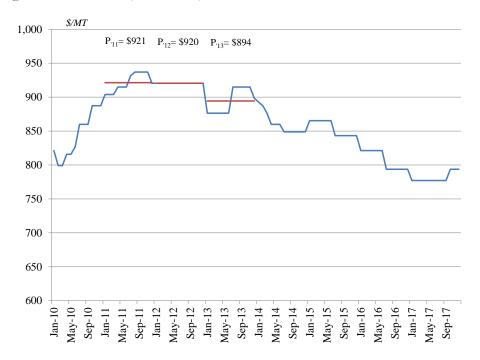
⁶⁵ Economists recognize that the ability to substitute alternative products increases over time. Hence, long-run elasticities are greater than short-run elasticities. C-305, N. Gregory Mankiw. (2016) *Principles of Economics, Eight Edition*. Cengage Learning, Boston, at 91.

5. The results of my but for analysis are consistent with SCP pricing immediately before and after re-entry of PHP.

- 50. The Pöyry Expert Report and the Steger Report make several criticisms with regards to the price trends presented in my initial report. As a threshold matter, I conducted a comparative statics analysis that compared the equilibrium price and quantity of SCP with and without the presence of PHP production *at a point in time*. My method was not to trace the price of SCP *over time* and try to segregate the effects of changes in all possible supply and demand drivers including the PHP re-entry. In fact, the great strength of comparative statics, and an explanation of its ubiquity in economic analysis, is to avoid such an exercise.
- 51. While I did not make any specific predictions, I did present data from RISI showing that prices for SCA declined soon after the re-opening of the PHP mill and then rose somewhat during the second half of 2013 and then continued to decline in 2014. Both rebuttal reports make much of the price increase that occurred during the second half of 2013 and criticize my report for not explaining why this occurred. The record demonstrates these criticisms are *ad hoc* in nature, results-oriented, and inconsistent with price trends immediately before and after their self-selected time period.
- 52. Figure 2 below presents monthly RISI prices for SCA paper from 2011 to 2017. The blue line represents monthly prices and the red line represents annual averages. The graph clarifies two points. First, the reversal in the second half of 2013 was only temporary. The price of SCA began falling in December 2013 and trended downward until January 2017. Second, even with the temporary reversal, the average price in 2013 was \$26 per MT lower than the average price in 2012. This price decline approximates







53. In any event, I find the annualized price changes to be a more reliable indicator of the impact of the re-start on price. Month-to-month price changes are more susceptible to delivery lags, contract pricing commitments, and changes in other exogenous supply and demand drivers.

⁶⁶ R-161 at 53.

⁶⁷ RISI.

54. The Pöyry Expert Report also asserts that my framework of analysis cannot explain why the price of SCP did not increase more following the closure of the PHP mill in 2011, which removed supply from the market.⁶⁸ This criticism is unwarranted. The record demonstrates that in late 2011 and for much of 2012, the price of Bleached Softwood Kraft Pulp ("BSKP") trended lower.⁶⁹ All other things being equal, this decline in raw materials costs would have resulted in a lower price of SCP. Instead, the price of SCP held steady during 2012 until the re-opening of the PHP mill.⁷⁰ The Pöyry Expert Report also ignores the increase in raw materials costs that coincided with the brief increase in the SCP price during 2013.⁷¹ Following that temporary increase, the price of SCP resumed its downward trajectory despite markedly higher prices for BSKP. This divergence underscores the adverse impact that the re-entry of the PHP mill had on the price of SCP.

D. Response to additional criticisms in the Steger Report

55. The Steger Report criticizes my report for not clearly explaining my measure of benefits, not valuing damages caused by the opening of the PHP mill, failing to consider the grade composition of SCP produced by PHP and Resolute, misstating the quantity of SCP added to the market by PHP's re-start, and incorrectly identifying the injuries experienced by Resolute due to the re-entry of PHP. I address these criticisms below.

⁶⁸ Pöyry Expert Report at ¶101.

⁶⁹ Pöyry Expert Report at ¶79 and Figure 5.6.

⁷⁰ Pöyry Expert Report at ¶72 and Figure 5.2.

