In The Matter Of: )
)
SABINE PASS LIQUEFACTION, LLC ) Docket No. 10 - ___ - LNG )

EXHIBITS TO
APPLICATION OF SABINE PASS LIQUEFACTION, LLC
FOR LONG-TERM AUTHORIZATION
TO EXPORT LIQUEFIED NATURAL GAS

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LIST OF EXHIBITS

Opinion of Counsel

Exhibit A


Exhibit B

Letters of Support: Letter from Cameron Parish Planning and Development (Jun. 29, 2010); Letter from Louisiana State Senator Willie L. Mount, et al. (Jul. 1, 2010); Letter from Louisiana State Representative Jonathan Perry (Jul. 15, 2010); Letter from Lieutenant Governor Scott A. Angelle (Jul. 21, 2010); Letter from U.S. Senator Mary Landrieu, et al. (Jul. 26, 2010)

Exhibit C


Exhibit D

Domestic Hydrocarbon Liquids Production from Gas Shales and Other Unconventional Gas Resources, prepared by Advanced Resources International, Inc. (Aug. 27, 2010)

Exhibit E


Exhibit F
September 7, 2010

Office of Fuel Programs
Fossil Energy, U.S. Department of Energy
Docket Room 3F-056, FE50
Forrestal Building
1000 Independence Avenue, S.W.
Washington, D.C. 10585

Re: Sabine Pass Liquefaction, LLC
Application for Long-Term Authorization to Export Liquefied Natural Gas
Opinion of Counsel

Dear Sir or Madam:

This opinion of counsel is provided in accordance with the requirements of Section 590.202(c) of the U.S. Development of Energy’s regulations, 10 C.F.R. § 590.202 (c) (2010). I have examined the Limited Liability Company Agreement of Sabine Pass Liquefaction, LLC (“Sabine Pass”) and other authorities as necessary, and have concluded that the proposed long-term, multi-contract exportation of liquefied natural gas is within its corporate powers. Further, Sabine Pass is authorized to do business in Texas and to engage in foreign commerce.

Respectfully submitted,

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A REVIEW OF INTERNATIONAL TRADE-RELATED LEGAL OBLIGATIONS AND POLICY CONSIDERATIONS GOVERNING U.S. EXPORT LICENSES FOR LIQUEFIED NATURAL GAS

August 23, 2010

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I. **EXECUTIVE SUMMARY**

U.S. international trade law and general U.S. trade policy strongly support exportation of natural gas. U.S. law requires government approval for a proposed export of natural gas, but the government must approve the export so long as it is not shown to be inconsistent with the public interest. The Department of Energy has a longstanding policy that the public interest is best served by the principles of free trade and limited government involvement, which supports exportation consistent with market demands. In addition, the current Administration’s National Export Initiative demonstrates a significant international trade policy objective toward increasing exports and promoting U.S. products overseas to benefit the domestic economy. Although certain exceptions exist in U.S. law that may be applied to restrict exports of natural gas, these exceptions are either inapplicable at present or do not justify blanket export restrictions on natural gas.

A review of U.S. international legal obligations under the WTO Agreement and U.S. free trade agreements indicates that export restrictions made effective through discretionary or non-automatic export licensing requirements can be inconsistent with those U.S. international legal obligations unless they can be justified under an exception. Although there are a number of exceptions potentially available in cases involving critical shortages, the conservation of natural resources, government stabilization plans, short supply situations, or national security interests, it is not clear that the U.S. government would be justified in relying on any of these exceptions to deny a license application to export natural gas at the present time based on available facts. Finally, even if the export licensing requirements in the U.S. statute are deemed not to be inconsistent with U.S. obligations under the WTO Agreement, the DOE’s *administration* of the statute adopting a practice of granting export licenses for natural gas exports for brief limited periods appears to be unreasonable and arbitrary contrary to U.S. obligations under the WTO Agreement.

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1 The following discussion is intended to be an identification and broad review of various U.S. international trade-related legal obligations and policy considerations governing U.S. export licenses for liquefied natural gas. As such, the memorandum does not weigh the relative merits of various claims or defenses that could be raised before U.S. courts or international dispute settlement bodies.
In sum, the following analysis indicates that there are a number of significant U.S. domestic and international legal obligations and policy considerations that should weigh heavily in favor of approving U.S. export license applications for natural gas at this time.

