



**UNITED STATES – COUNTERVAILING MEASURES ON
SUPERCALENDERED PAPER FROM CANADA**

RECOURSE TO ARTICLE 22.6 OF THE DSU BY THE UNITED STATES

DECISION BY THE ARBITRATOR

Addendum

This *addendum* contains Annexes A to C to the Decision of the Arbitrator to be found in document WT/DS505/ARB.

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ANNEX A

WORKING PROCEDURES OF THE ARBITRATOR

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ANNEX A-1

WORKING PROCEDURES OF THE ARBITRATOR

Adopted on 28 August 2020

General

1. (1) In this proceeding, the Arbitrator shall follow the relevant provisions of the Understanding on Rules and Procedures Governing the Settlement of Disputes ("DSU"). In addition, the following Working Procedures apply.

(2) The Arbitrator reserves the right to modify these procedures as necessary, after consultation with the parties.

Confidentiality

2. (1) The deliberations of the Arbitrator and the documents submitted to it shall be kept confidential. Members shall treat as confidential information that is submitted to the Arbitrator by another Member which the submitting Member has designated as confidential.

(2) In accordance with the DSU, nothing in these Working Procedures shall preclude a party from disclosing statements of its own positions to the public.

(3) If a party submits a confidential version of its written submissions to the Arbitrator, it shall also, upon request of a Member, provide a non-confidential summary of the information contained in its submissions that could be disclosed to the public. A party should endeavour to promptly provide a non-confidential summary to any Member requesting it, and if possible, within 10 days of receiving the request.

(4) Upon request, the Arbitrator may adopt appropriate additional procedures for the treatment and handling of confidential information after consultation with the parties.

Submissions

3. (1) Before the substantive meeting of the Arbitrator with the parties, Canada shall transmit to the Arbitrator and to the United States a communication explaining the basis for its request, including the methodology and data supporting it, in accordance with the timetable adopted by the Arbitrator.

(2) Each party to the dispute shall also transmit to the Arbitrator a written submission in which it presents the facts of the case and its arguments, in accordance with the timetable adopted by the Arbitrator.

(3) The Arbitrator may invite the parties to make additional submissions during the proceeding, including with respect to requests for preliminary rulings in accordance with paragraph 4 below.

Preliminary rulings

4. (1) If the United States considers that the Arbitrator should make a ruling before the issuance of the Decision that certain measures, claims or issues are not properly before the Arbitrator, the following procedure applies. Exceptions to this procedure shall be granted upon a showing of good cause.
 - a. The United States shall submit any such request for a preliminary ruling at the earliest possible opportunity. Canada shall submit its response to the request at a time to be determined by the Arbitrator in light of the request.

- b. The Arbitrator may issue a preliminary ruling on the issues raised in such a preliminary ruling request before, during or after the substantive meeting, or the Arbitrator may defer a ruling on the issues raised by a preliminary ruling until it issues its Decision to the parties.
 - c. If the Arbitrator finds it appropriate to issue a preliminary ruling before the issuance of its Decision, the Arbitrator may provide reasons for the ruling at the time that the ruling is made, or subsequently in its Decision.
- (2) This procedure is without prejudice to the parties' right to request other types of preliminary or procedural rulings during the proceeding, and to the procedures that the Arbitrator may follow with respect to such requests.

Evidence

- 5. (1) Each party shall submit all evidence to the Arbitrator no later than the substantive meeting, except evidence necessary for purposes of rebuttal, or evidence necessary for answers to questions or comments on answers provided by the other party. Additional exceptions may be granted upon a showing of good cause.
- (2) If any new evidence has been admitted upon a showing of good cause, the Arbitrator shall accord the other party an appropriate period of time to comment on the new evidence submitted.
- 6. (1) If the original language of an exhibit or portion thereof is not a WTO working language, the submitting party shall simultaneously submit a translation of the exhibit or relevant portion into the WTO working language of the submission. The Arbitrator may grant reasonable extensions of time for the translation of exhibits upon a showing of good cause.
- (2) Any objection as to the accuracy of a translation should be raised promptly in writing, preferably no later than the next filing or the meeting (whichever occurs earlier) following the submission which contains the translation in question. Any objection shall be accompanied by an explanation of the grounds for the objection and an alternative translation.
- 7. (1) To facilitate the maintenance of the record of the dispute and maximize the clarity of submissions, each party shall sequentially number its exhibits throughout the course of the dispute, indicating the submitting Member and the number of each exhibit on its cover page. Exhibits submitted by Canada should be numbered CAN-1, CAN-2, etc. Exhibits submitted by the United States should be numbered USA-1, USA-2, etc. If the last exhibit in connection with a submission was numbered CAN-5, the first exhibit in connection with the next submission thus would be numbered CAN-6. If a party withdraws an exhibit or leaves one or more exhibits intentionally blank, it should indicate this on the cover page that provides the number of the blank exhibit.
- (2) Each party shall provide an updated list of exhibits (in Word or Excel format) together with each of its submissions, oral statements, and responses to questions.
- (3) If a party submits a document that has already been submitted as an exhibit by the other party, it should explain why it is submitting that document again.
- (4) Insofar as a party considers that the Arbitrator should take into account a document already submitted as an exhibit in the prior panel proceedings, it should resubmit that document as an exhibit for the purpose of this proceeding. In its list of exhibits, it should refer to the number of the original exhibit in the original panel proceeding (OP) and Article 21.5 panel proceedings (CP), if applicable (example: CAN-1 (CAN-21-OP)).
- (5) If a party includes a hyperlink to the content of a website in a submission, and intends that the cited content form part of the official record, the cited content of the website shall be provided in the form of an exhibit along with an indication of the date that it was accessed.

Editorial Guide

8. In order to facilitate the work of the Arbitrator, each party is invited to make its submissions in accordance with the WTO Editorial Guide for Submissions (electronic copy provided).

Questions

9. The Arbitrator may pose questions to the parties at any time, including:

a. Before the meeting, the Arbitrator may send written questions, or a list of topics it intends to pursue in questioning orally during the meeting. The Arbitrator may ask different or additional questions at the meeting.

b. The Arbitrator may put questions to the parties orally during the meeting, and in writing following the meeting, as provided for in paragraph 16 below.

Substantive meeting

10. The Arbitrator may open its meetings with the parties to the public, either in whole or in part, subject to appropriate procedures to be adopted by the Arbitrator after consulting with the parties.

11. The parties shall be present at the meetings only when invited by the Arbitrator to appear before it.

12. (1) Each party has the right to determine the composition of its own delegation when meeting with the Arbitrator.

(2) Each party shall have the responsibility for all members of its delegation and shall ensure that each member of its delegation acts in accordance with the DSU and these Working Procedures, particularly with regard to the confidentiality of the proceeding and the submissions of the parties.

13. Each party shall provide to the Arbitrator the list of members of its delegation no later than 5.00 p.m. (Geneva time) three working days before the first day of the meeting with the Arbitrator.

14. A request for interpretation by any party should be made to the Arbitrator as early as possible, preferably at the organizational stage, to allow sufficient time to ensure availability of interpreters.

15. There shall be one substantive meeting with the parties.

16. The substantive meeting of the Arbitrator with the parties shall be conducted as follows:

a. The Arbitrator shall invite the United States to make an opening statement to present its case first. Subsequently, the Arbitrator shall invite Canada to present its point of view. Before each party takes the floor, it shall provide the Arbitrator with a provisional written version of its statement. If interpretation is needed, each party shall provide additional copies for the interpreters.

b. Each party should avoid lengthy repetition of the arguments in its submissions. Each party is invited to limit the duration of its opening statement to not more than 60 minutes. If either party considers that it requires more time for its opening statement, it should inform the Arbitrator and the other party at least 10 days prior to the meeting, together with an estimate of the expected duration of its statement. The Arbitrator will accord equal time to the other party.

c. After the conclusion of the opening statements, the Arbitrator shall give each party the opportunity to make comments or ask the other party questions.

d. The Arbitrator may subsequently pose questions to the parties.

- e. Once the questioning has concluded, the Arbitrator shall afford each party an opportunity to present a brief closing statement, with the United States presenting its statement first. Before each party takes the floor, it shall provide the Arbitrator and other participants at the meeting with a provisional written version of its closing statement, if available.
- f. Following the meeting:
- i. Each party shall submit a final written version of its opening statement no later than 5.00 p.m. (Geneva time) on the first working day following the meeting. At the same time, each party should also submit a final written version of any prepared closing statement that it delivered at the meeting.
 - ii. Each party shall send in writing, within the timeframe established by the Arbitrator before the end of the meeting, any questions to the other party to which it wishes to receive a response in writing.
 - iii. The Arbitrator shall send in writing, within the timeframe established by the Arbitrator, any questions to the parties to which it wishes to receive a response in writing.
 - iv. Each party shall respond in writing to the questions from the Arbitrator, and to any questions posed by the other party, within the timeframe established by the Arbitrator.

Descriptive part and executive summaries

17. The description of the arguments of the parties in the Decision of the Arbitrator shall consist of executive summaries provided by the parties, which shall be annexed as addenda to the Decision. These executive summaries shall not in any way serve as a substitute for the submissions of the parties in the Arbitrator's examination of the case.

18. Each party shall submit one integrated executive summary, which shall summarize the facts and arguments as presented to the Arbitrator in the party's submissions and statements, and may also include a summary of its responses to questions and comments thereon following the substantive meeting.

19. Each integrated executive summary shall be limited to 15 pages.

20. The Arbitrator may request the parties to provide executive summaries of facts and arguments presented in any other submissions to the Arbitrator for which a deadline may not be specified in the timetable.

Service of documents

21. The following procedures regarding service of documents apply to all documents submitted by parties during the proceeding:

- a. Each party shall submit all documents to the Arbitrator by submitting them via the WTO e-filing system by 5.00 p.m. (Geneva time) on the due dates established by the Arbitrator. The electronic version uploaded into the WTO e-filing system shall constitute the official version for the purposes of submission deadlines and the record of the dispute. Upload of a document into the WTO e-filing system shall constitute electronic service on the Arbitrator and the other party.
- b. By 5.00 p.m. (Geneva time) the next working day following the electronic submission, each party shall submit one paper copy of all documents it submits to the Arbitrator, including the exhibits, with the DS Registry (office No. 2047). The DS Registrar shall stamp the documents with the date and time of the submission. If an exhibit is in a format that is impractical to submit as a paper copy, then the party may submit such exhibit in electronic format (on a CD-ROM or DVD). In this case, the cover page of the exhibit should indicate that the exhibit is only available in electronic format.

- c. All documents and communications issued by the Arbitrator during the proceeding will be provided to the parties via the WTO e-filing system.
- d. If the parties have any questions or technical difficulties relating to the WTO e-filing system, they are invited to contact the DS Registry (DSRegistry@wto.org).
- e. If any party is unable to meet the 5.00 p.m. deadline because of technical difficulties in uploading these documents into the WTO e-filing system, the party concerned shall inform the DS Registry without delay and provide an electronic version of all documents to be submitted to the Arbitrator by email including any exhibits. The email shall be addressed to DSRegistry@wto.org, the Secretary to the Arbitrator, and the other party. The documents sent by email shall be submitted no later than 6.00 p.m. on the due date established by the Arbitrator. If the file size of specific exhibits makes transmission by email impossible, or it would require more than five email messages, owing to the number of exhibits to be filed, to transmit all of them by email, the specific large file size exhibits, or those that cannot be attached to the first five email messages, shall be filed with the DS Registry (office No. 2047) and provided to the other party by no later than 9.30 a.m. the next working day on a CD-ROM or DVD. In that case, the party concerned shall send a notification to the DS Registrar, copying the Secretary to the Arbitrator and the other party via email, identifying the numbers of the exhibits that cannot be transmitted by email.
- f. In case any party is unable to access a document filed through the WTO e-filing system because of technical difficulties, it shall promptly, and in any case no later than 5.00 p.m. on the next working day after the due date for the filing of the document, inform the DS Registrar, the Secretary to the Arbitrator, and the party that filed the document, of the problem by email and shall, if possible, identify the relevant document(s). The DS Registrar will promptly try to identify a solution to the technical problem. In the meantime, the party that filed the document(s) shall, promptly after being informed of the problem, provide an electronic version of the relevant document(s) to the affected party by email, with a copy to the DS Registry (DSRegistry@wto.org) and the Secretary to allow access to the document(s) while the technical problem is being addressed. The DS Registrar may provide an electronic version of the relevant document(s) by email if the affected party so requests. The DS Registrar shall in that case copy the party that filed the document(s) on the email message.

Correction of clerical errors in submissions

22. The Arbitrator may grant leave to a party to correct clerical errors in any of its submissions (including paragraph numbering and typographical mistakes). Any such request should identify the nature of the errors to be corrected and should be made promptly following the filing of the submission in question.

