Certain Country of Origin Labelling (COOL) Requirements:

Recourse by the United States to Article 22.6 of the DSU (Canada) **(DS384)**

Recourse by the United States to Article 22.6 of the DSU (Mexico) **(DS386)**

Executive Summary
of the United States of America

October 15, 2015

I. INTRODUCTION

1. Both Canada and Mexico calculate the level of nullification or impairment as the sum of "export revenue losses" and domestic "price suppression losses." In the first instance, these estimates dwarf the historical and current export value of livestock and in no way reflect the "benefit" impaired by the amended COOL measure. Specifically, Canada and Mexico are arguing that if the amended COOL measure were withdrawn, their exports of livestock would increase 92 percent and 70 percent, by value respectively, to never before seen levels, and even as overall demand for beef and pork muscle cuts in the United States has been in decline since 2008 – with no sign of rebound. In the second, the claimed "price suppression losses" are not part of the level of nullification or impairment of benefits accruing under the *Agreement on Technical Barriers to Trade* ("TBT Agreement") or the *General Agreement on Tariffs and Trade 1994* ("GATT 1994").

2. In response, the United States explains why the econometric calculations of the requesting parties produce highly inflated levels of nullification and impairment. In contrast to the flawed methodologies proffered by Canada and Mexico, the United States puts forward a type of partial equilibrium model, which more accurately estimates the trade effects of the COOL measure, as amended, in the context of the complex North American market. Specifically, an equilibrium displacement model ("EDM") is the most suitable tool for estimating the trade effects of the amended COOL measure. And finally, the United States has explained why the requesting parties' claims for non-trade related damages cannot succeed.

II. APPROPRIATE CALCULATION OF THE LEVEL OF NULLIFICATION OR IMPAIRMENT

3. Pursuant to Article 22.6 of the *Understanding on Rules and Procedures Governing the Settlement of Disputes* ("DSU"), the United States objected to Canada and Mexico's proposed levels of suspension of concessions or other obligations because each party has submitted a proposed level of suspension that is far in excess of the level of nullification or impairment attributable to the measure at issue. Article 22.4 of the DSU is explicit and requires that the "level of suspension of concessions or other obligations authorized by the DSB shall be equivalent to the level of nullification or impairment." The requesting parties' calculations suffer from conceptual flaws and methodological errors that result in grossly inflated estimates of the levels of nullification or impairment.

4. In this proceeding, Canada and Mexico have each gone far beyond an "equivalent" level of nullification in offering a two-part asserted level of nullification or impairment, which in the first instance exceeds all possible trade effects, and which in the second instance is not attributable to the nullified or impaired benefit. As to the former, Canada and Mexico attempt to quantify the "export revenue losses" attributable to the amended COOL measure, *i.e.*, the volume and value of livestock that would have been exported "but for" the amended COOL measure. The methodologies employed to estimate the quantity and value effects of the amended COOL measure are fundamentally flawed and result in requests for levels of suspension of concessions that are unsupportable. As to the latter, Canada and Mexico argue that domestic "price suppression losses" should also be included in the total level of nullification or impairment. Even if this "loss" level was determined through a clear and rational methodology, which it is not, the alleged effects on domestic price are not trade effects and do not relate to the "benefits" accruing under the relevant covered agreements (the TBT Agreement and the GATT 1994) that are being nullified or impaired.

5. The DSU does not prescribe any particular way to demonstrate that the level of suspension requested by each party is excessive in light of the requirements of the DSU. The United States has established its *prima facie* case in three different, and independent, ways. First, the United States has provided a methodology – the EDM – that more accurately estimates the level of nullification and impairment than the one proposed by the requesting parties. Second, the United States has explained why, even aside from the EDM approach, the somewhat differing econometric calculations of the requesting parties produce highly inflated levels of nullification and impairment. Third, the United States has explained why the requesting parties' claims for non-trade related damages – *i.e.*, their claims regarding domestic "price suppression losses" – are legally invalid.

A. Applied Economic Analysis Is Necessary to Accurately State the Level of Nullification or Impairment in the North American Livestock Industry

6. To calculate the amount of nullification or impairment, one must compare on a prospective basis the imports of the relevant livestock from Canada and Mexico under the amended COOL measure to the imports that would occur were the amended COOL measure withdrawn. And to make that comparison, one would look at the actual relevant U.S. livestock imports during the most recent period (actual situation), and then estimate the relevant imports of livestock that would exist during the same period if the amended COOL measure were withdrawn and all other factors were held constant (the counterfactual).