II. U.S. LAW AND POLICY REQUIRE THE DOE TO APPROVE AN EXPORT LICENSE APPLICATION ABSENT RECORD EVIDENCE THAT THE PROPOSED EXPORT WILL NOT BE CONSISTENT WITH THE PUBLIC INTEREST

A. U.S. Law Governing Consideration of Export License Applications Requires Their Approval Unless They Are Shown to Be Inconsistent with the Public Interest

1. U.S. Statutes Support Exportation of Natural Gas

U.S. laws directly relating to the regulation of exports of natural gas provide for export approval so long as they are determined to be in the public interest. The Natural Gas Act of 1938 requires that all proposed exports of natural gas\(^2\) from the United States must be approved by the government. It further states that such applications shall be granted unless the government finds that the proposed export will not be consistent with the public interest. Specifically, 15 U.S.C. § 717b(a) states:

(a) Mandatory authorization order

After six months from June 21, 1938, no person shall export any natural gas from the United States to a foreign country or import any natural gas from a foreign country without first having secured an order of the Commission authorizing it to do so. The Commission shall issue such order upon application, unless, after opportunity for hearing, it finds that the proposed exportation or importation will not be consistent with the public interest. The Commission may by its order grant such application, in whole or in part, with such modification and upon such terms and conditions as the Commission may find necessary or appropriate, and may from time to time, after opportunity for hearing, and for good cause shown, make such supplemental order in the premises as it may find necessary or appropriate.

The Department of Energy ("DOE") has interpreted this provision as providing a presumption of approval for exports of natural gas, but this presumption can be rebutted with specific evidence showing that the exports would be inconsistent with the public interest. Accordingly, unless opponents can show that the proposed exports of natural gas would be inconsistent with the public interest, the export application must be granted.

In 1992, as part of the Energy Policy Act, Congress added a new provision dealing with exportation to countries with which the U.S. has entered into certain trade agreements. It states that where a free trade agreement (FTA) exists that provides for national treatment for trade in natural gas, the export license application is deemed to be in the public interest and will be granted without modification or delay. Specifically, section 717b(c) provides the following:

(c) Expedited application and approval process
For purposes of {15 U.S.C. § 717b(a)}, the importation of the natural gas referred to in {15 U.S.C. § 717b(b)}, or the exportation of natural gas to a nation with which there is in effect a free trade agreement requiring national treatment for trade in natural gas, shall be deemed to be consistent with the public interest, and applications for such importation or exportation shall be granted without modification or delay.

The addition of this provision is consistent with the fundamental policies of free trade and limited government involvement that underlie U.S. natural gas regulation, discussed in more detail infra.

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The United States currently has FTAs in force with 17 countries. Each of these FTAs contains a National Treatment clause from which natural gas is not excluded. Additionally, the North American Free Trade Agreement between the U.S., Canada and Mexico contains specific provisions regarding energy and basic petrochemicals, which provides for national treatment of such products and limits potential import and export restraints on the countries’ energy and petrochemical products. Accordingly, the DOE is required, by the statutory provision in 15 U.S.C. § 717b(c), to grant applications without modification or delay for exports of natural gas destined for any of these 17 countries. It would be inconsistent with U.S. obligations under the WTO Agreements, however, to grant applications for exports to countries with which the U.S. has FTAs while denying applications for exports to other WTO Members with which the U.S. does not have a separate FTA.

Furthermore, the legislative history surrounding the inclusion of section 717b(c) provides a rationale that extends to all other WTO Members. The original language in the bill that went on to become the Energy Policy Act of 1992 focused on imports from Canada. In the House Report of the Committee of Energy and Commerce that accompanies H.R. 776, the Committee acknowledged that the existing free trade agreement prohibited differential treatment of Canadian and U.S. natural gas when it stated that “because of the 1988 Canadian Free Trade Agreement, old distinctions between Canadian and U.S. gas are illegal in any event.” Although this comment was made with respect to a specific free trade agreement and in reference to what

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6 The countries are Australia, Bahrain, Canada, Chile, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Israel, Jordan, Mexico, Morocco, Nicaragua, Oman, Peru, and Singapore. See Office of the United States Trade Representative at www.ustr.gov/trade-agreements/free-trade-agreements.