ANNEX A-2

**ADDITIONAL WORKING PROCEDURES OF THE ARBITRATOR CONCERNING BUSINESS
CONFIDENTIAL INFORMATION¹**

Adopted on 28 August 2020

1. The following procedures apply to business confidential information (BCI) submitted in the course of the present Arbitration proceedings.
2. For the purposes of these proceedings, BCI is defined as any information that has been designated as such by a party submitting the information to the Arbitrator. The parties shall only designate as BCI information that is not available in the public domain, the release of which would cause serious harm to the interests of the originator(s) of the information. BCI may include information that was previously treated by the US Department of Commerce as confidential or proprietary information protected by Administrative Protective Order in the course of the countervailing duty proceeding entitled Supercalendered Paper from Canada (C-122-854). In addition, these procedures do not apply to any BCI if the entity which provided the information in the course of the aforementioned investigation has agreed in writing to make the information publicly available.
3. If a party considers it necessary to submit to the Arbitrator BCI as defined above from an entity that submitted that information in investigation C-122-854, the party shall, at the earliest possible date, obtain an authorizing letter from the entity and provide such authorizing letter to the Arbitrator, with a copy to the other party. The authorizing letter from the entity shall authorize both Canada and the United States to submit in this arbitration proceeding, in accordance with these procedures, any confidential information submitted by that entity in the course of investigation C-122-854. Each party shall, at the request of the other party, facilitate the communication to an entity in its territory of any request to provide an authorizing letter referred to above. Each party shall encourage any entity in its territory that is requested to grant the authorization referred to in this paragraph to grant such authorization.
4. No person may have access to BCI except a member of the Secretariat or the Arbitrator, an employee of a party, or an outside advisor to a party for the purposes of this arbitration proceeding. However, an outside advisor to a party is not permitted access to BCI if that advisor is an officer or employee of an enterprise engaged in the production, sale, export, or import of the products that were the subject of investigation C-122-854, or an officer or employee of an association of such enterprises.
5. A person having access to BCI shall treat it as confidential, i.e. shall not disclose that information other than to persons authorized to have access to it pursuant to these procedures. Each party is responsible for ensuring that its employees and/or outside advisors comply with these procedures. BCI obtained under these procedures may be used only for the purpose of providing information and argumentation in this arbitration proceeding and for no other purpose. All documents and electronic storage media containing BCI shall be stored in such a manner as to prevent unauthorized access to such information.
6. A party submitting BCI shall mark the cover and/or first page of the document containing BCI, and each page of the document, to indicate the presence of such information. The specific information in question shall be placed between double brackets, as follows: [[xx,xxx.xx]]. The first page or cover of the document shall state "Contains Business Confidential Information on pages xxxxxx", and each page of the document shall contain the notice "Contains Business Confidential Information" at the top of the page. A party submitting BCI in the form of, or as part of, an Exhibit

¹ These procedures are adopted according to, and are an integral part of, the Arbitrator's Working Procedures of the same date.

shall, in addition to the above, so indicate by putting "BCI" next to the exhibit number (e.g. Exhibit CAN-1 (BCI)).

7. Where BCI is submitted in electronic format, the file name shall include the terms "Business Confidential Information" or "BCI". In addition, where applicable, the label of the storage medium shall be clearly marked with the statement "Business Confidential Information" or "BCI".

8. Where a party submits a document containing BCI to the Arbitrator, the other party referring to that BCI in its documents, including written submissions and oral statements, shall clearly identify all such information in those documents. All such documents shall be marked and treated as described in paragraph 6. In the case of an oral statement containing BCI, the party making such a statement shall inform the Arbitrator before making it that the statement will contain BCI, and the Arbitrator will ensure that only persons authorized to have access to BCI pursuant to these procedures are present or observing the session at that time. The written versions of such oral statements submitted to the Arbitrator shall be marked as provided for in paragraph 6.

9. If a party considers that information submitted by the other party should have been designated as BCI and objects to its submission without such designation, it shall forthwith bring this objection to the attention of the Arbitrator and the other party, together with the reasons for the objection. Similarly, if a party considers that the other party designated as BCI information which should not be so designated, it shall forthwith bring this objection to the attention of the Arbitrator and the other party, together with the reasons for the objection. The Arbitrator shall decide whether information subject to an objection will be treated as BCI for the purposes of these arbitration proceedings on the basis of the criteria set out in paragraph 2.

10. The Arbitrator will not disclose BCI, in its decision or in any other way, to persons not authorized under these procedures to have access to BCI. The Arbitrator may, however, make statements of conclusion drawn from such information. Before the Arbitrator circulates its final decision to the Members, the Arbitrator will give each party an opportunity to review the decision to ensure that it does not contain any information that the party has designated as BCI.

ANNEX A-3

ADDITIONAL WORKING PROCEDURES OF THE ARBITRATOR CONCERNING MEETINGS WITH REMOTE PARTICIPATION

Adopted on 20 August 2021

General

1. These Additional Working Procedures set out terms for holding meetings with the Arbitrator which some participants may attend by remote means.

Definitions

2. For the purposes of these Additional Working Procedures:

"Remote participant" means any registered person attending the meeting with the Arbitrator by remote means.

"Platform" means the software or system through which remote participants attend the meeting with the Arbitrator.

"Host" means the designated person within the WTO Secretariat responsible for the management of the platform.

Equipment and technical requirements

3. Each party shall ensure that all remote participants of its delegation join the meeting using the designated platform, and meet the minimum equipment and technical requirements set out by the platform provider for the effective conduct of the meeting.

Technical support

4. (1) The host will assist remote participants in planning, testing and conducting the virtual meeting and provide remote participants with technical support pertaining to the platform and its functionality.
(2) In order to guarantee the timely provision of technical support, the host will prioritize assisting those remote participants designated as main speakers on the delegations' lists.
(3) In light of the limitations of remote assistance, each party shall be responsible for its own technical support pertaining to its computer systems and networks.

Pre-meeting

Registration

5. Each party shall provide to the Arbitrator the list of the members of its delegation, on a dedicated form to be provided by the WTO Secretariat, no later than 5:00 p.m. (Geneva time) two weeks before the first day of the meeting with the Arbitrator. Such list shall include all members of the party's delegation, regardless of whether they participate in person or by remote means. Each party shall indicate who among their remote participants will be their main speakers.

Advance testing

6. Before the meeting with the Arbitrator, the WTO Secretariat will hold two testing sessions with all remote participants of each party: (i) a separate one for each party's remote participants, and (ii) a joint session with all participants in the meeting, including all remote participants of

the parties and the arbitrators joining remotely. Such sessions will seek to reflect, as far as possible, the conditions of the meeting.

Confidentiality and security

7. All remote participants shall follow the Additional Working Procedures of the Arbitrator concerning Business Confidential Information and the security rules contained in these Additional Working Procedures as well as any additional security guidance that may be provided by the host.
8. Remote participants shall connect to the virtual meeting through a secure internet connection and shall avoid the use of an open or public internet connection.
9. The parties are strictly prohibited from:
 - (1) Recording, via audio, video or screenshot, the virtual meeting or any part thereof; and
 - (2) Permitting any non-participant to record, via audio, video or screenshot, the virtual meeting or any part thereof.

Conduct of the meeting

Access to the virtual meeting room

10. (1) The host will invite remote participants via email to join the virtual meeting room on the platform.
 - (2) For security reasons, access to the virtual meeting room will be password-protected and limited to registered participants. Remote participants shall not forward or share the meeting link or password with non-remote participants.
 - (3) Each party shall ensure that only registered participants from its delegation join the virtual meeting room.

Advance log-on

11. (1) The virtual meeting room will be accessible 60 minutes in advance of the scheduled start time of each session of the meeting with the Arbitrator.
 - (2) All remote participants shall log on to the platform at least 30 minutes in advance of the scheduled start time of each session of the meeting with the Arbitrator.

Document sharing

12. (1) Each party shall provide the Arbitrator and other participants with a provisional written version of its opening statement and, if available, of its closing statement, before delivery at the meeting.
 - (2) Any participant wishing to share a document with the Arbitrator and other participants during the meeting shall do so before first referring to such document at the meeting.

Communication breakdown

13. (1) Each party shall designate a contact person who can liaise with the host during the course of the meeting to report any technical issues that arise with respect to the platform. The host can be contacted via the platform, by sending an email to madeleine.mitchell@wto.org, or by calling +41 (0)22 739 6964.
 - (2) After consulting the parties, the Arbitrator may pause the session until the technical issue is resolved or may continue the proceedings with those participants that continue to be connected or are physically present in the meeting room at the WTO.

Relation with the Working Procedures of the Arbitrator

14. These Additional Working Procedures complement the Working Procedures of the Arbitrator and prevail over the latter to the extent of any conflict.
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ANNEX A-4

**ADDITIONAL WORKING PROCEDURES OF THE ARBITRATOR REGARDING OPEN MEETINGS
(DELAYED ONLINE BROADCAST)**

Adopted on 17 December 2021

1. The Arbitrator adopted Additional Working Procedures of the Arbitrator Concerning an Open Meeting on 28 August 2020 at the request of the parties. Those additional working procedures were repealed by the Arbitrator on 3 September 2021, because such procedures envisioned an in-person meeting occurring in Geneva, and the meeting ultimately occurred in a virtual format. These new Additional Working Procedures of the Arbitrator Regarding Open Meetings (Delayed Online Broadcast) have been adopted to replace the repealed Additional Working Procedures of the Arbitrator Concerning an Open Meeting.
 2. The Arbitrator has agreed to make the relevant portions of the recordings of the meeting with the parties available to the public in a delayed online broadcast format set out in these additional working procedures. The meeting with the Arbitrator was held in a virtual format with the possibility for limited participation on the WTO premises.
 3. The Arbitrator will make available to the public, via a registration process, the audio recordings of the relevant portions of the meeting with the parties, together with the "as delivered" written versions of the parties' statements at the meeting and the written versions of the parties' responses to the Arbitrator's questions following the meeting submitted by the parties on 29 October 2021, excluding exhibits (collectively, the Materials). The Materials will be available in English and no interpretation or translation will be provided.
 4. The Materials will be available to the registered participants through a password-protected web-link during a limited period of 72 hours. At the beginning of the period, all registered participants will receive an email with the web-link and access credentials. The registered participants may access the web-link at any time within the period to listen to and/or read the Materials. At the end of the period, the Materials will no longer be accessible.
 5. The parties shall inform the Arbitrator by a deadline set by the Arbitrator, which shall be no later than two weeks before the delayed online broadcast, whether any parts of their relevant Materials shall be redacted in order to protect private or confidential information.
 6. All registered participants will be informed that sharing the web-link or access credentials with other persons and/or any form of recording or sharing of the Materials with other persons is prohibited. However, the parties recognize that, given the format of the broadcast, the Arbitrator and the WTO Secretariat cannot guarantee or supervise the registered participants' compliance with this rule.
 7. Access to the Materials will be open to officials of WTO Members, Observers, staff members of the WTO Secretariat, journalists, representatives of non-governmental organizations, and the interested members of the public upon registration. No later than two weeks before the delayed online broadcast, the WTO Secretariat will place a notice on the WTO website informing the public of the delayed online broadcast. The notice shall include a link to register directly with the WTO. The notice shall also indicate the beginning, duration, and the end of the period during which the Materials will be available. The deadline for the registration shall be ten days from the date of the publication. The WTO Secretariat will inform the parties of publishing the notice no later than two days before the publication. The WTO Secretariat will share the names of the registered participants with the parties.
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ANNEX B

ARGUMENTS OF THE PARTIES

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ANNEX B-1**INTEGRATED EXECUTIVE SUMMARY OF THE ARGUMENTS OF THE UNITED STATES****EXECUTIVE SUMMARY OF THE U.S. WRITTEN SUBMISSION****I. INTRODUCTION**

1. The U.S. views on the appellate document are clearly reflected in the minutes of the March 5, 2020 and June 29, 2020 DSB meetings, as well as the U.S. communication to the DSB on April 17, 2020. In this submission, the United States will not repeat those objections. However, the United States emphasizes that its participation in this arbitration is without prejudice to its views concerning the invalidity of the appellate document and the purported adoption of recommendations by the DSB. Furthermore, the use of the term challenged "measure" in this arbitration proceeding is without prejudice to the U.S. position concerning the DSB adoption procedures and existence of DSB recommendations.

2. Canada's methodology paper demonstrates that Canada's request for suspension of concessions is contrary to the requirements of the DSU. Canada suffers no nullification or impairment from a measure that is not applied to it. Canada has also requested to suspend concessions on the basis of a formula, but this cannot generate an estimate that is equivalent to a future level of nullification or impairment because the formula simply speculates as to what duty might result from the discovered subsidy "ongoing conduct". In the event the Arbitrator proceeds to evaluate a future, hypothetical level of nullification or impairment, the United States also provides its views on conceptual and methodological flaws in Canada's approach.

II. CANADA HAS NO NULLIFICATION OR IMPAIRMENT

3. Under the terms of Article 22.7, the arbitrator considering the matter "shall determine whether the level of such suspension is equivalent to the level of nullification or impairment." Article 22.4 of the DSU requires that the "level of the suspension of concessions or other obligations authorized by the DSB shall be equivalent to the level of the nullification or impairment." Therefore, where nullification or impairment does not exist, the level of suspension should be set at zero. To do otherwise would breach Articles 22.4 and 22.7 of the DSU because the level of suspension of concessions would fail to be "equivalent" to the correct level of nullification or impairment, which is zero.

4. The same conclusion follows from the second sentence of Article 22.7. This provision reads: "The arbitrator may also determine if the proposed suspension of concessions or other obligations is allowed under the covered agreement." Under Article 1.1 and Appendix 1 of the DSU, the DSU itself is a "covered agreement". Article 22.4 of the DSU establishes that the level of suspension shall be equivalent to the nullification or impairment. However, a suspension of concessions that is not zero is not equivalent to a level of nullification or impairment that is zero, and therefore, Canada's proposed suspension is not allowed under the DSU.

A. The DSU Permits the Arbitrator to Find That Nullification or Impairment Does Not Exist

5. Article 3.8 of the DSU plainly provides for the possibility that the Member concerned may rebut the presumption of the existence of nullification or impairment by putting forth evidence that a breach of WTO obligations does not have an adverse impact on the complaining Member. This is because nullification or impairment and breach are two separate concepts.