7. Recognizing these challenges, and the complexity of the North American livestock markets, the United States uses a type of partial equilibrium model, an EDM, to estimate the prospective trade effects of coming into compliance with the DSB recommendations and rulings through withdrawal of the amended COOL measure. This model compares a baseline of 2014 trade data to what would happen to supply and demand across all three countries if the amended COOL measure were withdrawn.

1. Overview of the Equilibrium Displacement Model

8. EDMs are a well-accepted and widely used type of partial equilibrium model used for applied economic analysis, particularly in the agricultural sector. In particular, EDMs are well accepted by economists, and have been widely used in the economic literature to model and measure the impact of policy changes in the agricultural sector. In the context of COOL, the United States notes that there have been at least three significant studies of the U.S. livestock market using EDMs.

9. Further, prior arbitrators in Article 22.6 proceedings have in the past relied on partial equilibrium or stimulation models similar to the EDM proposed by the United States. In this regard, the United States notes that the arbitrator in *US – CDSOA (Article 22.6 – US)* considered that where "evaluating the trade effects of the scheme cannot be accomplished with mathematical precision," "economic science allows for the consideration of a range of possible trade effects with a certain degree of confidence." That is, the use of well-supported and reasoned economic models that recognize the varying effects of a measure, as the EDM does, has been an important tool for arbitrators.

2. Explanation of the Equilibrium Displacement Model for the U.S. Cattle/Beef and Hog/Pork Sectors

10. The United States uses an EDM in order to estimate the difference between the value of trade flows in 2014 and a counterfactual situation where compliance with the DSB recommendations and rulings is achieved. The EDM is a series of linearized equations that provide economic estimates of the trade shifts that would occur if the amended COOL measure were withdrawn.

11. The EDM utilizes a multi-animal (covering cattle/beef and hogs/pork), and multi-sector (representing five levels of the beef and pork marketing chain), structure. For each species and at each level, the model establishes baseline quantities and prices, and then estimates the price and quantity changes due to an external "shock."

12. In this case, the shock is the immediate elimination of the amended COOL measure and its associated compliance costs, which appear in the first four marketing levels. All other independent variables are held constant at their 2014 levels. In this context, the resulting quantities and prices are endogenous variables, meaning they are determined within the EDM by a set of exogenous and computed components. Exogenous components include the baseline quantity and prices, demand and supply elasticities, and COOL compliance costs.

3. 2014 Baseline Quantities and Prices

13. The EDM's baseline utilizes 2014 market quantities and prices sourced from the U.S. Census Bureau trade data. The most recent full year data reflects all current market conditions such as transport costs, feed costs, exchange rates, ownership structures, Canadian and Mexican domestic policies, and environmental factors as they existed in 2014. The year 2014 thus provides the most appropriate baseline for the purposes of determining the nullification or impairment of benefits accruing to Mexico and Canada under the TBT Agreement and the GATT 1994 on a prospective basis.

14. Construction of the 2014 baseline, as well as the EDM, depends on certain additional assumptions. The EDM assumes that all marketing levels are in perfect competition. The EDM utilizes "fixed proportions" between inputs and outputs through the marketing channel. The EDM also assumes that technologies used in the "value-added" sectors provide a constant return to scale. The EDM further uses certain "conversion factors" to translate animal standard-sized livestock from the number of head of livestock into the retail weight in pounds. Finally, the conversion factors and the EDM, more generally, are based on an assumption that fed cattle are 1,400 lbs. and fed hogs are 300 lbs.

4. Multi-Animal, Multi-Marketing Sector Model Structure

15. To accurately estimate the trade effects of the amended COOL measure at each level of the marketing chain from farm to consumer, the EDM explicitly models the five distinct levels of the livestock market: (1) cow-calf and farrowing, (2) finishing, (3) packing/wholesale, (4) retail, and (5) consumers. To model the complete and integrated livestock-to-retail meat market, this model also incorporates imported livestock from Mexico and Canada, as well as

imports and exports of pork and beef. The model therefore captures the elements of supply and demand relevant to the livestock/meat market in North America.