7 The relevant provisions of the FTAs addressing national treatment are included as Annex A to this memorandum. Note: Although the free trade agreement with Israel does not explicitly state that the parties must provide national treatment to each other’s goods, Article 3 of the U.S.-Israel FTA states that the parties “affirm their respective rights and obligations with respect to each other under existing bilateral and multilateral agreements, including…the GATT.” By affirming their rights and obligations under the GATT, this presumptively includes the national treatment provisions included in GATT Article III. The full text of GATT Article III also is included in Annex A.

8 See North American Free Trade Agreement, Articles 301, 603 and 606.

is now 15 U.S.C. § 717b(c), this same logic applies to all WTO Members that have committed, by virtue of their WTO accession, to most-favored-nation and national treatment of each others’ goods and services. The U.S. has specifically committed to afford most-favored-nation treatment to all WTO Members in its schedule of commitments. As discussed in more detail further below, it would therefore be inconsistent with U.S. commitments under the WTO agreements to restrain exports to WTO Members under 15 U.S.C. § 717b(a), especially in light of the provision requiring approval of export applications involving countries with which the U.S. has a separate FTA (15 U.S.C. § 717b(c)).

There is one possible exception to the general export provisions discussed immediately above. The statutes impose an additional requirement on proposed exports of large quantities of Alaskan natural gas. The Alaskan Gas Transportation Act provides for exports of Alaskan natural gas, under the terms of the Natural Gas Act (15 U.S.C. § 717 et seq.) described above, but imposes an additional requirement: for proposed exports in excess of 1,000 Mcf per day destined for countries other than Canada or Mexico, the “the President must make and publish an express finding that such exports will not diminish the total quantity or quality nor increase the total price of energy available to the United States.” This provision also raises concerns under the WTO agreements and U.S. FTAs other than NAFTA by providing Canada and Mexico with preferential treatment, which is inconsistent with the most favored nation and national treatment clauses, but it is also relevant in that it does not prohibit exports of domestic natural gas.

2. The DOE Policy Supports Exportation of Domestic Natural Gas

The DOE has a longstanding policy of promoting free trade and limiting government involvement to allow parties to negotiate commercial transactions, thus establishing competitive

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10 GATT 1994 Articles I and III, in WTO, The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations at 424, 427 (1999). See also the discussion in Section III D infra at notes 115 – 120.

11 Marrakesh Protocol to the General Agreement on Tariffs and Trade 1994, Schedule XX- United States of America, Part I, Section II, page 54 at HTS 2711.11.00 “Liquefied Natural Gas”.

prices for natural gas. In February 1984, the agency published guidelines relating to regulation of natural gas, which originally only applied to imports but have since been applied to exports as well. The guidelines emphasize free market principles and promote limited government involvement in federal natural gas regulation:

The market, not government, should determine the price and other contract terms for imported {and exported} gas. U.S. buyers {and sellers} should have full freedom – along with the responsibility – for negotiating the terms of trade arrangements with foreign sellers {and buyers}.

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The government, while ensuring that the public interest is adequately protected, should not interfere with buyers’ and sellers’ negotiation of the commercial aspects of import {and export} arrangements. The thrust of this policy is to allow the commercial parties to structure more freely their trade arrangements, tailoring them to the markets served.

The guidelines also provide some insight on the public interest standard for evaluating potential import and export applications. They note that Congress did not define the term “public interest” in the Natural Gas Act and attempted to provide some additional clarity on that phrase. The guidelines state that the “policy cornerstone of the public interest standard is competition.” Competitive import/export arrangements are therefore an essential element of the public interest and so long as the sales agreements are set in terms that are consistent with


14 Phillips Alaska Natural Gas Corporation and Marathon Oil Company: Order Extending Authorization to Export Liquefied Natural Gas from Alaska, DOE/FE Opinion and Order No. 1473, at 14 (April 2, 1999) (noting that although the DOE guidelines specifically address imports, “the principles are applicable to exports as well”).