6. Nothing in Article 3.8 of the DSU, which is one of the "General Provisions" of the DSU, limits the opportunity of the Member concerned to make such a rebuttal only during the original panel phase of a dispute settlement proceeding. The more logical time for a Member concerned to make such a rebuttal would be in the context of an arbitration under Article 22.6 of the DSU. In the countermeasures arbitration, the question of the level of nullification or impairment – including

whether there is any at all – is placed squarely before the adjudicator that is tasked with evaluating the equivalency of the level of suspension and the nullification or impairment.

7. Furthermore, as is the case in this dispute, the factual circumstances related to the effect of a measure on the complaining Member might change over time, including after a panel report is circulated and before a suspension request is made under Article 22.2 of the DSU. Thus, it is incumbent upon the arbitrator to determine whether nullification or impairment exists as part of its evaluation of whether the level of suspension is equivalent to the nullification or impairment.

B. The Challenged Measure Causes No Nullification or Impairment

8. There is no adverse impact on Canada because the "ongoing conduct" measure does not continue to exist and be applied to exports from Canada. In the underlying proceeding, Canada used nine CVD determinations to allege an "ongoing conduct" measure; however, only one CVD determination involved a Canadian good – that is, *Supercalendered Paper*. In July 2018, the *Supercalendered Paper* countervailing duty order was revoked with retroactive effect to the beginning of the CVD proceeding. With the revocation of the order, Canada is not subject to any "ongoing conduct" and suffers from no adverse impact from the challenged measure.

9. This is a fact acknowledged by Canada in its request for authorization – the request states, "if the 'ongoing conduct' continues to exist and applies to exports from Canada in the future". As Canada itself stated at the June 29, 2020 DSB meeting, "Canada's request for authorization to suspend concessions related to 'ongoing conduct' by the United States that was not currently being applied to Canada, and would relate to future U.S. investigations or administrative reviews of Canadian goods." As it is undisputed that the "ongoing conduct" measure is not currently applied to any imports from Canada, the measure cannot "continue" to exist in relation to Canada. Rather, Canada's request solely relates to the existence and application of a measure "in the future".

10. Canada's reliance on past arbitrations that have assessed "measures that have yet to be applied against the WTO complainant in the future" is misplaced. First, the cited arbitrations concern "as such" measures, not "ongoing conduct" measures, a distinctly different type of measure in WTO dispute settlement. Second, the arbitrations relied upon by Canada concern instances where arbitrators assessed requests where the measure at issue was currently applied and would continue to be applied. In contrast, Canada asks for the Arbitrator to consider imposing countermeasures because of a measure that is not applied to any Canadian good today. Finally, in each of the "as such" disputes relied upon by Canada, the measure is easily discernable and a future application of the measure would not be disputed. Here, in contrast, all aspects of the existence of the "ongoing conduct" measure – the precise content, the repeated application, and the likelihood to continue – were highly contested between the parties and involved the evaluation of the specific facts of multiple CVD determinations.

11. Therefore, because the measure does not continue to exist and be applied to Canadian goods, the determination that a future application of facts available constitutes the existence of the measure would be subject to dispute, yet that determination would be left solely to the discretion of Canada. The fact that such an assessment would be left to the complaining party makes this dispute distinctly different from the arbitration decisions relied upon by Canada.

12. Accordingly, the United States requests that the Arbitrator determine that Canada's proposed suspension of concessions is not allowed or is not equivalent to the correct level of nullification or impairment, which is zero.

III: IN THE ALTERNATIVE, THE APPROPRIATE CALCULATION OF THE LEVEL OF NULLIFICATION OR IMPAIRMENT

13. In the event the Arbitrator proceeds to evaluate the level of nullification or impairment, the United States also provides its views on the conceptual and methodological flaws in Canada's approach.

A. Article 22.4 of the DSU Requires that the Proposed Level of Suspension Be Equivalent to the Level of Nullification or Impairment

14. Pursuant to Article 22.4 of the DSU, the DSB will not authorize the suspension of concessions or other obligations unless "the level" of suspension is "equivalent" to the level of nullification or impairment. Article 22.7 of the DSU further provides that where a matter is referred to arbitration, the arbitrator "shall determine whether the level of . . . suspension is equivalent to the level of nullification or impairment." The starting point in the analysis of a suspension request is to determine the extent to which a measure at issue is maintained following the expiration of the implementation period such that it nullifies or impairs benefits accruing to the complaining Member under the relevant covered agreement(s). An analysis of the level of nullification or impairment must focus on the "benefit" accruing to the complaining Member under a covered agreement that is allegedly nullified or impaired as a result of the breach.

15. In previous Article 22.6 proceedings, the arbitrator has compared the level of trade for the complaining party under the measure at issue to what the complaining party's level of trade would be expected to be where the Member concerned has brought the measure into conformity following the expiration of the implementation period. Canada proposes the use of a counterfactual. The United States agrees that the use of a counterfactual analysis is appropriate if the Arbitrator does not accept the U.S. argument above that Canada has suffered no nullification or impairment, but explains why Canada's counterfactual must be adjusted.

B. Canada's Counterfactual Fails to Ensure an Estimate that Is Equivalent

16. Company-specific CVD rate: The United States notes that it would not necessarily be the case that removal of the challenged measure always results in the portion of the CVD rate being reduced. Rather, the removal of the challenged measure could result in the U.S. Department of Commerce ("Commerce") continuing to find subsidization because Commerce utilizes the information from verification to find a countervailable subsidy, and therefore the respondent company's rate could stay the same or even increase. Therefore, in instances where information exists on the record of the future CVD proceeding to use for the discovered subsidy program, it would be more appropriate to use such information to calculate the counterfactual company-specific CVD rate. If such information does not exist, then the total CVD rate for the affected respondent company will be reduced by the amount of the rate attributable to the application of the measure.

17. All Others rate: Given that the All Others rate calculation differs depending on the factual circumstances of a proceeding, to ensure that the counterfactual will accurately reflect the level of nullification or impairment, it would be appropriate that the counterfactual All Others rate be calculated in accordance with the All Others rate calculation methodology that is used in the future CVD proceeding.

18. In some instances, the information needed to calculate the counterfactual All Others rate will be publicly available. If, in a future proceeding, Commerce uses a simple average of the individually-investigated respondents or uses a weighted-average of the publicly-ranged values of U.S. sales to calculate the All Others rate, the counterfactual All Others rate would be established using the same methodology, and the information needed will be publicly available.

19. Where Commerce has calculated the All Others rate using actual U.S. sales values of subject merchandise and the information is considered business confidential, Canada will request that the individually-investigated respondents in the future CVD proceeding provide written authorization to the Government of Canada to permit access to the relevant calculation memoranda, containing the confidential sales data, that will be on the record of Commerce's CVD proceeding for the purpose of calculating a counterfactual All Others rate.

20. Because the calculation of the All Others rate is done on a case-by-case basis, the same methodology applied by Commerce in the future CVD proceeding – taking into account the U.S. statute's requirements to exclude rates that are zero, *de minimis*, or entirely based on facts available – should be used to establish the counterfactual All Others rate.

C. The Selected Approach Must Allow for the Level of Nullification or Impairment to Be Determined Case by Case

21. The central issue in this proceeding is the impact on trade flows of the *future* application of the discovered subsidy "ongoing conduct" measure. Canada has requested to suspend concessions on the basis of a formula that is described in its methodology paper. As an initial matter, Canada's formula cannot generate an estimate that is equivalent to a future level of nullification or impairment because the product and market are unknown, and therefore Canada's formula rests on pure speculation. Indeed, given the unique circumstances of this dispute – an "ongoing conduct" measure that is not applied to Canada and only relates to an unknown future application – the selection of a singular analytical framework, as Canada proposes, to assess a hypothetical level of suspension is contrary to the requirement of Article 22.4 of the DSU.

22. In the event the Arbitrator disagrees and seeks to select a singular analytical framework to set a hypothetical future nullification or impairment, the United States presents in the sections that follow considerations that should be taken into account. The methodology that is ultimately selected must have the flexibility to capture the nuances of the particular product and market at issue at a specific point in time in order to calculate an estimate equivalent to the level of nullification or impairment with precision.

1. The Correct Methodology

23. The appropriate methodology for determining the level of nullification or impairment is to evaluate the effects of duty rate changes in an Armington partial equilibrium model. Both the United States and Canada agree that this model is the appropriate starting point.

24. Canada's formula is derived from a model with only two sources of supply – imports from Canada and supply from all other sources. It is essential to distinguish among the subject imports from Canada because in a model with imperfect substitution, when duty rates on Canadian imports are reduced, the market price of the corresponding varieties falls and the supply of each variety increases. The increase in demand for each individual subject Canadian variety will depend not only on the magnitude of the reduction in their own duty rate, but also on the magnitude of the reduction relative to other subject Canadian varieties. Similarly, if the duty rates on Canadian imports increase, the impact of the rate increase would affect all varieties.

25. Therefore, the model selected must be able to account for at least five varieties: domestic sources, non-subject imports from the rest of the world, and three Canadian varieties – individually-investigated subject companies, the subject All Others rate, and non-subject Canadian companies – because the change in duty rate of the affected Canadian companies will be at the expense of not only U.S. domestic supply and imports from other countries, but will also be at the expense of other Canadian companies. The appropriate model must account for all of these varieties because the total level of nullification or impairment is based on the change in total imports from Canada, not just the change in total imports from affected companies.

26. Furthermore, it would be more appropriate to apply the Armington partial equilibrium model directly in its non-linear form. Implementing the model in its non-linear form will avoid introducing approximation error – the difference that occurs from calculating nullification or impairment directly in a non-linear model as opposed to solving it in log-linearized formulas.

2. Canada's Formula Is Derived from a Flawed Model

27. There are several flaws with Canada's approach. First, Canada implicitly assumes domestic shipments and imports from all countries other than Canada are one variety. However, domestic supply elasticities are typically assumed to be lower than import supply elasticities to account for the greater ability of foreign suppliers to shift supply from other markets.

28. Second, Canada incorrectly places all Canadian sources into a single variety, thereby treating both subject and non-subject Canadian imports together. However, in an Armington-based partial equilibrium model, if everything else is held equal, a reduction in the duty rate on one Canadian entity results in an increase in demand for that Canadian variety and a decrease in demand for all other varieties, including Canadian varieties not benefitting from the reduction in their duty rate.

When removal of the challenged measure creates changes in duty rates of varying magnitudes across several Canadian exporters, the adjustment of U.S. demand is more complex and depends on the change in each entity's relative duty rate. As such, the model must be able to capture at least three Canadian varieties – the individually-investigated subject company, the subject All Others rate, and the non-subject Canadian companies.

29. Third, Canada sets up its formula to have only one Canadian variety, arguing that if there are multiple groups of exporters with different duty rates, then the formula should be applied to each group separately, and the resulting amounts for each group of exporters would then be added together to obtain the level of nullification or impairment. However, when there are multiple affected Canadian entities, the model must simultaneously account for the effects of multiple changes in duty rates, which allows the model to properly account for shifts in imports across Canadian varieties, as well as between Canadian and non-Canadian varieties.

30. Finally, Canada's approach remains flawed because it unnecessarily introduces approximation error to the model. Canada's formula is derived by first solving its incorrect two-variety model through the log-linearization method. Because the Armington model is inherently non-linear, the log-linearization method introduces approximation error into the resulting estimates. The magnitude of this error increases with the size of the percent change in tariff. Under Canada's approach, approximation error is particularly problematic because Canada seeks to apply its formula multiple times, thereby compounding the issue by introducing approximation error over and over again. However, it is unnecessary to introduce approximation error when the model can be run directly in its non-linear form, with a sufficient number of sources of supply to differentiate imported varieties from their domestic counterparts and allow for nuanced treatment of changes in duties applied to different Canadian sources.

3. Canada's Use of a Pre-determined Scaling Factor Results in an Unreasoned Estimate of Nullification or Impairment

31. In its methodology paper, Canada proposes to use a formula, and to apply a limited number of pre-determined values for the "scaling factor" based on broad sectors of the U.S. economy. Canada characterizes the combination of parameter values and market shares that is multiplied by the value of imports and change in duty rates as a "scaling factor". The scaling factor that Canada calculates is based on broader categories than any specified product, and it includes pre-determined input values that would remain fixed to a specific period of time regardless of supply and demand changes in the U.S. market.

32. However, the use of such a pre-determined scaling factor, composed of a number of fixed elements, does not accord with an arbitrator's mandate to select a methodology that will result in setting the level of suspension equivalent to the level of nullification or impairment. Past arbitrators have expressed the view that the determination of nullification or impairment must be a "reasoned estimate" with assumptions that are not based on speculation. The selection of a formula with a pre-determined and fixed scaling factor would fail to capture the characteristics of a yet-to-be known product in a specific case or account for future changes in market conditions, and therefore would not result in a reasoned estimate, consistent with Article 22.4 of the DSU.

33. Canada asserts that its approach of using a pre-determined scaling factor is similar to that of *US – Washing Machines (Korea) (Article 22.6 – US)*. Canada's reliance on that decision is misplaced because that proceeding involved an "as such" measure and dealt with consideration of a measure that existed and would continue to exist. Here, on the other hand, the dispute involves an "ongoing conduct" measure that does not continue to exist and be applied to exports from Canada. Further, in *US – Washing Machines (Korea) (Article 22.6 – US)*, neither Korea nor the United States supported the use of a formula with pre-determined scaling factors – referred to as a "coefficient-based approach" by the arbitrator in that dispute.

34. As discussed below, because the future product and market at issue are unknown, only the sources for data inputs should be pre-determined, not the values of the data inputs themselves.