⁷¹ Pöyry Expert Report at ¶79 and Figure 5.6

1. My measure of benefits was clearly explained.

- 56. The Steger Report is concerned that the sum of the various components of the benefits package I identify in my initial report totaled CAD 1.164 billion versus the total value of over CAD 124.5 million in benefits I claim in my report.⁷² As noted in footnote 25 of my report, my valuation of the benefits excludes the tax loss benefit⁷³ of CAD 1.0 billion, which accounts for the vast majority of the difference between the sum of the bullets and the value of CAD 124.5 million. I also explicitly exclude the hot idle and forest infrastructure funding of CAD 36.8 million specified in my first bullet.⁷⁴ Finally, I explicitly exclude the reduced property taxes of CAD 1.3 million specified in my eighth bullet.⁷⁵ The sum of the remaining elements is CAD 124.5 million, which is consistent with the value of the benefits package provided in my report. This should alleviate Mr. Steger's concern.
- 57. I note that Mr. Steger's review of the Port Hawkesbury Paper Limited Partnership's ("PHPL") financial statements from 2012 to 2015 finds 1) benefits of CAD from GNS and 2) expectations of an additional from GNS and 2) expectations of a additional from GNS and 2) expectations of a additional from GNS additional from GNS

already received substantial funding from GNS.

⁷² Steger Report at \P 24.

⁷³ Kaplan Report at ¶ 24. I did not include the benefit in my twelfth bullet, "Ability to harvest \$1 billion in Nova Scotia tax losses to offset taxes on assets outside of the province," in my estimate of over CAD124.5 million.

⁷⁴ Kaplan Report at ¶ 24. I did not include the benefit in my first bullet, "\$36.8 million for hot idle and forest infrastructure funding," in my estimate of over CAD124.5 million.

⁷⁵ Kaplan Report at ¶ 24. I did not include the benefit in my eighth bullet, "Reduced property taxes by \$1.3 million," in my estimate of over CAD124.5 million.

Public Version

2. My analysis properly excluded a damages calculation

58. The Steger Report criticizes me for not quantifying the adverse effect of re-entry on Resolute's profitability and for not taking into account "real world events" since the opening of PHP. I note that my report is on liability, not damages, so I was not asked to quantify the impact of PHP's re-entry on Resolute's profitability. As for the impacts of other world events, they can be analyzed in the comparative statics framework I presented in my original report. I have not explicitly done so because my focus has been on the impact of a specific event, the re-entry of the PHP mill. As discussed above, the downward sloping demand curve explicitly takes into account the possibility of substitution among SC paper and other products in response to changes in relative prices. The stepped supply curves in Figure 2 also illustrate the impact of a secular decline in demand. The reason I do not assess the impact of the other events identified in the Steger Report is that my charge is to establish whether the full re-entry of the PHP mill into the North American market caused economic harms to Resolute's SCP operations.

3. I did consider the grade composition of the PHP and Resolute SCP.

59. The Steger Report is also concerned that I did not mention the grade composition of PHP and Resolute. As an initial matter, I did mention that SC paper grades are highly substitutable and, as a result, their prices tend to move together.⁷⁶ This also is demonstrated

⁷⁶ Kaplan Report at ¶ 37.

in Figure 5-2 of the Pöyry Expert Report. Second, there is overlap in competition because both PHP and Resolute produce and sell SCA and because at the margin SCA competes with SCA+, and is therefore affected by changes in the price of SCA+. Finally, because all levels of SCA are considered to have better attributes than SCB, the price of SCA normally sets a cap on the price of SCB. Since PHP's re-entry, the prices of SCB and SCA have moved in tandem with the price for SCA above the price of SCB.⁷⁷

60. Mr. Steger appears to be arguing that SCA+ is substitutable with coated mechanical papers that Resolute's SCP mills do not produce, but is not substitutable with, and therefore cannot affect the prices of, SCA and SCB, which the Resolute mills in question do produce. He cannot have it both ways. If the prices for SCA+ are low enough to cause demand shifts from other grades, it stands to reason that those low prices also will have adverse effects on the prices of adjacent grades in the same family.