16. The EDM uses four sets of equations, "identity," "price," "value-added," and "structural," to define the market and analyze shifts resulting from withdrawal of the amended COOL measure. These equations are based on the assumption that equilibrium conditions exist at each stage of production.

5. Explanation of Elasticities and COOL Compliance Costs

17. There are two primary input parameter values utilized by the EDM: elasticities and COOL compliance costs.

a. Elasticities

18. The EDM's structural supply and demand equations are linearized and use the elasticities, consistent with previous COOL EDM studies, to determine the responsiveness of prices and quantities in the model to exogenous shocks. As discussed in academic literature and noted in Mexico's Methodology Paper, data and time constraints render impractical estimating all supply and demand elasticities econometrically. Therefore, the EDM follows the same approach as other EDM studies and uses supply and demand elasticity estimates established in and vetted by peer-reviewed academic literature.

19. The EDM utilizes short-run supply elasticities for the supply of U.S. feeder animals and the supply of imports of feeder animals, slaughter animals, and wholesale meat drawn from academic sources. In this context, short-run is typically defined as one to two years, while long run is typically defined as ten years. The EDM also utilizes demand elasticities for U.S. retail meat (own-price and cross-price elasticities) and U.S. wholesale meat exports.

20. Previous academic studies of the North American livestock market do not provide supply elasticities for U.S. imports of feeder or slaughter animals. The United States has thus set these elasticities to equal the supply elasticity for U.S. imports of wholesale meat imports. This is consistent with the expectation that the import supply elasticities for these animals would be higher than those for domestic supplies, and is supported by other studies that developed lower estimates for these parameters. Canada claims, however, that these elasticities are inappropriate because the ratio of export supply to total supply is important, and the (alleged) long-run must be calculated on an *annual* basis (and purports to do so for 2014). Canada provides no clear methodology or data to support its extreme export supply elasticities (which range from 12.6 to 126.3), which are much higher than those developed by academics specifically considering the underlying markets.

b. COOL Compliance Costs

i. RIA Cost Estimates

21. To estimate the trade effects of withdrawing the amended COOL measure, the costs of COOL compliance are estimated and removed from the EDM at each level of the beef and pork production chain. The COOL cost estimates in the EDM are based on the Regulatory Impact

Analyses ("RIAs") conducted by the U.S. Department of Agriculture ("USDA") with respect to the 2009 and 2013 COOL final rules. The United States has also put forward an alternative based on the Informa Economics report costs which form the far upward bound of likely costs.

22. Although the RIA costs assume that exclusively U.S.-origin meat and mixed origin meat are subject to the same incremental direct costs at the farm, finishing, packer and retail levels, differential impacts arise due to differing elasticities for import supply and domestic supply. The EDM captures and measures these differences by imposing appropriate import and domestic supply elasticities. That is, imported products are more sensitive to incremental cost increases and reflect these changes more severely in price and quantity changes. This difference reflects the differential compliance costs imposed on Canadian and Mexican livestock suppliers.

23. But for the compliance costs related to the 2009 and 2013 COOL measures, the value of Canadian and Mexican livestock exports to the United States would have exceeded the 2014 baseline level of exports. Specifically, Canadian feeder pig exports would be US$3.75 million higher than 2014 levels, and Canadian slaughter hogs would have been US$0.35 million higher. Canadian feeder calf exports would have been US$21.45 million higher and slaughter cattle would have been US$17.64 million higher. Mexican feeder calf exports would have been US$49.18 million higher than 2014 export levels.

ii. Informa Economics Cost Estimates

24. Recognizing that the original panel and compliance panels have found that some portion of U.S. costs may be shifted up the supply chain and imposed on importers, the United States has also put forward an alternative based on the Informa Economics report costs which form the far upward bound of likely costs. As the original panel noted, however, the "Informa Report is silent on its methodology and the sample considered (*i.e.*, time period, geographical zone, number of firms surveyed)," and thus is not "reliable and precise as regards its exact quantification of the costs of the COOL measure." These costs in fact represent an exaggeration of the compliance costs for mixed origin product, and the far upward bound of potential segregation and compliance costs.