D. Correct Model Inputs

35. In its most basic form, an Armington partial equilibrium model requires three types of information: (1) U.S. consumption (the value of imports and domestic shipments), (2) duty rates, and (3) parameter values (elasticity estimates and market share). As such, similar information is required to calculate nullification or impairment following either party's approach.

1. Parameter Values

36. The United States disagrees with Canada's approach of pre-determining the values of the data inputs by using sources that are based on broad sectors of the U.S. economy. Neither the elasticities nor the market shares advocated by Canada are tailored to the product that would be at issue. The elasticities are estimated for a broader product grouping than the product that would be at issue in a CVD proceeding, and therefore will not be sufficiently precise. Further, for each elasticity, Canada also uses different sources – each of which is based on different years and a different number of broad sectors – thereby generating imprecise input values.

37. Likewise, Canada's proposal to pre-determine market share inputs is flawed because Canada's input fixes a broader product segment to a year other than the base year for the calculation. The market share should be calculated by dividing imports of the relevant product by the total value of the market for the relevant product in the same year.

38. It would be more appropriate for the selected elasticities and market share inputs to be based on data reported by the U.S. International Trade Commission ("Commission") in the future CVD proceeding at issue. The Commission estimates demand, substitution, and domestic supply elasticities for every product under a CVD (or AD) investigation in its investigation report. Therefore, the elasticity estimates should be the median of the range of the estimated elasticities determined by the Commission. The United States also considers it appropriate that the Commission report in the future CVD proceeding at issue be used as the source for the data necessary to calculate market shares.

39. The parameter estimates made and market share data used by the Commission are particularly well suited for use in a model to estimate the level of nullification or impairment because the Commission's estimates are for the specific products at issue. Further, the estimates are made after analyzing responses from domestic producers and importers, and foreign producers and exporters concerning the market of the product under investigation, as well as arguments made by interested parties. The use of estimates from the Commission in this proceeding would also be consistent with decisions in *US – Anti-Dumping Methodologies (China) (Article 22.6 – US)* and *US – Washing Machines (Korea) (Article 22.6 – US)*.

2. Change in Duty

40. The calculation of the change in duties will need to take into account the associated AD rates. That is, if there are corresponding dumping rates applied to the product in the proceeding, they should be taken into account in the overall duty calculation. A simulated market that fails to take into account relevant antidumping duties will inevitably reflect an inappropriately high level of nullification or impairment for Canada. Therefore, the correct calculation for a company's change in duty should be the difference between all duties applied to the specific company with the challenged measure in effect, compared to all duties excluding the challenged measure applied to the specific company.

3. Value of Imports

41. For the value of imports, company-specific import data should be obtained directly from U.S. Customs and Border Protection ("Customs"). For clarity, the United States notes that for CVD investigations, because Customs does not track the value of shipments of merchandise subject to AD or CVD duties before those duties are imposed, data from Customs based on the reference HTS codes should instead be used. The use of HTS data will likely overstate the value of imports since some of the values under the reference HTS code are not subject to duties, but it remains the best available information under those circumstances. For administrative reviews, the data from Customs will be the value of shipments of merchandise subject to AD or CVD duties.

IV. CONCLUSION

42. For the reasons set forth above, the United States respectfully requests that the Arbitrator determine that Canada's proposed suspension of concessions is not allowed or is not equivalent to the correct level of nullification or impairment, which is zero. If the Arbitrator were nonetheless to proceed to estimate a future, hypothetical level of nullification or impairment, the Arbitrator should reject Canada's proposed formula because it will not result in a reasoned estimate of nullification or impairment consistent with Article 22.4 of the DSU.

EXECUTIVE SUMMARY OF THE U.S. RESPONSES TO FIRST SET OF QUESTIONS

U.S. Response to Question 6

43. The text of Article 23.2 provides context supporting the U.S. interpretation that a Member may rebut the "presumption that a breach of rules has an adverse impact" under Article 3.8 of the DSU in an Article 22.6 arbitration proceeding. Article 23.2 of the DSU first links back to Article 23.1 by initially stating, "in such cases". Article 23.1 provides, "[w]hen Members seek the redress of a violation of obligations or other nullification or impairment of benefits under the covered agreements or an impediment to the attainment of any objective of the covered agreements, they shall have recourse to, and abide by, the rules and procedures of this Understanding." The "rules and procedures of this Understanding" include Article 3.8.

44. Article 23.2(a) then provides that in the cases outlined in Article 23.1, Members shall "not make a determination to the effect that a violation has occurred, that benefits have been nullified or impaired or that the attainment of any objective of the covered agreements has been impeded". The latter half of Article 23.2(a) then references those determinations, stating, "[Members] shall make any such determinations consistent with the findings contained in the panel or Appellate Body report adopted by the DSB or an arbitration award rendered under this Understanding." Thus, Article 23.2(a) plainly provides for the possibility that a determination "that benefits have been nullified or impaired" shall be consistent with both "the panel or Appellate Body report" or "an arbitration award rendered under this Understanding".

45. Contrary to Canada's argument, the reference to "arbitration award" in Article 23.2(a) is not limited to an award from an Article 25 arbitration proceeding. The text of Article 23.2 does not provide for such a limitation. Further, an interpretation that diminishes the rights and obligations in Article 23.2(a) is contrary to Article 3.2 of the DSU, which prohibits WTO adjudicators from "add[ing] to or diminish[ing] the rights and obligations provided in the covered agreements."

46. Past arbitrators have also rejected the argument that Article 23.2(a) of the DSU does not apply to Article 22 proceedings. The arbitrator in *EC – Bananas III (US) (Article 22.6 – EC)* found that the reference to "an arbitration award" in Article 23.2(a) suggested that the issue of nullification of impairment can be determined by arbitration.

U.S. Response to Question 14

47. The United States disagrees with Canada's assertion that part of the precise content of the challenged "ongoing conduct" measure relates to refusing to accept information regarding the discovered information on to the record of the proceeding. Rather, the precise content of the measure consists of three parts: "[(1)] [Commerce] asking the 'other forms of assistance' question and, [(2)] where [Commerce] 'discovers' information that it deems should be provided in response to that question, [(3)] applying [adverse facts available] to determine that the 'discovered' information amounts to countervailable subsidies."¹ Canada seeks to change the precise content of the measure by citing to Table 2 of the panel report to argue that the evidence it submitted demonstrated that Commerce refuses to accept new information discovered during verification. However, an examination of Table 2 reveals otherwise. Excerpts from both *Solar Cells from China 2014* and *Solar Cells from China 2015* contain arguments from respondents for Commerce "to use the information taken at verification" instead of the applying adverse facts available in the final determination. Therefore, the evidence on which Canada relied to demonstrate the precise content

¹ *US – Supercalendered Paper (Canada) (Panel)*, para. 7.316.

of the measure does not establish that the information needed to calculate a counterfactual company-specific CVD rate is never available.

U.S. Response to Question 35

48. **Subpart (a):** The United States considers that Canada would be able to impose countermeasures if the challenged measure were applied in assigning a CVD rate in the final determination of either a CVD investigation or administrative review of Canadian products and a duty were, in fact, assessed. A CVD investigation only results in the collection of estimated duties, but not the assessment of duties. It would thus be appropriate for Canada to "trigger" the model only after duty assessment occurred.

49. **Subpart (b):** The United States does not agree with Canada that new shipper reviews, expedited reviews, changed circumstances reviews, and sunset reviews are within the scope of this arbitration. The United States recalls that the challenged "ongoing conduct" is an unwritten measure, which imposed upon Canada a high evidentiary burden to demonstrate the measure's existence. The Appellate Body in *Argentina – Import Measures* explained that "the constituent elements that must be substantiated with evidence and arguments in order to prove the existence of a measure challenged will be informed by how such measure is described or characterized by the complainant." To demonstrate the existence of the challenged measure, Canada utilized nine CVD determinations, consisting of post-2012 investigations or administrative reviews. Therefore, the measure, as defined by Canada, relates only to CVD investigations and administrative reviews.

U.S. Response to Question 46

50. The use of multiple Canadian varieties is consistent with the theory of demand underlying the Armington model. Canada argues that "Armington models do not typically rely on firm-level varieties," and states that academic literature typically treats individual countries as a single variety. The implication that product differentiation based on national borders is necessary for theoretical consistency is incorrect. Individual varieties in an Armington model represent products that are imperfect substitutes for one another. Defining varieties in terms of country of origin is a simplifying assumption that is frequently employed in Armington models. Armington (1969) explains that differentiating varieties by country of origin is a simplifying assumption, noting, "the assumption that products are distinguished by place of production is a very convenient point of departure". Here, in contrast, the focus is on the effect of a "trade policy" that differs across companies. By correctly treating imports from companies subject to different changes in "policy" as imperfect substitutes, the U.S. Armington model, in contrast to Canada's approach, provides the appropriate flexibility to explore such a circumstance.

51. Importantly, the United States is not introducing an innovation in this respect. For instance, in one application of the Armington framework, the Commission (2019) defines a model in which varieties are distinguished not by country, but by the type of platform through which they are purchased. To study the market for "retail goods" in Mexico and Canada, the model defines three varieties: goods purchased at brick-and-mortar retail outlets, goods purchased from non-U.S. e-commerce firms, and goods purchased from U.S. e-commerce firms. Moreover, the Armington model used in *US – Anti-Dumping Methodologies (China) (Article 22.6 – US)* also defined three varieties of subject-country imports, differentiated by duty rates.

U.S. Response to Question 47

52. Using a market share value that does not correspond to the value of imports used in the formula implies that the formula is no longer consistent with the underlying model from which it is derived. Specifically, by associating the value of imports from individual Canadian companies with total Canadian market share, Canada's formula misrepresents Canadian companies' relative position in the U.S. market, and thus misrepresents the impact of a change in duty rates.

53. Canada presupposes that the predetermined market share in the scaling factor will, in fact, exceed the actual market share corresponding to the "value of imports" of the specific product in the formula's application. This is speculation, given that the product and time period are unknown. The market shares Canada proposes to use represent Canada's shares of the U.S. market in broad categories of products from a fixed, past year. Canada's share in the U.S. market for a specific product in a future year could exceed Canada's market share in the corresponding Caliendo and

Parro category, calculated using data from 2018 and 2019. If so, Canada's methodology would overestimate nullification or impairment.

U.S. Response to Question 84

54. Both AD and CVD duties affect the U.S. import price, which is the relevant price in the model because it is the price faced by the buyer. As such, both duties are relevant to the demand generated by the model. To correctly isolate the trade effect solely due to the removal of the challenged CVD measure, any corresponding AD duty must also be taken into consideration. Therefore, nullification or impairment will be overstated if the initial duty rate (t_i) or counterfactual duty rate (t_c) used in calculating nullification or impairment is not inclusive of all duties in place at the time the challenged measure is implemented. To omit the AD duties that are present in the market would artificially reduce the import price of subject Canadian varieties relative to all other imports, and thus inflate estimated demand for subject varieties. Such an approach would not produce a reasoned estimate of nullification or impairment.

U.S. Response to Question 105

55. In many cases, subject merchandise may enter under multiple HTS subheadings. Additionally, a particular HTS classification may correspond to a broader "basket" HTS category of products that include many goods in addition to subject merchandise, and therefore will be over-inclusive. Similarly, the arbitrator in *US – Washing Machines (Korea) (Article 22.6 – US)* noted that, "frequently not all imports within the referred HTS 10-digit codes are affected by the WTO-inconsistent measure. Some adjustment is therefore necessary."

EXECUTIVE SUMMARY OF U.S. RESPONSES TO SECOND SET OF QUESTIONS

U.S. Response to Question 121

56. The precise content of the challenged measure makes it impossible for the prior application of the challenged measure to Company A to continue in a subsequent administrative review of that company. In an administrative review, Commerce will issue questionnaires to the individually-examined respondents and ask questions concerning all previously countervailed subsidies. This includes specific questions concerning the "discovered subsidies" that were "discovered" during the prior segment of the CVD proceeding. As such, an administrative review of Company A would remove the prior application of the challenged measure because Commerce's determination in the administrative review with respect to the countervailability of what were previously "discovered subsidies" would no longer be the result of the "other forms of assistance" question, that is, part one of the challenged measure.

57. There is also a very low likelihood for the measure to be applied anew to Company A because verifications do not occur in every administrative review. As such, part two of the challenged measure, Commerce's "discovery" of unreported information at verification, also would be unlikely to occur, precluding a new application to Company A's CVD rate.

58. Lastly, the United States observes that the scenario highlighted in this question further supports the U.S. position that Canada may only impose countermeasures after duty assessment occurs. As demonstrated above, an administrative review of Company A would obviate the need for countermeasures applied in response to Company A's CVD rate from the investigation because the duties assessed to Company A would not be based on the challenged measure.

U.S. Response to Question 130

59. The United States considers it appropriate for Canada to notify the DSB of the level of suspension it calculates and of any adjustment to the level of suspension for each year during the first quarter of the following year.

U.S. Response to Question 173

60. Canada attempts to justify its request for Customs data in the most disaggregated form by contending that such disaggregated data are necessary for the purposes of verification. However,

Canada proposes to verify disaggregated Customs data with aggregated data. That is, if Canada obtains "all" export data directly from affected exporters as it suggests, this data would presumably be on an aggregate basis. Further, Canada also proposes to use data from Statistics Canada, but Canada acknowledges that Statistics Canada data is in an aggregate form.

U.S. Response to Question 178

61. The United States considers it appropriate only to use the primary set of 10-digit HTS codes identified in the CVD order. A CVD order may list two sets of 10-digit HTS codes. One portion lists the HTS codes that the product "is" or the products "are" currently classified under, and there may also be an additional description of the HTS codes that the product "may" or "might" be classified under. The second category of HTS codes are generally broader than the merchandise subject to the CVD order. To avoid overinclusion, only the HTS codes that the CVD order states the product "is" or the products "are" currently classified under should be used.