4. I did correctly identify the injuries experienced by Resolute due to the re-entry of PHP.

61. The Steger Report also states that PHP only added MT of SCP shipments to the market instead of 360,000 MT of capacity that I mention in my report. Even if PHP's shipments were "only" MT, this level of shipments was still significant in light of the size of the PHP market. Further, the amount of capacity added is important to the pricing environment. It is well known that capacity utilization is a closely watched

⁷⁷ Pöyry Expert Report at Figure 5-2.

indicator in the paper industry precisely because mills seek to operate at high capacity utilization rates.⁷⁸

- 62. The USITC and industry analysts agree there is a link between capacity utilization and price. Because mills need to operate at high utilization rates, they tend to drop prices to achieve high rates. For example, according to the USITC, "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."⁷⁹ The USITC also noted, "To maintain sales and capacity utilization, the domestic industry priced its products competitively with the increasing volumes of subject merchandise that undersold the domestic like product to a significant degree."⁸⁰ PWCC's restart plan for the PHP mill also recognized the link between capacity and price in the North American SCP market.⁸¹ Indeed, one industry publication stated that the re-start of PHP would likely doom existing producer efforts to implement a \$40 per MT price increase for SC paper.⁸²
- 63. Contrary to the Steger Report's assertions, I correctly identified the injuries caused by the re-start of PHP. Whether the quantity added by the re-start was closer to **MT** or to 360,000 MT, the re-start of PHP shifted the supply curve to the right, which must depress the price of SCP, including the products sold by Resolute. But for this re-entry, market prices would have been higher and Resolute's sales would have been greater. The Steger

82 Exhibit R-103 (

at p. 5)

⁷⁸ Kaplan Report at ¶ 38.

⁷⁹ C-237, USITC Inv. at p. 21.

⁸⁰ *Id.* at p. 25.

⁸¹ C-163, CAN000004_0026 (PHP Restart Plan)

Report also claims that the differing product mix of the two firms precludes any injury to Resolute from the re-start. But as I mentioned in my initial report, SC grades are highly substitutable and, as a result, their prices tend to move together. The Steger Report insinuates that the temporary increase in prices during the second half of 2013 somehow discredits my model, but as shown above, there has been a long period of low and declining prices consistent with the predictions of my model and the one Pöyry used in its earlier reports unrelated to this litigation.

E. Response to Additional Criticisms in the Pöyry Expert Report

64. The Pöyry Expert Report criticizes my report for claiming that the benefits package alone caused the re-entry of PHP.⁸³ Specifically, the report states that I ignored the expertise that Pacific West Commercial Corporation ("PWCC") brought to PH's operations and did not comment on how and when each component of the benefits package was utilized.⁸⁴ Further, the Pöyry Expert Report claimed I overlooked the role played by imports. However, Pöyry's own exhibits show that imports neither offset the decline in PHP production in 2012 nor offset the increase in PHP production caused by the re-entry in 2013. These criticisms are unfounded and irrelevant to my conclusions.

1. My analysis of the PHP re-entry considered the role of PHP's management.

65. I did consider other steps taken by PWCC's management. Most importantly, I considered that PWCC's representatives made it clear that they would only purchase and operate the

⁸³ Pöyry Expert Report at ¶ 97

⁸⁴ Id.

facility if the benefits package was sufficient to make it the producer of SCP in the North American market.⁸⁵ I considered that PWCC recognized that the

.⁸⁶ I also considered that the PWCC team recognized that it would need a very large package of benefits in order to achieve its goal of being the

, which is why PWWC rejected

,⁸⁷ and called off the purchase of the mill when an unfavorable tax ruling effectively reduced the size of the benefits offer.

- 66. PWCC has, of course, managed the PH facility since assuming ownership, and made certain operational decisions. These decisions are irrelevant to my analysis. The main point of my report is that PWCC would not have assumed ownership and re-opened the PH facility without the substantial large benefits package it received from the NSG. Without the benefits package, PHP would not have been opened and PWCC would not have had the opportunity to manage the facility.
- 67. I note that the Pöyry Expert Report Table 6.1 ascribes a number of cost savings to PWCC business acumen that largely reflect lower costs associated with operating only one machine instead of two. NSG was aware that it would be extremely challenging for PHP to compete in the newsprint market if the mill re-opened due to a report

88

⁸⁵ Kaplan Report at ¶ 32; C-197, PWCC Evidence at 9; C-163, CAN000004 0011.

⁸⁶ Kaplan Report at ¶ 20 and ¶ 25; C-126, CAN000069_0001.

⁸⁷ Kaplan Report at ¶ 26.