25. Using this cost wedge and assuming that U.S. retailers and packers will push costs associated with mixed origin animals up the supply chain, the value of Canadian and Mexican livestock exports to the United States would have exceeded the 2014 baseline level of exports. Specifically, Canadian feeder pig exports would be US$62.30 million higher than 2014 levels, and Canadian slaughter hogs would have been US$5.10 million higher. Canadian feeder calf exports would have been US$34.30 million higher and slaughter cattle would have been US$27.01 million higher. Mexican feeder calf exports would have been US$78.95 million higher than 2014 export levels.

6. Conclusion

26. As demonstrated by the EDM, the more appropriate level of nullification or impairment is approximately US$43.22 million per year for Canada, and certainly no more than US$128.71 million per year. With respect to Mexico, the more appropriate level of nullification or impairment is approximately US$47.55 million per year, and certainly no more than US$78.95

million per year. This analysis demonstrates that the levels of suspension of concessions requested by Canada and Mexico are in excess of the appropriate levels of nullification or impairment.

III. THE LEVELS OF SUSPENSION OF CONCESSIONS OR OTHER OBLIGATIONS PROPOSED BY CANADA AND MEXICO FAR EXCEED THE LEVELS OF NULLIFICATION OR IMPAIRMENT

27. The requesting parties utilize econometric methods that are fundamentally incapable of estimating the impact of the amended COOL measure in the complex North American livestock and meat market. Their "export revenue loss" calculations depend on unrealistic assumptions and suffer from serious methodological deficiencies that render their estimates incorrect. As noted consistently by previous arbitrators, the proposed level of nullification or impairment must reflect the "benefit" accruing under the relevant covered agreement allegedly nullified or impaired "as a result of" the breach found by the DSB. That is, the proposed level must be an accurate reflection of the trade that would have occurred "but for" the inconsistent amended COOL measure, and not a reflection of unrelated market drivers or circumstances.

A. Canada and Mexico's Proposed "Export Revenue Losses" Methodologies Are Fundamentally Flawed and Result in Overstatements of the Levels of Nullification or Impairment

28. The United States, Canada, and Mexico agree that the "trade effects" of an inconsistent measure are determined by evaluating the difference between a baseline annual export value and the estimation of what that export value would be if the amended COOL measure costs were eliminated. However, neither Canada nor Mexico's alleged level of nullification or impairment reflects the established patterns of supply and demand in North America or the realities of the livestock industry. Canada's total hog and cattle export value for 2014 was US$1.744 billion. Canada's estimated level of nullification or impairment, US$1.61 billion, suggests that export revenues would increase by 92.3 percent by value if the COOL measure was eliminated. Mexico's total feeder cattle export value for 2014 was US$737 million. Mexico's suggested level of nullification or impairment suggests that marginal revenue will increase by as much as 70 percent by value.

1. Econometric Modeling Is Not Well Suited to Accurately Determining Trade Effects

29. Canada's Methodology Paper attempts to use linear regression analysis to econometrically estimate the "reduction in the average weekly exports from Canada to the United States caused by the amended COOL measure," and the "price basis." Mexico's Methodology Paper seeks to determine "price basis" through econometric analysis, but abandons this methodology when determining the impact of the amended COOL measure with respect to exports.

30. Econometric modeling analysis seeks to estimate the statistical relationship between a variable of interest (the dependent variable) and other explanatory variables (the independent variables) as a tool for forecasting how changes to those independent variables would impact the dependent variable. Econometric modeling, however, is not an appropriate approach for

determining the level of nullification or impairment. For example, it is widely understood that econometric models are dependent on the inclusion and accurate estimation of exogenous variables, are limited by the ability to incorporate accurate real world data, and must ensure that the relationship between the variables and data is accurately identified. Failure to address these issues will lead the model to attribute to the amended COOL measure trade effects that are due to some other factor. The concept of "non-attribution" is one that is familiar under the covered agreements and was addressed by the recent *China – GOES* compliance panel. These concerns make econometric models poorly suited for analyzing complex markets, such as integrated and vertically linked animal and meat markets, which are subject to numerous and overlapping variables that may impact the dependent variables.