EXECUTIVE SUMMARY OF U.S. OPENING STATEMENT AT VIRTUAL SESSION

62. Much of the parties' argument on these issues has been in the abstract because Canada's request to suspend concessions rests on pure speculation concerning some future, unknown level of nullification or impairment. Indeed, throughout this arbitration, Canada has dismissed the U.S. arguments by alleging that Canada's "simplifying" assumptions will not have much impact on the calculation of nullification or impairment. However, concrete numbers show that this is false. Canada's methodology cannot generate a reasoned estimate of nullification or impairment.

63. The United States has prepared an accompanying exhibit, Exhibit USA-48. The exhibit uses actual data values associated with the product and market from the CVD order on *Softwood Lumber from Canada*. The hypothetical assumes that the challenged measure is applied to a company during an administrative review. Therefore, the duty rates from the CVD order are used as the reference year duty rates.

64. The exhibit walks through several scenarios illustrating the methodological points of disputes between the parties. Specifically, the exhibit demonstrates the difference between parameter values of aggregated sectors versus product- and market-specific; same or different values for domestic and import supply elasticity; log linear formula versus non-linear model; explicit inclusion or exclusion of the non-subject Canadian variety; and the inclusion or omission of AD duties and ordinary tariffs. As is evident from the exhibit, the scenarios collectively demonstrate how each of Canada's "simplifying" assumptions tend to build upon one another. In the example of the CVD order on *Softwood Lumber*, these assumptions produce a substantially inflated estimate of the level of nullification or impairment actually experienced by Canada. But these assumptions could also produce a deflated estimate. Therefore, as the scenarios in the exhibit illustrate, contrary to Canada's representations, Canada's purportedly "simple" approach greatly impacts the calculation of nullification or impairment. Accordingly, Canada's approach cannot generate an estimate that is "equivalent" to nullification or impairment. And on that basis, Canada's suspension request should be rejected.

EXECUTIVE SUMMARY OF U.S. CLOSING STATEMENT AT VIRTUAL SESSION

65. Canada seeks for a methodology that, ultimately, will only benefit Canada. Specifically, Canada is determined to "fix" the elasticity estimates and market share in advance of knowing the product and market at issue. In doing so, Canada asks the Arbitrator to sacrifice accuracy for purported practicability. However, the need for an accurate and reasoned estimate should not be prejudiced by Canada's decision to prematurely pursue this arbitration.

66. Canada also says that it wants to reduce the number of decisions and disputes. Yet, for the remaining inputs – duty rates and value of imports – Canada advocates to wait to find out the product and market at issue, and then requests sole "discretion" to select the parameter values that most benefit Canada. Nothing in the DSU provides that Canada's role as the complaining Member means that Canada can simply have wide (or possibly unbounded) discretion to do as it wants when suspending concessions. Rather, the DSU provides that the purpose of this proceeding is to ensure that the level of suspension requested by Canada is equivalent to the level of nullification or impairment. That decision on equivalence does not rest with Canada. Rather, that decision rests

with the Arbitrator. The Arbitrator should not acquiesce to Canada's impermissible attempt to arrogate to itself authority that the DSU assigns to the Arbitrator.

EXECUTIVE SUMMARY OF U.S. RESPONSES TO THIRD SET OF QUESTIONS

U.S. Response to Question 181

67. Only if Canada is unable to obtain the necessary authorization to access the confidential U.S. sales data does the United States consider it appropriate to use the publicly ranged sales data on the record of Commerce's proceeding to calculate a weighted average for the counterfactual All Others rate. In the rare event this information is not available on the record, then the simple average of the firms' CVD rates should be used.

U.S. Response to Question 198

68. The United States proposes the use of a tiered approach to ensure that Canada will always be able to apply the model, ideally using product-specific information where such information is available.

69. For the **values of substitution, demand, and domestic supply elasticities**, the United States has explained the need for the elasticities to correspond to the specific product and time period at issue. As a first option, the United States considers that it would be most appropriate for the elasticity estimates to be based on data reported from a single source, that is the relevant Commission report from the future CVD proceeding at issue. If the elasticity estimates are not available in the Commission report, then the second option would be for the parties to consult and use some future source, including considering updated academic literature. If the parties are unable to come to an agreement after consultations, the parties should proceed to the third option and use a method predetermined by the Arbitrator. Specifically, for the third option for substitution elasticity, the Arbitrator has proposed Fontagne *et al.* (2020), while Canada has proposed Caliendo and Parro (2015). The United States highlighted Soderbery (2015) and Ahmad and Riker (2019) as two other recent contributions that employ methodologies and levels of aggregation distinct from one another and from Fontagne *et al.* (2020). Therefore, for the third option, the United States suggests the Arbitrator use the median value of the CVD order-specific elasticities from the three academic studies with a level of disaggregation at the 6-digit level HTS or higher. The United States maintains that the Caliendo and Parro values are highly aggregated, and are therefore not suitable as a third option. For the third option for demand elasticity, the United States agrees with the Arbitrator's proposal to use the most recently available GTAP consumer final demand elasticities. For the third option for domestic supply elasticity, the United States considers it appropriate to use a value of 1.55, the median value over manufacturing industries from Riker (November 2020).

70. For the **value of U.S. import supply elasticity**, both parties have proposed a value of 10. Further, estimates of this parameter are scarce in literature. Therefore, a value of 10 should be utilized.

71. **For the value of shipments from domestic sources**, as the first option, it would be most appropriate for the value to be based on data reported in the relevant Commission report from the future CVD proceeding at issue. In the event such information is not public, for the second option, Canada and the United States could obtain industry estimates through the most relevant trade association or private sector suppliers and consult on the use of the best information available. If the parties cannot reach agreement or in the event that there is no data from a relevant trade association or private sector supplier, then Canada as the final and third option, U.S. domestic market share could be obtained from the underlying data inputs of the BEA I-O table associated with the reference year at the most disaggregated level available.

72. **For the value of shipments from the rest of the world**, as the first option, the values from the relevant Commission report should be used because the values will correspond closer to the products under the scope of the CVD order. If the values are not publicly available, then the second option would be to apply the share of imports from Canada under the primary HTS reference codes, calculated using data from Census, to the value of imports from Canada, obtained from Customs, using the equation provided in the U.S. alternative instructions. In the very unlikely event

that the data from the reference year are not available from Census, Canada should obtain the Census data from the most recent year published closest to the reference year.

73. Any reasonable set of instructions would provide for a tiered approach, as described above, to accommodate all future scenarios. Such a set of instructions would ensure that, in the best-case scenario, Canada would apply the model using product-specific information. The instructions would also ensure that if such information were not available, then Canada would also be assured of being able to run the model by having a final option.

74. Importantly, if the challenged measure were to occur under the CVD orders pertaining to *Wind Towers* or *Softwood Lumber*, for the relevant parameter values, it would be appropriate to use the Commission report for the product at issue that is most recent to the reference period. If the value is not available in the most recent Commission report relative to the reference period, then the alternative would be to use the most recent Commission report containing such a value.

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75. In the U.S. model, all Canadian companies in the market will always be included in each run of the model. The subject Canadian variety will consist of companies that were affected by the challenged measure in that specific segment of the CVD proceeding. The non-subject Canadian variety will consist of companies that were not affected by the challenged measure in that specific segment of the CVD proceeding. This would include companies that have legacy affected CVD rates from prior segments of the CVD proceeding. The reference year will always be the year prior to the most recent application of the challenged measure. Canada may also continue to suspend concessions for the maintenance of a prior application of the challenged measure (a legacy application). However, the prior suspension of concessions must be modified when a prior application of the challenged measure is removed and companies are no longer assessed an affected CVD rate.

76. Therefore, a "triggering event" occurs in two ways. First, there is a "triggering event" if there is a new application of the challenged measure. Second, there is a "triggering event" if the challenged measure is removed and a company's CVD rate is no longer affected by the challenged measure.

ANNEX B-2**INTEGRATED EXECUTIVE SUMMARY OF THE ARGUMENTS OF CANADA****I. INTRODUCTION**

1. On June 18, 2020, Canada requested that the DSB authorize the suspension of concessions at an annual level commensurate with the trade effects attributable to the Other Forms of Assistance-Adverse Facts Available measure ("OFA-AFA measure") of any future countervailing duties on all Canadian imports of any given good.¹ The United States objected to the level of suspension proposed by Canada and the Dispute Settlement Body ("DSB") referred the matter to arbitration.² The Arbitrator was constituted on August 6, 2020.³

2. The method that Canada proposes in its Methodology Paper is appropriate to determine a level of suspension of concessions that is equivalent to the level of nullification or impairment, in accordance with Article 22.7 of the *Understanding on Rules and Procedures Governing the Settlement of Disputes* ("DSU").

3. The OFA-AFA measure continues to exist and could be applied against Canadian imports in the future. Accordingly, the OFA-AFA measure nullifies or impairs benefits accruing to Canada. Canada's methodology proposes to suspend concessions if and when the United States applies the OFA-AFA measure to Canadian imports in the future. Canada proposes a reasonable and plausible counterfactual which eliminates the duties resulting from the OFA-AFA measure from the CVD rate of the respondent companies that had been subjected to the application of the OFA-AFA measure, as well as from the counterfactual All Others rate. Canada's method calculates the level of nullification or impairment by estimating the trade effect of the OFA-AFA measure.

4. In accordance with the guidance provided by the arbitrator in *US – Washing Machines (Article 22.6 – US)*, Canada uses a linearized Armington-based partial equilibrium model to estimate the difference in the value of U.S. imports from Canada with and without the OFA-AFA measure in place. Canada's method results in a "'predictable' level of suspension", is practical to implement and limits the risk of potential controversies between the parties. The data proposed is verifiable and available to both parties, and is sufficiently generic to capture any variation in the types of product and markets, as required by the circumstances of this case, where the United States may apply the OFA-AFA measure against any good. Canada's approach has clear advantages over that proposed by the United States. Canada proposes to use U.S. Customs data as the primary source for the value of imports, provided that the shipment- and company-specific data is provided to Canada by the United States.

II. NULLIFICATION OR IMPAIRMENT**A. Article 22.6 Arbitrations Do Not Re-Evaluate the Existence of the WTO-Inconsistent Measure or the Existence of Nullification or Impairment**

5. An Article 22.6 arbitrator does not have jurisdiction under the DSU to re-evaluate the existence of nullification or impairment. Instead, Article 22.6 arbitrations have the mandate of assessing whether the "level" of suspension of concessions or other obligations is equivalent to the "level" of nullification or impairment of benefits resulting from the WTO-inconsistent measure.

6. An Article 22.6 arbitration is not an appellate mechanism. By the time a dispute reaches an Article 22.6 arbitration, the DSB has already adopted a finding that the measure at issue nullifies or impairs benefits under Article 3.8 of the DSU. These findings cannot be re-litigated. If a responding party considers that the relevant measure has changed such that it no longer nullifies or impairs

¹ Communication from the delegation of Canada to the Chairperson of the Dispute Settlement Body, dated 18 June 2020, WT/DS505/13.

² Communication from the delegation of the United States to the Chairperson of the Dispute Settlement Body, dated 26 June 2020, WT/DS505/14.

³ Note by the Secretariat, "Constitution of the Arbitrator", WT/DS505/15.

benefits to the complaining party, it has the opportunity to make this case before a compliance panel in an Article 21.5 proceeding.

B. The United States Is Not Entitled to Re-Litigate the Existence of the WTO-Inconsistent OFA-AFA Measure and the Resulting Nullification or Impairment in an Article 22.6 Arbitration

7. The United States' proposition that Canada suffers no nullification or impairment rests on the false premise that the OFA-AFA measure does not continue to exist. However, if the United States considered that the OFA-AFA measure has been withdrawn and no longer nullifies or impairs Canada's benefits, it was incumbent on the United States to inform the DSB that it has implemented the recommendations and rulings in the *US – Supercalendered Paper* dispute, in accordance with its obligation pursuant to Article 21.3 of the DSU. The issue of whether the OFA-AFA measure exists and could be applied against Canada in the future cannot be examined in the absence of a factual record concerning the U.S. implementation of the recommendations and rulings of the DSB.

8. The United States clarified in its responses to the Arbitrator's questions that it is not challenging the continued existence of the OFA-AFA measure or arguing that it has withdrawn the measure. Instead, the United States argues that because the measure is not currently being applied against Canada, Canada should not have the opportunity to retaliate, should the measure be re-applied against Canada in the future. This position should be summarily rejected.

9. In evaluating this position, it is important to recall that Canada only has this one opportunity to request suspension of concessions. As a result, the U.S. position is essentially that, despite a finding that the OFA-AFA measure is WTO-inconsistent, the United States is open to apply the measure in the future without retaliation from Canada. The U.S. position would take the "teeth" out of the retaliation remedies available in the WTO system, by allowing a Member to suspend a measure during the Article 22.6 arbitration, only to re-impose it later and escape retaliation. This is untenable.

10. The U.S. position is also inconsistent with previous Article 22.6 arbitrations. In *US – 1916 Act (EC) (Article 22.6 – US)*, the arbitrator allowed for the suspension of concessions in the future, despite the fact that the WTO-inconsistent measure was not being applied against EC products at the time of the Article 22.6 proceedings. Similarly, the arbitrator in *US – Washing Machines (Article 22.6 – US)* authorized a level of suspension of concessions based on the equivalent trade effect of future impositions of an inconsistent anti-dumping measure by the United States.