⁸⁸ Exhibit R-146 at p. 6-8.

68. The Pöyry Expert Report's claim that I did not comment on how or when the various components of the benefits package were used is irrelevant. My point is that PWCC would not have made a CAD33 million investment in PHP without the total benefits package. Capital budgeting techniques allow managers to calculate the net present value of current and future benefits so that the various components of the package can be compared on a common basis at a single point in time. This technique adjusts for time variant cash flows by "discounting" expected future benefit values to the present. Thus, whether the nominal amount of the various benefits in the package was realized over time is immaterial. What is relevant to me is whether the expected net present value of the benefits package was large enough to make the purchase of PHP worthwhile for PWCC. And it was.

2. SCP imports were minor compared to the supply that PHP added to the North American SCP market.

69. Figure 3-2 of the Pöyry Expert Report shows that changes to imports into the North American SCP market did not offset the increase in North American supply caused by the re-entry of PHP. Thus, the re-opening created a net increase in supply causing equilibrium consumption to increase and prices to fall. (Similarly, the exit of the Port Hawkesbury mill in 2012 was not offset by an increase in imports of a similar magnitude.) Figure 3-3 of the Pöyry Expert Report shows a similar pattern when the analysis is confined solely to SC-A/A+ consumption.⁸⁹

⁸⁹ An incomplete offsetting import response is consistent with Armington's insight that domestic (*i.e.*, North American) and imported products are differentiated by country of origin based on market characteristics such as availability, delivery times, etc., as well as physical characteristics. It is also consistent with an upward sloping import supply. *See* C-308, Paul S. Armington. (Mar., 1969) "A Theory of Demand for Products Distinguished by Place of Production," *IMF Staff Papers*, Vol. 16, No. 1, pp. 159-178. The Armington assumption is incorporated into nearly all widely used general and partial equilibrium trade models. See, for example, C-309, Martina Brockmeier. (October

Public Version

VI. Conclusion

- 70. The two reports criticizing my liability report make two fundamental arguments. First they claim that my framework of analysis is too theoretical to explain price and volume trends in the SCP market following the exit and re-entry of the PHP mill. Second, they claim that I ignore alternative explanations that explain short- and long-term market movements in the price of SCP, such as market segmentation, imports, and the acumen of PWCC management. These reports reach these conclusions in large part because they misunderstand, mischaracterize and ignore the basic economic relationships embodied in supply and demand curves.
- 71. Whether they realize it or not, the authors of the Pöyry Expert Report and the Steger Report actually adopt the key conditions of competition in the SCP market, a stepped upward sloping supply curve, a downward sloping demand curve, and a continuum of substitutable SCP grades. Where we differ is that I consider the relevant market as the market for SCP, while their construct redraws the boundaries of the SCP market in an attempt to cordon off Resolute's SCP production from the effects of the sudden increase in SCP supply. However, their own data show that SCP prices declined and trended downward for a number of years after the re-opening of the PHP mill, consistent with the predictions of the conventional model I have put forth, and consistent with earlier predictions made by

prior to the re-opening of the PHP mill.

^{1996) &}quot;A Graphical Exposition of the GTAP Model." *GTAP Technical Paper No.* 8, at 15; and C-368, Joseph F. Francois and H. Keith Hall. (1998) "Partial Equilibrium Modelling," in Joseph F Francois and Kenneth A. Reinert, eds., Applied Methods for Trade Policy Analysis—A Handbook, Cambridge University Press, 122-155.

- 72. This re-opening was made possible by the benefits package provided by NSG, a package that both reports indicate was substantial. In fact, in quibbling with the size of the benefits package and its relative effects, the reports demonstrate that 1) the benefits package was large, and 2) the benefits package led to substantial annual cost savings. The bottom line is that neither report demonstrated that PWCC would have purchased and re-started the PHP mill absent the benefits package.
- 73. As such, my opinion remains that PWCC would not have purchased and re-started the PHP mill without NSG's benefits package, that the resumption of production and subsequent sales of SC paper by PHP depressed prices of SC paper in the North American market, and that the resulting lower prices and lost volumes caused harm to Resolute. But for the benefits package, Resolute's SCP mills would have achieved higher volumes at higher prices, and therefore greater profits.

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

Seth T. Kaplan Washington, DC 20036 United States