2. Canada and Mexico's Models Are Mis-specified Because the Models Omit Numerous Necessary Explanatory Variables

31. The reduced form econometric modeling proposed by Canada and Mexico is far too simplistic to accurately isolate and quantify the magnitude of any potential effects of the amended COOL measure. In particular, Canada and Mexico's limited analysis does not consider a number of important explanatory variables impacting the North American livestock and meat markets between 2005 and 2015. Failure to accurately control for relevant factors results in attributing to the amended COOL measure effects that are instead due to other factors. For this reason, Canada and Mexico's proposed levels of nullification or impairment far exceed the "benefit" being impaired.

32. To accurately isolate and assess the quantity and price impact of the amended COOL measure, the requesting parties' models should not choose to include or exclude explanatory variables based on the bias requesting parties assume the variable will create or on the assumption that the effect is small – as they have done in these arbitrations. Rather, all explanatory variables should be included in the analysis.

33. Specifically, the requesting parties must effectively control for numerous independent variables, which also had an impact on quantity and price during this period. These independent variables include, but are not limited to:

- Economic Fluctuations and Recession: Significant economic fluctuations affecting the price and quantity of livestock exports to the United States have occurred during the period used by Canada and Mexico. The global economic crisis resulted in a worldwide slowing of trade and an overall contraction of agricultural markets between 2007 and 2009. The recessions had different origins and impacted each of the three economies differently. The U.S. recession, which lasted between December 2007 and June 2009, was largely driven by domestic factors in the housing and banking sectors. Canada entered economic recession in December 2008, which is a full year after the United States. Mexico's recession lasted from October 2008 to March 2009.

  Despite addressing the most significant economic downturn in recent memory in other submissions and academic papers, Canada and Mexico provide no assessment of the recession's effect on export quantities or the price basis. Instead, Canada and Mexico attribute the total effect of the economic downturn to the amended COOL measure.

- Increased Feed Costs: Feed costs, as one of the single largest input into livestock production, play a significant role in determining price and trade flows. For instance, when the cost of feed is high, the profitability of feeding cattle declines, encouraging increased slaughter or export of animals. Between 2005 and the present, feed costs in North America have shifted for a number of reasons, including drought, biofuels policy, changing export demands, and shifting domestic demand. In fact, feed costs not only change throughout the period of the amended COOL measure, impacting the price and quantity of livestock shipped, but feed costs affect Canada, Mexico, and the United States differently and must be accounted for in econometric price and quantity equations to ensure that changes in feed costs over time are not incorrectly attributed to the estimated effects of the amended COOL measure.

- Shifting Transportation Costs: Transportation costs can significantly impact cattle trade between Canada and the United States, and Mexico and the United States. When transportation costs, which are linked to the price of fuel, are high the incentive to ship Canadian cattle to the United States diminishes. Therefore, U.S. packers will purchase fewer Canadian livestock and Mexican cattle, and the price of imported livestock will decline. This is particularly clear as Canada's own submission specifies differences in transportation costs between costs for Canadian and U.S. producers. Unless these costs are properly accounted for, there is no way through an econometric analysis to precisely isolate the effects of the amended COOL measure on the price basis.

- Lingering Effects of BSE and Other Animal Diseases: The discovery of bovine spongiform encephalopathy ("BSE") in Canada in 2003 has also had lingering effects on the Canadian market. While Canada has attempted to account for the trade disruption between Canada and the United States, it has not addressed the impact of bans enacted by other trading partners on imports of live cattle, beef, and beef products. Conversely, Mexico continues to benefit from its increased market share in a number of Canada's prime export markets, which are periodically closed to Canadian exports due to BSE cases (reported as recently as February 2015).

- Shifting Livestock Processing: Both Canada and Mexico have functioning slaughter and processing sectors which provide meat for domestic consumption as well as export. The relative health of this sector and, in particular, shifts in production capacity have a significant impact on the domestic price of livestock and the competitive opportunities for Canadian/Mexican farmers and feedlot owners. This should be considered in any econometric analysis.

- Weather Patterns: Weather related disruptions, such as drought, can significantly impact export levels. For instance, between 2011 and 2014 a significant drought affected Mexico and the U.S. Southwest. Drought both encouraged exports from Mexico, and increased slaughter (and a decline in stocks) in the United States. Canada has not controlled for the impact of this drought or other weather conditions. Rather, Canada suggests that if this were included in the econometric model specification the COOL impact would be larger because the drought had increased demand for imports of Canadian cattle to be used for breeding stock rather than for slaughter. However, Canada misunderstands the impact of the drought in the context of the integrated market. As

Mexico indicated, the drought and expectations regarding its length and cost encouraged Mexican farms to export to the United States more feeder animals at lower weights and lower prices. This increased supply from Mexico decreased demand for Canadian feeder animals, and this effect should not be attributed to the amended COOL measure.