C. The United States Has Not, In Any Case, Rebutted the Presumption of Nullification or Impairment

11. Even if an Article 22.6 arbitration could re-evaluate whether the OFA-AFA measure continues to nullify or impair benefits, which it cannot, the United States has not rebutted the presumption of nullification or impairment under Article 3.8 of the DSU.

12. The United States suggests that because the OFA-AFA measure is not currently being applied against Canada, the maintenance of the OFA-AFA measure does not nullify or impair benefits accruing to Canada. The United States ignores the fact that Canada's challenge against the OFA-AFA measure was broader than the application of that measure against Resolute in the Supercalendered Paper countervailing duty investigation. The withdrawal of one order in which the OFA-AFA measure was applied does not demonstrate that this measure no longer exists or no longer nullifies or impairs benefits accruing to Canada.

13. The United States has presented no evidence to show that its maintenance of the OFA-AFA measure does not nullify or impair benefits to Canada. Under Article 3.8 of the DSU any "adverse impact" constitutes nullification or impairment. In determining whether a responding party has rebutted the presumption of nullification or impairment under Article 3.8, the Appellate Body has found that "any potential export interest" must be taken into account.⁴ There is a continuous risk that the OFA-AFA measure will be applied against Canadian products in ongoing U.S. countervailing duty proceedings or in countervailing duty proceedings initiated in the future. The maintenance of the OFA-AFA measure means that the government of Canada, the provincial

⁴ Appellate Body Report, *EC – Bananas III (Article 21.5 – US)*, para. 469.

governments, and Canadian producers suffer trade uncertainty and cannot be assured that their duty rates will be calculated in a manner that is WTO-consistent. This is an adverse impact to Canada.

D. An Arbitrator under Article 22.7 of the DSU is Mandated to Determine a Methodology for Calculating Future Nullification or Impairment

14. The Arbitrator's mandate requires it to determine a methodology for calculating the level of suspension of concessions equivalent to the level of nullification or impairment arising from the future application of the WTO-inconsistent OFA-AFA measure. Where a challenged measure is broader than the application of that measure in a particular case, the "level" of nullification or impairment of benefits resulting from the application of the WTO-inconsistent measure against the complaining Member in the future must be calculated by means of a model. An Article 22.6 arbitration must provide a prospective, variable methodology that allows for the calculation of a level of suspension of concessions equivalent to the level of nullification or impairment.

15. The level of nullification or impairment from any future application of the OFA-AFA measure against Canada cannot simply be presumed to be zero. Allowing for suspension of concessions where the measure is applied against a complaining Member in the future is consistent with the principle that the definition of a "measure" that may be challenged under the DSU is broad. The GATT and WTO disciplines, as well as the dispute settlement system, are intended to protect existing trade and provide the security and predictability needed to conduct future trade. This security and predictability only exists when there is an effective enforcement mechanism when a Member fails to bring its WTO-inconsistent measures into compliance. As previous arbitrators have found, "[a] key objective of the suspension of concessions or obligations [...] is to seek to induce compliance by the other WTO Member with its WTO obligations".⁵

III. OVERALL METHODOLOGY

16. The events that trigger Canada's right to suspend concessions or other obligations are not limited to investigations and administrative reviews. Investigations and administrative reviews, including those conducted by the U.S. Department of Commerce ("Commerce") in an aggregate form, new shipper reviews, expedited reviews or changed circumstances reviews all qualify as triggering events for the suspension of concessions by Canada. Canada used investigations and administrative reviews as evidence before the Panel to prove the constituent elements of the OFA-AFA measure (an unwritten measure). However, the precise content of the OFA-AFA measure that was identified by the Panel and the Appellate Body could clearly arise in other segments of a countervailing duty proceeding. Commerce does, or may, ask the OFA question to the investigated company and/or the government and carry out verifications in new shipper reviews, expedited reviews or changed circumstances reviews or where Commerce conducts a proceeding in aggregate form.

17. Regarding the start of suspension of concessions, if a triggering event occurs, Canada should be entitled to suspend concessions as soon as the calculation of nullification or impairment is completed and Canada is ready to suspend concessions. There should be no delay to the start of suspension of concessions, e.g. until the beginning of the next calendar year, as the U.S. suggests; nor should there be an artificial temporal structure requiring Canada to start suspending concessions by a certain time. Imposing such a temporal structure would not be necessary or within the jurisdiction of the Arbitrator.

IV. THE COUNTERFACTUAL

18. A counterfactual in an Article 22.6 arbitration is a hypothetical compliance scenario that presents the trade flows that would have occurred had the responding Member implemented the DSB recommendations and rulings. Where the arbitrator must make assumptions regarding compliance, these assumptions should be plausible and reasonable, "taking into account the circumstances of the dispute".⁶ In order to calculate the level of nullification or impairment where

⁵ See Decision by the Arbitrator, *US – 1916 Act (EC) (Article 22.6 – US)*, paras. 5.5-5.7. See also Decisions of the Arbitrator, *EC – Bananas III (US) (Article 22.6 – EC)*, para. 6.3; and *EC – Hormones (US) (Article 22.6 – EC)*, para. 40.

⁶ Decision by the Arbitrator, *US – Gambling (Article 22.6 – US)*, para. 3.30.

the United States applies the OFA-AFA measure in the future, Canada proposes a counterfactual scenario in which the OFA-AFA measure is eliminated as a practice against Canadian exporters. This reasonable and plausible counterfactual eliminates the adverse facts available that result from the application of the measure from the company-specific countervailing duty rate as well as the All Others rate.

A. A Reasonable and Plausible Counterfactual Must Rely on Information That Will Be Available to Canada in Future Countervailing Duty Proceedings

19. The information necessary to establish the appropriate counterfactual duty rates must be available to a complaining party. The report of the arbitrator in *US – Washing Machines (Article 22.6 – US)* stands for the proposition that the information required to calculate a counterfactual duty rate must "always be available" to calculate the level of suspension.⁷ Where information is not currently available on Commerce's public record, it cannot be presumed to be available in future proceedings. This holds particularly true regarding the lack of information necessary to determine the counterfactual All Others rate. Where it must be anticipated that necessary information will be unavailable to Canada, or where such information may be unclear, the Arbitrator should favour the use of alternative information. This information should not understate the level of nullification or impairment.

B. The Counterfactual for an Investigated Company Subject to the OFA-AFA Measure Should Deduct the Amount of the Duty Resulting from the Application of the AFA

20. The counterfactual duty rate for investigated companies should be obtained by deducting the amount of the rate attributable to the application of adverse facts available resulting from the OFA-AFA measure. The counterfactual should not require the calculation of a "new" hypothetical company-specific counterfactual duty rate, as the United States proposes. Such a counterfactual would not be plausible or reasonable. Information to calculate a new duty rate will not be available on the record of Commerce's proceedings, given that Commerce refuses to accept any new information or evidence onto the record when it discovers alleged assistance during verifications. Even if information were inadvertently placed on the record in some proceedings, it is unreasonable to assume that Commerce would make, and Canada accept, such a new finding of subsidization in a situation where Commerce has applied the OFA-AFA measure again in a proceeding against Canada.

C. The Counterfactual Must Take into Account That Information May Not Be Publicly Available to Calculate the All Others Rate in All Circumstances

21. Information to calculate the counterfactual All Others rate will not be available to Canada in all countervailing duty proceedings. This applies in proceedings where the counterfactual All Others rate is calculated with confidential sales information from three or more investigated companies.⁸ It also applies in proceedings with three investigated companies where the counterfactual duty rate of one company drops below the *de minimis* threshold and therefore has to be removed from the calculation of the counterfactual All Others rate in accordance with 19 U.S.C. § 1671d(c)(5)(A)(i).⁹ Although Canada should not have to rely on information from private companies—specifically, companies that are not subject to the OFA-AFA measure and are not likely to cooperate with Canada—it is not unreasonable that Canada request the relevant companies to provide authorization to Commerce to share their confidential sales values with Canada, and use it to calculate the counterfactual All Others rate where companies make the information available.

22. Where Canada does not receive this information, Canada should calculate, first, the simple average CVD rate and, second, the weighted average CVD rate based on publicly ranged sales values. Between these two rates, Canada should select the lower one as the counterfactual All Others rate. This approach is reasonable because it allows the use of publicly available information, and selecting the lower countervailing duty rate is less likely to understate the level of nullification or impairment. Both a simple average and a weighted average have the potential to understate nullification or impairment where one or the other is closer to the actual CVD rate. In this situation,

⁷ Decision by the Arbitrator, *US – Washing Machines (Article 22.6 - US)*, para. 4.18.

⁸ As determined by the Arbitrator in Scenario 5 of Question No. 181.

⁹ As determined by the Arbitrator in Scenario 4 of Question No. 181.

where necessary information is not available, Canada should not have to select a duty rate as the counterfactual All Others rate that may result in a lower level of nullification or impairment than what is reasonably due to Canada if Commerce applies the OFA-AFA measure again. This would contravene the objective of inducing compliance by the United States, which is one of the objectives of this proceeding.

23. Where a countervailing duty proceeding involves two investigated companies,¹⁰ Canada would be able to follow Commerce's methodology by simply using the averaging methodology that Commerce selected in its original calculation to calculate the counterfactual All Others rate.

24. In a CVD investigation where the only investigated company has a *de minimis* rate,¹¹ the U.S. Department of Commerce will not reach an affirmative final determination and will therefore not be required to calculate an All Others rate. Commerce would also not impose a countervailing duty order, and therefore, no exporter would be subject to countervailing duties. In this scenario, where the CVD order never should have been imposed, Canada would suspend concessions regarding all future segments of the CVD proceeding.

V. THE REFERENCE PERIOD

25. If Commerce applies the OFA-AFA measure in countervailing duty proceedings, the reference period to determine the value of imports is the calendar year prior to the imposition by Commerce of duties resulting from the application of the OFA-AFA measure in a U.S. countervailing duty proceeding. In case Commerce were to apply the OFA-AFA measure in two consecutive segments of its countervailing duties proceedings, the relevant reference period should be a period where U.S. imports from Canada have not been affected by the OFA-AFA measure.

VI. THE MODEL

26. The model used to determine the level of nullification or impairment of any future applications of the OFA-AFA measure should follow the guiding principles established in prior Article 22.6 arbitrations. The model should: (1) result in a predictable level of suspension; (2) be practical to implement; (3) limit the risk of controversies between the parties; (4) rely on credible, factual and verifiable information available to both parties; and (5) be sufficiently generic to capture the variation in the types of products and markets in which the WTO-inconsistent measure may be applied. To achieve this, the model should fix those parts of the formula that can be fixed, and reduce the number of decisions that must be taken by the parties in its future application.

A. Canada's Model is Practical to Implement, Results in Predictable and Reasonable Outcomes, and Limits Future Controversies

27. Canada has proposed a model that aligns with these principles. Canada has constructed a practical and versatile linearized Armington-based partial equilibrium model that determines the change in the value of the affected U.S. imports from Canada with and without the OFA-AFA measure in place. The Armington model is a widely-used model that provides an approximation for how trade volumes from different countries respond to changes in prices and tariffs.

28. In its simplest form, Canada's model can be expressed using the following formula:

$$\text{Change in Imports} = \text{Value of Imports} \times \Delta \text{Duty} \times \text{Scaling Factor}$$

The value of imports and the change between the factual and counterfactual duty rates (ΔDuty) can only be determined in the future at a time when the United States applies the OFA-AFA measure. The scaling factor captures the trade response to the WTO-inconsistent duty for a given product, and can reasonably be determined in this proceeding. At a more detailed level, the formula provides as follows:

$$NI = \text{Value of Imports} \times \frac{t}{1+t} * t \times \text{Scaling Factor}$$

¹⁰ As determined by the Arbitrator in Scenario 3 of Question No. 181.

¹¹ As determined by the Arbitrator in Scenario 1 of Question No. 181.

where NI is the nullification or impairment, t refers to the factual duty rate expressed as a decimal (i.e. 5% rate = 0.05), and ℓ is a percentage change in the duty.

29. Similar to the formula adopted by the arbitrator in *US – Washing Machines (Article 22.6 – US)*, Canada's model defines two sources of supply (or "varieties") of the affected products in the U.S. market. The first variety is for Canadian imports of the product, some or all of which may be subject to the WTO-inconsistent duty. The second is a variety for non-Canadian sources of the product.

30. For each variety, there are three equations: one for supply, one for demand, and one that balances supply to demand. Each supply equation is characterized by a supply elasticity. Each demand equation is characterized by an elasticity of demand by U.S. purchasers, the elasticity of substitution between varieties, and the Canadian share of the U.S. market.

31. The equations for Canada's model are linearized around the market's equilibrium. This approach offers several advantages. For one, the model's variables—the duties, prices, and quantities—can be expressed as percentage changes from their equilibrium level. It also allows for the expression of market behaviours in the form of multiplicative scaling factors. The scaling factors depend on parameters that can be reasonably determined using credible and verifiable third-party information available today. This includes the elasticities of supply, demand, and substitution between the varieties, as well as the market shares. Canada's approach thus permits the Arbitrator to fix those parts of the model that can be fixed, and reduce the number of decisions that must be taken by the parties at the time of its application.

32. With the scaling factors in hand, the model can be executed using simple arithmetic, as it only requires the reference period values of imports of Canadian exporters affected by the OFA-AFA measure, and the factual and counterfactual duty rates associated with these limited number of exporters. The result is a straightforward, yet robust, formula that is generic enough to accommodate any potential products or markets; is practical to implement; results in predictable and reasonable outcomes; and which limits the potential of future controversies between the parties.