- U.S. Holidays: Significant holidays are often preceded by an increase in demand for beef and pork. But in their Methodology Papers, Canada and Mexico fail to address the influence of these holidays on quantity impacts or price basis.

- Competing Imports: Canada does not appear to consider the impact of U.S. or Mexican production on the ability of Canada to export to the United States, and Mexico does not consider the impact of Canadian and U.S. production on Mexican exports. Canada suggests that the United States is so large that the presence of an additional significant supplier of feeder cattle is irrelevant. This is erroneous. Canada further suggests that imports on the southern border do not affect the prices or quantities imported on the northern border. This stands in contrast to Canada's statements regarding the single integrated market, and is also in error. Failure to include another significant market player will result in Canada attributing to the amended COOL measure the impact of factors related to the supply of Mexican feeder cattle and in Mexico attributing to the amended COOL measure impacts related to the supply of Canadian livestock.

34. Finally, a wide variety of factors influence the quantity of livestock crossing the border and the price at which the livestock is sold, and because Canada and Mexico are seeking to determine both price and quantity effects, it is important to ensure that both the price and quantity equations are correctly specified with all the variables affecting either term. These additional variables include sales variables (such as lot size, average animal weight, animal sex, homogenous lots, type of sales contract, and other characteristics that may differ between Canadian and U.S. sales), demand shifters (such as relative prices of substitutes including consumer income, consumer preference, demographics, health concerns, and seasonality), and supply shifters (such as changes in slaughter capacity in both Canada and Mexico, or decisions to export at feeder or fed levels).

3. Including Additional Variables Is Insufficient to Increase the Accuracy of Canada's Econometric Model

35. Even if Canada and/or Mexico attempted to include additional explanatory independent variables, the econometric modeling still would not provide accurate results. Rather than focus on the actual price of livestock, Canada and Mexico both utilize equations specified in terms of "price basis." The flaw with this equation specification is that the estimation of trade effects should measure how much the amended COOL measure impacts or lowers Canadian and Mexican livestock prices. Thus, changes to the price basis, which reflects changes in both the U.S. price and Canada or Mexico export prices, is not appropriate because any widening basis captures both the decline in Canada or Mexico export prices and the increase in the U.S. price.

36. Canada states that estimating an equation "with the absolute price as the dependent variable" will be "biased and unreliable and yield no meaningful results that can be interpreted in the calculation of losses." Mexico suggests this approach is less efficient and will yield a less

reliable estimate than a model specified with price basis as the dependent variable. However, the question before the Arbitrators is not whether the "price basis" widened or contracted due to the amended COOL measure, but rather what quantity of livestock would be exported and at what price but for the amended COOL measure. For these reasons, Canada and Mexico's econometric analysis and its resulting overestimation of the level of nullification or impairment should be rejected.

4. Canada and Mexico's Methodologies Utilize Truncated Equations that Have Little Explanatory Power

37. Canada and Mexico use faulty "reduced form equations" to estimate the impact on the quantity of Canadian livestock exports to the United States and on the price basis from the amended COOL measure. These equations do not adequately evaluate the complex livestock and meat industry or the relevant demand and supply shifters.

38. Requesting parties' "reduced form equations" do not provide quantity equations that factor in price, or price equations that factor in quantity. In particular, the price and quantity equations, which are mutually linked (and in fact determinative), should have the same exogenous variables. Specifically, in a system attempting to identify both price and quantity, two reduced form equations should be specified with price and quantity as the dependent variables on the left hand side of the equations. On the right hand side should be all the variables affecting the price and quantity in the livestock market. It is important for all variables affecting either price or quantity to appear in both equations, otherwise the relevant variables affecting price and quantity are being omitted in the reduced form resulting in bias. Indeed, Canada itself conceded at the hearing that its quantity equation should, but does not, control for all causal factors. However, Canada inconsistently – and inaccurately – does not make the same concession for its price equation.

5. Canada and Mexico Rely on Incomplete and Unsubstantiated Data

39. Canada relies on unofficial weekly cattle and hog import data derived from veterinary certificates collected by USDA's Animal and Plant Health Inspection Service ("APHIS"). This is not the appropriate data to use because APHIS's responsibility is to ensure that health certificates are in order, not to track import numbers for official purposes.

40. With respect to the pricing data provided for feeder pigs, Canada notes that "no consistent time series of price data amenable for statistical analysis is available for feeder pigs in Canada." Canada now seeks to rely on a limited, handpicked selection of transactions, which are completely unverifiable. Such evidence simply cannot satisfy Canada's burden in this regard.

41. Mexico utilizes weekly pricing data collected by USDA's Agricultural Marketing Service ("AMS"). This data reflects a limited sample of weekly Texas and New Mexico feeder cattle prices. The AMS price data provided is not necessarily consistently reflective of the types of feeder cattle that are imported from Mexico. Moreover, it is significantly different from both the U.S. Census data and Mexico's reported export value. The AMS reported prices reflect both the export price and value added in the United States. However, Article 22.6 arbitration focuses

on the trade effect of the inconsistent measure. This means it must reflect the impact of the measure on the product as it crosses the border not any later added value.

6. Mexico's Quantity Impact Analysis Is Also Subject to Significant Flaws

42. With respect to evaluating the impact of the amended COOL measure on the quantity of livestock exports from Mexico to the United States, Mexico does not conduct an econometric analysis. Just one omitted variable – drought – in Mexico's opinion has undermined its ability to use econometric modeling to determine the quantity impact of the amended COOL measure. Mexico describes at length the difficulties associated with creating a variable to represent the economic impact of the drought. Shifts in producer expectations with respect to the length of the ongoing drought may affect the timing of sales, as well as expectations about whether input prices may be higher or less certain in the near future. Mexico notes that it is impossible to provide a variable that would represent these unknowable and unpredictable expectations. This alone was sufficient for Mexico to discredit the econometric analysis of the quantity impact of the amended COOL measure.

43. Instead, Mexico uses a simple elasticity calculation to estimate the quantity impact. The quantity equation is insufficient to account for the complexity of the feeder cattle market in Mexico and the United States, much less to account for linkages to demand for fed cattle and beef or to substitute products such as pork. Even though Mexico's estimation only applies to one category of livestock and level of production, Mexico's calculation should account for all factors influencing quantity outcomes.

44. Mexico's simple calculation has two inputs. The first is 100 percent of the price basis attributed to the amended COOL measure as determined using the price basis econometric equation. The United States has explained why attributing 100 percent of the change in the price basis estimated using this econometric technique to a change in prices received by Mexico (or Canada) for feeder cattle (or other animals) is incorrect and overstates the impact of the amended COOL measure.

45. The second input is Mexico's elasticity of export supply for feeder cattle to the United States. Elasticity is a measure of how responsive the market will be, in terms of quantity, to the changes in price. It appears that Mexico recognizes that a specific supply elasticity has not been previously estimated "because of confounding effects from the drought and the COOL measure." Mexico nevertheless attempts to develop its own elasticity. Mexico bases its estimated elasticity on a single year, 2012, a period of time most certainly affected by drought and other factors. It also appears to make unsupported assumptions about the rate of export, and ultimately with little explanation concludes that the export supply elasticity is 4. This elasticity exceeds the appropriate level.

46. Mexico inputs the price basis estimates derived from the econometric modeling into the calculation of export supply to determine the quantity impact. Using a derived elasticity coupled with an estimated price basis calculation does nothing more than compound Mexico's methodological errors and further distance Mexico's proposed level of nullification or impairment from the actual level of benefits nullified or impaired by the amended COOL

measure. Furthermore, using the entire price basis estimate to determine the impact of the amended COOL measure on Mexican feeder prices overstates the trade effect.

7. Canada and Mexico's Price and Quantity Estimates Result in Unsupportable Levels of Nullification or Impairment

47. Finally, Canada and Mexico uses the inaccurately estimated quantity impact and price basis to derive an overall level of nullification or impairment for each livestock category. That is, Canada and Mexico essentially multiples the price basis it attributes to the amended COOL measure times the quantity impact it attributes to the amended COOL measure. However, Canada and Mexico's methodology erroneously attributes to the amended COOL measure the impact of a wide variety of other factors concurrently affecting the North American market. For this reason, the trade effect figures provided by Canada and Mexico are unsupported and do not accurately estimate the level of nullification and impairment resulting from the amended COOL measure.