B. The United States' Model Does Not Satisfy the Principles Established in Prior Arbitrations

33. In contrast, the United States' proposed methodology does not satisfy the principles established by previous arbitrators. The U.S. model is impractical to implement. Its outcomes are inherently uncertain and unpredictable. It also preordains future controversies between the parties, as it seeks to rely on unverifiable and potentially unavailable sources from the U.S. own agencies.

34. The United States has proposed an Armington-based partial equilibrium model applied directly in its non-linear form, with multiple Canadian varieties arbitrarily defined based on differentiated and ever-changing duty treatments. The U.S. model provides no closed-form solution for the calculation of nullification or impairment. It leaves the determination of key parameter in the hands of its own International Trade Commission ("USITC" or "Commission") in future investigations, unverifiable by the Arbitrator or the parties. Even if elasticity parameters were fixed today, the model would still require future calibration based on the exact market shares of an unknown number of Canadian varieties—information that can only be obtained through disaggregated company-specific customs data compiled by the United States' own agencies, and which would likely change at each subsequent stage of its retrospective duty assessment process. Absent the necessary data, the U.S. model would be rendered unworkable, frustrating Canada's ability to suspend concessions.

1. The U.S. Model is Economically Unsound and Cannot Claim to be More Accurate

35. The U.S. model treats "varieties" not based on countries—as would be consistent with the underlying Armington assumption—but based on differentiated duty treatments. Defining Armington varieties in this manner is arbitrary and not supported by economic principles. In the Armington model, the most discrete level of a variety is generally for a given country. This is because substitution elasticity estimates are primarily based on country-level bilateral trade flows, which treat individual countries as a single "variety".

36. Arbitrarily defining Canadian import "varieties" based on their duty treatment also means that the final form of the U.S. model cannot be specified until some point in the future when each category of affected and unaffected Canadian exporters are known. This is because a non-linear model requires that the implied scaling factor be based on the various factual and counterfactual duty rates, and market shares, associated with each "variety" of Canadian imports, which cannot be known ahead of time. This also means that under the United States' retrospective duty system, the number of Canadian varieties, and thus the final form of the U.S. model, will likely change at each subsequent stage of its duty assessment process.

37. The United States failed to show that its complex approach is more accurate than Canada's model in reasonably determining the level of nullification or impairment.

38. First, the United States erroneously claims that Canada's linearized approach "introduces approximation error". Armington-style models are mathematical approximations that cannot capture all economic factors that influence trade or replicate actual trade outcomes. Both the Canadian and U.S. models incorporate simplifying assumptions with associated but different limitations; neither can fully capture the range of economic outcomes that can and do occur. The United States' claim of an "approximation error" amounts to no more than the difference in outcomes between two competing models with different underlying assumptions, using different parameters.

39. The U.S. model would only be free of "approximation errors" if the real world corresponds exactly to the functional forms of supply and demand in a non-linearized Armington model, with demand preferences across different products that correspond precisely to Canadian products subject to different duty rates. However, the limitations and approximation errors of the non-linear Armington model and its constant-elasticity assumption are well known. In particular, there is no price, regardless of how high, at which demand for a product falls to zero. The U.S. model thus precludes the possibility of a prohibitive tariff. Under such a model, imposition of large duties on a single Canadian exporter (or a small group of Canadian exporters) could never cause that exporter (or exporters) to stop exporting to the United States. It is also widely understood that the constant-elasticity assumption, although an algebraically useful simplification, is inconsistent with actual trade patterns. In contrast, sub-convex demand forms, such as a linear demand, are more consistent with observed trade behaviour.

40. Second, the United States wrongly asserts that Canada's model fails to account for the offsetting increases in the value of imports experienced by Canadian exporters that are unaffected by the OFA-AFA measure. Like the United States', Canada's approach fully recognizes that a duty applied to a subset of Canadian exporters may increase the value of imports experienced by other Canadian exporters unaffected by the WTO-inconsistent duty. Canada's mathematical proofs show how its exact formula and approach can also be derived from a more complex, linearized Armington model that accounts for multiple Canadian varieties simultaneously. This more complex model explicitly accounts for any offsetting increases in the values of imports experienced by unaffected Canadian exporters and yields an equivalent level of nullification or impairment as Canada's simpler proposed model. The United States' claims are simply incorrect.

41. Despite the United States' insistence that the appropriate model must "simultaneously" modify all duty rates affected by the OFA-AFA measure to account for such offsetting effects, the United States readily abandons this principle where it stands to benefit. The United States criticizes Canada's approach of aggregating the results of multiple executions of the formula as "effectively [basing] the level of nullification or impairment on the sum of the approximate trade effects of duty rate changes in multiple, independent markets". Yet it advocates for an extreme version of this process when applying its own model where there are subsequent applications of the OFA-AFA measure. By summing calculations of nullification or impairment across different runs of its model calibrated across different sets of market data, and with false counterfactuals, the U.S. model invariably results in unreliable estimates of nullification or impairment. The United States' approach is thus incapable of calculating a level of suspension that is equivalent to the level of nullification or impairment.

2. The U.S. Sources of Parameters Are Unverifiable and Potentially Unavailable

42. To minimize the risk of future controversies between the parties, it is an imperative that key inputs to the model be based on verifiable, third-party sources that have not been created by either

party in the context of an investigation or dispute. However, the United States objects to the use of pre-determined parameters. Instead, it has insisted that the Arbitrator leave the determination of these required parameters to the USITC to some point in the future. The United States' proposal to use USITC reports as the primary source for parameter inputs fails on several grounds.

43. First, the USITC's methodology results in estimates that are inconsistent and which cannot be independently verified. Its elasticity estimates are not econometric estimates. Rather, the Commission qualitatively determines a *range* of possible elasticities based on an examination of information from various interested parties. The Commission has stated publically that it is under no obligation to analyze elasticities in any particular manner or even to use its own staff-recommended estimates. When elasticity estimates change for a product, it is impossible to verify whether the changes are due to actual changes in market conditions, or rather, a result of the Commission's variable qualitative analysis of the evidence before it. This is not a stable or verifiable methodology capable of producing consistent results.

44. Second, USITC estimates have themselves been the subject of dispute before bi-national arbitral panels or domestic appeal processes. They are therefore not without controversy. The prospect that USITC determinations may be contested and subsequently amended presents a real practical challenge for the parties if directed to rely on future USITC reports. In the event that a Commission's determination of a relevant parameter is appealed and subsequently remanded for redetermination, Canada may well be prejudiced in its ability to suspend concessions in a timely manner simply for the fact that settlement of that dispute may be not occur until years later.

45. Lastly, there is no guarantee that future USITC reports will contain the inputs required. There are no legal or practical requirements for the USITC's staff to generate quantitative elasticity estimates. There is simply no guarantee that the USITC will publish them. It is also evident that key market share inputs in USITC reports, including the values of domestic shipments and values of U.S. consumption, are more often than not proprietary information that is unavailable to Canada. If the Arbitrator were to pre-determine USITC reports as the source for parameters and future reports fail to include them, then there will be a future dispute regarding the appropriate source of the missing parameters, and the parties will not be able to resort to an arbitrator to resolve that dispute.

46. The United States' proposed tiered-approach fails to address these problems. For the reasons stated above, the use of USITC reports as a first-tier option is untenable. The United States' proposed second-tier option of consulting between the parties on the use of "some future source" is also impractical and unnecessary. As evident from the parties' disagreements over the source of key inputs, the prospect is low that the parties will agree in the future on the appropriateness of some unspecified future academic literature, or industry source, to provide estimates for such inputs. It is also unnecessary, given that reliable and verifiable third-party sources currently exist to determine the necessary inputs.

C. Appropriate Sources for the Necessary Inputs

47. The United States provides no compelling reasons for rejecting the following credible, factual and verifiable third-party sources:

48. Substitution Elasticity: Canada has proposed substitution elasticities from Caliendo and Parro (2015). Canada's proposed elasticity of substitution values have the advantage of being derived from differences in trade costs, and have been shown to successfully model trade behaviour specifically among NAFTA countries (i.e. between Canada and the United States) in response to changing tariff treatments. The Caliendo and Parro sectors and the corresponding elasticities of substitution provide near universal coverage concerning any relevant U.S. imports from Canada.

49. However, Canada also considers substitution elasticities derived by Fontagné et al. ("Fontagné") to be suitable for use. Both Caliendo and Parro, and Fontagné, determine trade elasticities through differences in trade policies, and are both founded on the structural gravity model. Substitution elasticities determined using a structural gravity model, with identification determined by differences in tariff rates, is the most reliable and relevant approach for determining elasticities relevant to this proceeding. Despite differences in data sources, timing, and estimation methodology, Fontagné's substitution elasticities are broadly consistent with Caliendo and Parro's estimates.

50. **Demand Elasticity:** The values for the elasticity of demand proposed by Canada are derived from the most recent and up to date Global Trade Analysis Project ("GTAP") 11 Data Base. These elasticities are based on analysis of the U.S. economy and account for the use of products as intermediate goods in production activities. GTAP demand elasticities are widely used by the United States, Canada, the WTO, and other national and international entities for the purposes of modelling trade effects. Previous iterations of the database have also been used as a reasonable basis for modelling counterfactual trade outcomes in the context of Article 22.6 proceedings.

51. **Supply Elasticity:** Canada considers it appropriate to use a supply elasticity of 10 for all sources of supply. Without prejudice to Canada's position that it is not necessary to distinguish among non-Canadian sources of supply, should the Arbitrator determine a need to separate non-Canadian supply into distinct varieties, Canada considers that it would be most reasonable to use a value of 15 for import (i.e. non-U.S.) supply elasticity, and a value of 6 for domestic (i.e. U.S.) supply.

52. **Market Shares:** Canada considers it appropriate to pre-determine market share values using the most recently available U.S. Bureau of Economic Analysis ("BEA") Input-Output ("I-O") supply and use table to calculate market shares. First, the import share of the total U.S. market is calculated from the BEA's I-O tables. Second, the Canadian share of total U.S. imports is calculated from the U.S. Census Bureau's import data. Multiplying these shares determines the Canadian share of the U.S. market. The average import share in domestic absorption should be calculated using U.S. imports from Canada among products covered by the measure as weights.

VII. IMPORT VALUES

53. Canada could accept the use of U.S. Customs data to calculate the value of imports. However, Canada's acceptance of U.S. Customs data has several conditions and Canada considers that it is important for the Arbitrator to establish binding procedures for the search and exchange of U.S. Customs information. While the procedures should allow the parties to consult concerning import values, consultations should be limited to the small number of issues where there is potential for disagreement. The consultations must be designed in a manner that encourages both parties to meaningfully participate and resolve disagreements, rather than stall the process.

A. Scope of Data Provided by the United States

54. Following a final determination or countervailing duty order where Commerce applies the OFA-AFA measure, Canada would notify the United States of its intention to suspend concessions by applying the model, along with specific information required to run the search of U.S. Customs data. The United States would then have a period of 45 days, from the date of notification, to provide the data to Canada.

55. If Canada determines that the OFA-AFA measure has been applied in an initial investigation (i.e. where a countervailing duty order is not in place during the reference period), U.S. Customs would perform a minimum search prescribed by the Arbitrator for all shipments from Canada to the United States, under the HTS Codes listed in the countervailing duty order, where the "Entry Date" field is within the reference period. All HTS Codes listed in the countervailing duty order should be included in the value of imports. The Arbitrator should reject the U.S. proposal to exclude HTS Codes listed in the countervailing duty order as HTS Codes that "may" or "might" contain subject merchandise. Excluding these HTS Codes will almost always undercount the value of imports.

56. If Canada determines that the OFA-AFA measure has been applied in a subsequent proceeding to an initial investigation (e.g. an administrative review) and the "CVD Case Number" is available for the reference period, U.S. Customs would perform a minimum search for all shipments from Canada to the United States, under the relevant CVD Case Number, where the "Entry Date" field is within the reference period.

57. Canada has detailed the fields that are necessary to run the model and to verify the U.S. Customs data.¹² Canada has also proposed a spreadsheet in machine-readable format that contains the requested fields. The United States would provide Canada data concerning shipments by all

¹² These fields include: Manufacturer Name, Manufacturer ID, Country of Origin, HTS Code Number, Entered Value, CVD Rate, HTS Rate, Entry Type, Importer of Record Name, and Address, Importer Number, Description of Merchandise, Net Quantity in HTSUS Units, CHGS, Port Code, and Export Date.

exporters. However, the United States could provide a preliminary identification of the shipments by respondent(s) affected by the OFA-AFA measure, unaffected respondent(s), and affected exporters subject to the All Others rate. Canada agrees with the Arbitrator's proposal to identify affected and unaffected exporters with reference to the "Manufacturer Name", "Manufacturer ID", "CVD Case Number", and "CVD Rate" fields. However, Canada highlights that the existence of minor typos in these fields should not allow a party to claim that the "Manufacturer Name" or "Manufacturer ID" fields do not match those of an affected exporter.

58. The parties have agreed on the *Understanding between Canada and the United States Concerning Procedures to Apply to Business Confidential Information to the Extent Necessary to Apply a DSB Authorization Consistent with the Arbitrator's Decision*, which covers information that was treated by U.S. Customs as confidential.

B. Verification Procedures

59. Following the receipt of U.S. Customs data, Canada will verify the U.S. Customs data. The provision of shipment- and company-specific information is necessary for verification. Providing the data at its most disaggregated level will allow Canada to confirm that the search by U.S. Customs has been performed consistently with the search criteria, to identify potential errors within the data, to verify the data against the records of affected exporters, and to confirm and correct the identification of affected exporters. Moreover, requiring the provision of shipment- and company-specific information is transparent and serves as an additional incentive for the United States to cooperate and report the data as accurately as possible, given that the data can be scrutinized by Canada. It will encourage cooperation, improve the accuracy of the import values, and give Canada confidence in the import values.