B. The Level of Nullification and Impairment Should Reflect Only the Trade Effect of the Amended COOL Measure

48. Both Methodology Papers argue to include in the level of nullification or impairment of benefits accruing under a trade agreement estimated economic effects in Canada or Mexico's domestic market, referred to in the Papers as "price suppression losses." With respect to the "price suppression losses," the requesting parties allege that the amended COOL measure resulted in a surplus of animals in their respective domestic markets, which ultimately "suppress[ed] the domestic price of feeder cattle in Mexico," and "suppressed prices for livestock in Canada." There is, however, no basis under the DSU for considering domestic price suppression as a part of the level of nullification or impairment of benefits under the TBT Agreement or the GATT 1994.

49. First, the DSU establishes that nullification or impairment relates to the benefits accruing to a Member under the provisions of the covered agreements. For example, DSU Article 3.3 states that prompt settlement of situations in which "any benefits accruing to [a Member] … under the covered agreements are being impaired" is essential. Similarly, Article 10.4 speaks of whether a measure already the subject of a panel proceeding "nullifies or impairs benefits accruing to" a Member "under any covered agreement." In this dispute, Canada and Mexico's request to include in the level of the suspension of concessions authorized an amount equivalent to alleged price suppression losses is inconsistent with the DSU and goes beyond any possible nullification or impairment of Canada and Mexico's benefits under the TBT Agreement and the GATT 1994.

50. The request to include alleged domestic price suppression losses cannot be reconciled with the DSU. An analysis of the level of nullification or impairment must focus on the "benefit" under the *trade agreement* allegedly nullified or impaired "as a result of" the failure of the Member to fulfill its obligation – *i.e.*, as a result of the inconsistency found by the DSB. Here, a trade benefit under these agreements relates to international trade in livestock, not to domestic markets. Indeed, it is notable that neither Canada nor Mexico has, *until this very arbitration*, considered that the "benefits accruing" under the WTO Agreement meant anything

other than *the trade* in livestock. Thus, in their GATT 1994 Article XXIII claims before the compliance panels, Canada and Mexico claimed that the "benefits accruing" relate to *the market access of the livestock exported* to the United States, a point that the compliance panels recognized.

51. Second, the specific DSU requirement is that the "level of suspension of concessions . . . shall be equivalent to the level of nullification and impairment." Even aside from the fact that the DSU does not provide for the alleged "price suppression losses" approach advocated by Canada and Mexico, any analysis of whether the level of suspension of concessions is equivalent to the level of nullification or impairment would need to account for the economic effects of the suspension of concessions in the United States. In other words, to the extent that the level of nullification or impairment is increased by alleged price suppression losses to reflect broader economic effects in Canada and Mexico of the amended COOL measure, then it would be necessary to include broader economic effects on both sides of the equation.

52. The corresponding level of suspension would need to be decreased by an appropriate calculation of the broader economic effects on the U.S. economy of the suspended trade. Otherwise, the arbitration would not be an apples-to-apples determination of equivalency, as required under the DSU.

53. Finally, and again aside from the fact that Canada's and Mexico's alleged price suppression losses are not part of the level of nullification or impairment, Canada's and Mexico's estimates of those alleged losses are unsupported and incorrect. Both Canada and Mexico have provided estimates that are vague, at best, and do little to accurately assess or attribute the economic impact of the amended COOL measure on domestic livestock transactions. For instance, there are numerous additional factors that would need to be considered in an econometric analysis of domestic price suppression – including Canadian and Mexican demand for livestock and differential input costs for domestic production.

IV. CONCLUSION

54. For the reasons set forth above, the United States respectfully requests that the Arbitrators find that the levels of suspension of concessions requested by Canada and Mexico are in excess of the appropriate levels of nullification or impairment. As described above, the more appropriate level of nullification or impairment is approximately US$43.19 million per year for Canada, and US$49.18 million per year for Mexico, and even assuming extreme compliance costs, the level of nullification or impairment would certainly be no more than US$128.71 million per year for Canada, and US$78.95 million per year for Mexico.