60. If verification reveals any errors in the dataset, Canada would consult with the United States concerning the errors during a two-week period, and correct the errors, if possible. Should the parties fail to reach agreement following consultations, it would be inappropriate for the Arbitrator to permit the United States to undermine the calculation of the level of nullification or impairment by deferring to the United States on the calculation of import values. The United States, as the non-compliant party, should not have unchecked authority to determine the import values, which will have a significant effect on the level of suspension of concessions applied against the United States.

61. If the verification reveals that U.S. Customs data provided on the basis of HTS Codes do not adequately reflect the export sales that fall within the scope of the countervailing duty order, Canada may supplement the U.S. Customs data with company-specific export data, obtained from the affected exporters, for products falling within the product description, but not covered by the reference HTS Codes. Canada will provide this supplemental data to the United States within four weeks of the receipt by Canada of the U.S. Customs data. After Canada provides the supplemental data to the United States, Canada will consult with the United States and consider its views on the supplemental data for a two-week period. If the parties disagree, Canada should nevertheless have permission to supplement the dataset. To alleviate any U.S. concerns regarding the accuracy of this data, Canada will request affected exporters to attest to the accuracy of the supplemented data, should it be necessary to use such data.

C. Procedures to be Applied Should the United States Fail to Provide U.S. Customs Data

62. In order to preserve Canada's ability to suspend concessions in the event that the United States does not provide the requested U.S. Customs data or does not provide the data within the specified time frame, it is critical for Canada to have recourse to an alternative data source to serve as a proxy for the value of imports.

63. In that case, Canada will have discretion to select from three data sources: (a) import values directly from affected exporters; (b) estimated import values derived from publicly-ranged sales data from the respondents in the underlying countervailing duty proceedings and aggregate trade data (from USA Trade Online or USITC DataWeb); and (c) where available and in certain circumstances, import values from Statistics Canada. Canada disagrees with the United States that the Arbitrator should impose a hierarchy between the three reliable data sources Canada proposes. Canada must maintain the discretion to choose between the three reliable data sources where there

is no U.S. Customs data, as it is not possible to predict which of the data sources will be the most accurate in advance.

64. If Canada resorts to these alternative means of calculating the value of imports, Canada would nevertheless consult with the United States, provide the United States with the data forming the basis of the value of imports, and provide the United States an opportunity to comment on the data and identify errors prior to Canada's suspension of concessions during a period of two weeks.

65. Canada has proposed additional instructions for identifying value of imports and reference period duty rates at the time of the triggering event in "Revised Table 1".

VIII. CONCLUSION

66. For these reasons and the reasons set out in more detail in Canada's Methodology Paper, written submission, written responses to the questions from the Arbitrator and oral statements during the virtual meeting with the Arbitrator, Canada respectfully requests that the Arbitrator find that the method proposed by Canada is appropriate to determine a level of suspension of concessions that is equivalent to the level of nullification or impairment.

ANNEX C

DATA INPUTS AND CALCULATIONS OF THE ARBITRATOR

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ANNEX C-1

STATA CODE OF ARBITRATOR'S MODEL*

```

*****
****Code to run Arbitrator's Model*****
*****

clear all
set more off
capture program drop all

global root /*"INSERT PATH HERE"*/
cd "$root"
global temp "`c(tmpdir)'"

*****
****Solution of the Armington Model****
*****

program nlArmington
    syntax varlist(min=2 max=2) [if], at(name)
    //Specify name
    local RHS: word 1 of `varlist'
    local exogenous: word 2 of `varlist'

    //Specify the temporary variable names
    tempname p_us p_aca p_nca p_row epsilon_us epsilon_aca ///
        epsilon_nca epsilon_row m_us m_aca m_nca m_row Y theta ///
        sigma t0_aca t_aca t0_nca t_nca LHS PQ a_us a_aca ///
        a_nca a_row b_us b_aca b_nca b_row QS_us QS_aca ///
        QS_nca QS_row QD_us QD_aca QD_nca QD_row

    //Specify the endogenous parameters
    scalar `p_us' = `at'[1, 1] //US shipments
    scalar `p_aca' = `at'[1, 2] //US imports from affected Canadian firm subject to duty rate change
    scalar `p_nca' = `at'[1, 3] //US imports from Canada not subject to a rate change
    scalar `p_row' = `at'[1, 4] //US imports from the rest of the world

    //Specify exogenous parameters (elasticities, initial market shares, initial total expenditure and initial duties)
    local i = 1
    foreach param in epsilon_us epsilon_aca epsilon_nca ///
        epsilon_row m_us m_aca m_nca m_row Y theta sigma ///
        t0_aca t_aca t0_nca t_nca {
        levelsof `exogenous' in `i'
        generate double ``param' = `r(levels)'
        local i = `i' + 1
    }

    replace `t0_aca' = 0 if `t0_aca' == .

    //Specify initial market clearance conditions
    generate double `LHS' = 0

    //Compute the index price
    generate double `P' = (`m_us'/100 * `p_us'^(1 - `sigma') + ///
        `m_aca'/100 * `p_aca'^(1 - `sigma') + ///
        `m_nca'/100 * `p_nca'^(1 - `sigma') + ///
        `m_row'/100 * `p_row'^(1 - `sigma')) ///
        ^ (1/(1 - `sigma'))

    //Compute the aggregate demand
    generate double `Q' = `Y' * `P'^`theta'

    local i = 1
    foreach x in us aca nca row {
    //Compute the shifting factors
    if "`x'" == "us" | "`x'" == "row" generate double ///
        `a_`x'' = `Y' * `m_`x'' / 100
    if "`x'" == "aca" | "`x'" == "nca" generate double ///
        `a_`x'' = `Y' * `m_`x'' / 100 * (1 + `t0_`x''/100)^(`epsilon_`x'')
    generate double `b_`x'' = exp(ln(`m_`x''/100) / `sigma')
    replace `b_`x'' = 0 if `m_`x'' == 0 | `m_`x'' == .

    //Compute the supply functions
    if "`x'" == "us" | "`x'" == "row" generate double ///

```

* English only.


```

        `QS_`x" = `a_`x"*(`p_`x")^`epsilon_`x"
if "`x'" == "aca" | "`x'" == "nca" generate double ///
    `QS_`x" = `a_`x"*((`p_`x")/(1 + `t_`x"/100))^`epsilon_`x"

//Compute the demand functions
generate double `QD_`x" = `Q' * (`b_`x"^(`sigma')) * ///
    (`p_`x"/`P')^(-`sigma')

//Compute the market clearance conditions
replace `LHS' = `QD_`x" - `QS_`x" in `i'
if `i' == 5 replace `LHS' = `QD_`x" - `QS_`x" + 1 in `i'

local i = `i' + 1
}

//Ensure the market clearance conditions are met
replace `RHS' = `LHS'

end

*****
*****Corresponding Prices and Quantities*****
*****

program define dPQ
//Specify the input variables:
* `1': variable with prices
* `2': variable with exogenous parameters

//Specify the temporary variable names
tempname p_us p_aca p_nca p_row epsilon_us epsilon_aca epsilon_nca ///
    epsilon_row m_us m_aca m_nca m_row Y theta ///
    sigma t0_aca t_aca t0_nca t_nca LHS PQ a_us a_aca ///
    a_nca a_row

//Specify the parameters
local i = 1
foreach param in p_us p_aca p_nca p_row epsilon_us epsilon_aca ///
    epsilon_nca epsilon_row m_us m_aca m_nca m_row Y theta ///
    sigma t0_aca t_aca t0_nca t_nca {

        if `i' <= 4 scalar ``param" = `1' in `i'
        if `i' > 4 local j = `i' - 4
        if `i' > 4 scalar ``param" = `2' in `j'
        local i = `i' + 1
    }

// Compute the index prices
generate double `P' = (`m_us/100 * `p_us^(1 - `sigma') + ///
    `m_aca/100 * `p_aca^(1 - `sigma') + ///
    `m_nca/100 * `p_nca^(1 - `sigma') + ///
    `m_row/100 * `p_row^(1 - `sigma')) ///
    ^ (1/(1 - `sigma'))

//Compute the aggregate demand
generate double `Q' = `Y' * `P'^`theta'

local i = 1
foreach x in us aca nca row {
//Compute the shifting factors
if "`x'" == "us" | "`x'" == "row" generate double ///
    `a_`x" = `Y' * `m_`x"/100
if "`x'" == "aca" | "`x'" == "nca" generate double ///
    `a_`x" = `Y' * `m_`x"/100 * (1 + `t0_`x"/100)^(`epsilon_`x")

//Compute the percent changes in prices
generate double dp_`x" = (p_`x" - 1) * 100 in 1

//Compute the initial equilibrium quantities
if "`x'" == "us" | "`x'" == "row" generate double ///
    iniq_`x" = `a_`x" * 1^`epsilon_`x" in 1
if "`x'" == "aca" | "`x'" == "nca" generate double ///
    iniq_`x" = `a_`x" * (1/(1 + `t0_`x"/100))^`epsilon_`x" in 1

//Compute the initial duties
if "`x'" == "us" | "`x'" == "row" generate double ///
    inid_`x" = 0 in 1
if "`x'" == "aca" | "`x'" == "nca" generate double ///
    inid_`x" = (`t0_`x"/100)/(1 + `t0_`x"/100) * (`a_`x" * (1 / (1 + `t0_`x"/100))^`epsilon_`x") in 1
}

```

```

//Compute the new equilibrium quantities
if "`x'" == "us" | "`x'" == "row" generate double ///
newq_`x' = `a_`x' * (p_`x')^`epsilon_`x' in 1
if "`x'" == "aca" | "`x'" == "nca" generate double ///
newq_`x' = `a_`x' * (p_`x'/(1 + `t_`x'/100))^`epsilon_`x' in 1

//Compute the percent changes in quantities
generate double dq_`x' = (newq_`x' - iniq_`x') / iniq_`x' * 100 in 1
if dq_`x' == . replace dq_`x' = 0 in 1

//Compute the new expenditures
generate double newX_`x' = p_`x' * newq_`x' in 1

//Compute the new duties
if "`x'" == "us" | "`x'" == "row" generate double ///
newD_`x' = 0 in 1
if "`x'" == "aca" | "`x'" == "nca" generate double ///
newD_`x' = (`t_`x'/100/(1 + `t_`x'/100)) * p_`x' * newq_`x' in 1

//Compute the change in expenditures
generate double dX_`x' = (newX_`x' - iniq_`x') in 1

//Calculate the change in duties
generate double dD_`x' = (newD_`x' - inid_`x') in 1
}
end

*****
****Implementation of the five-variety model****
*****

**Import data inputs from Excel file "Excel Input Sheet of Arbitrator's Model.xlsx"
* Canada will insert inputs in sheet "Parameter Input". Stata will use inputs from sheet "Stata Input"

cd "$root"
import excel "Excel Input Sheet of Arbitrator's Model.xlsx", firstrow clear sheet("Stata Input")
*Renaming to existing program notation to avoid programming error
rename epsilon theta
rename eta_use epsilon_us
rename eta_import epsilon_import
drop if Product == ""

*Create additional inputs
foreach var in aca nca {
generate double epsilon_`var' = epsilon_import
generate double t0_`var' = t_`var'
}
rename epsilon_import epsilon_row

save "$temp\Inputs", replace

*Solve the Armington model
use "$temp\Inputs", clear
levelsof Product, local(Product)
foreach product of local(Product) {
use "$temp\Inputs", clear
keep if Product == "`product'"
display ""
display "***** `product' *****"
quietly {
* Create constraints and exogenous variables structure
set obs 19
generate double MrktEq = 0
replace MrktEq = 1 in 4
local i = 1
generate paramname = ""
generate double param = .
foreach param in epsilon_us epsilon_aca ///
epsilon_nca epsilon_row m_us m_aca ///
m_nca m_row Y theta sigma t0_aca t1_aca ///
t0_nca t1_nca {
levelsof `param' in 1, local(temp)
replace paramname = "`param'" in `i'

```

```

        capture replace param = `temp' in `i'
        replace param = 0 if param == . in `i'
        local i = `i' + 1
    }
}
*Solve the Armington model with WTO-consistent duties
nl Armington @ MrktEq param, param(p_us p_aca p_nca p_row) ///
initial(p_us 1 p_aca 1 p_nca 1 p_row 1) eps(1e-12)
quietly {
    matrix B = e(b)
    svmat double B
    local i = 1
    foreach x in us aca nca row {
        rename B `i' p_`x' // New price
        local i = `i' + 1
    }

    *Compute the level nullification or impairment
    matrix B = B'
    svmat double B
    dPQ B param
    generate double NI = dX_aca-dD_aca + dX_nca-dD_nca

    *Compute new market shares
    egen double Y1 = rowtotal(newX_*)
    foreach x in us aca nca row {
        generate double m1_`x' = newX_`x' / Y1 * 100
    }

    drop p_* dp_* iniq_* newq_* dq_* inid_* newD_* newX_* MrktEq param* B1
    keep Product NI

    keep in 1

}
scalar NI_`product' = NI
display NI_`product'
}

scalar LevelOfNI = NI_FirstRun - NI_SecondRun
display LevelOfNI

```

ANNEX C-2

EXCEL INPUT SHEET OF ARBITRATOR'S MODEL

Pages offset (excel file attached in English only).

ANNEX C-3

EXCEL SPREADSHEET TEMPLATE FOR US CUSTOMS DATA

Pages offset (excel file attached in English only).