15 DOE Policy Guidelines at 6685 (with references to “exports” inserted to reflect DOE policy that “the principles are applicable to exports as well” as enunciated in Phillips Alaska Natural Gas Corporation and Marathon Oil Company: Order Extending Authorization to Export Liquefied Natural Gas from Alaska, DOE/FE Opinion and Order No. 1473, at 14 (April 2, 1999)).

16 DOE Policy Guidelines at 6687.
market demands, they should be considered to “largely” meet the public interest standard.\textsuperscript{17} The guidelines continue by saying that “{t}his policy approach presumes that buyers and sellers, if allowed to negotiate free of constraining governmental limits, will construct competitive import {and export} agreements that will be responsive to market forces over time.”\textsuperscript{18}

While competitiveness is the key focus in considering whether to authorize potential international trade in natural gas, additional factors may also be relevant in making the determination. Specifically, the guidelines instruct consideration of the domestic need for natural gas and the security of supply, and also recognize the need to consider other factors that may bear on the import or export authorization request, including international trade policy, foreign policy and national security.\textsuperscript{19}

U.S. international trade policy encourages trade and embodies the view that trade is a tool for growth and prosperity. Moreover, as discussed in more detail \textit{infra}, the Administration has recently launched the National Export Initiative with the goal of doubling U.S. exports over the next five years. Because exports of liquefied natural gas (“LNG”) would stimulate considerable infrastructure building to enable and facilitate such exports as well as exploration, recovery, and distribution of additional natural gas, U.S. international trade policy weighs strongly in favor of authorizing U.S. exports of LNG.

To date, the DOE orders granting authorization to export natural gas continue to reflect and reinforce the principles laid out in the 1984 guidelines. The orders issued by the DOE emphasize the ideas of free trade and limited government involvement,\textsuperscript{20} and evaluate the public

\textsuperscript{17} DOE Policy Guidelines at 6687.

\textsuperscript{18} DOE Policy Guidelines at 6687 (with reference to “exports” inserted to reflect DOE policy that “the principles are applicable to exports as well” as enunciated in Phillips Alaska Natural Gas Corporation and Marathon Oil Company: Order Extending Authorization to Export Liquefied Natural Gas from Alaska, DOE/FE Opinion and Order No. 1473, at 14 (April 2, 1999)).

\textsuperscript{19} DOE Policy Guidelines at 6688.

\textsuperscript{20} See, e.g., ConocoPhillips Alaska Natural Gas Corporation and Marathon Oil Company: Order Granting Authorization to Export Liquefied Natural Gas from Alaska, DOE Opinion and Order No. 2500, at 44-45 (June 3, 2008) (stating that DOE’s general policy is to minimize federal government involvement and allow commercial parties to freely negotiate their own trade arrangements).
interest through consideration of numerous factors. As noted above, it is now established that there is a presumption of approval for export applications and any objectors bear the burden to present evidence demonstrating that the export would be inconsistent with the public interest in order to overcome that presumption. When evaluating the public interest standard, the DOE takes into account the domestic need for natural gas as well as other factors, including the potential international effects of the transaction. For example, the DOE orders recognize positive international effects based on the mitigating effects of exports on the balance of payments with the recipient country. The DOE also has stated that the public interest is generally best served by a free trade policy.

Pursuant to the statute and the guiding principles, the DOE granted multiple applications for proposed exports of both domestic and foreign-sourced natural gas from the United States. Natural gas from Alaska has been exported to Japan for 30 years. Authorization for this export was expanded to include all Pacific Rim countries, or more specifically, “any destination point for the delivery of liquefied natural gas on or abutting the Pacific Ocean in a country with which

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23 See, e.g., Cheniere Marketing, Inc.: Order Granting Authorization to Export Liquefied Natural Gas, DOE Opinion and Order No. 2651, at 14 (June 8, 2009).


25 See Yukon Pacific Corporation: Order Granting Authorization to Export Liquefied Natural Gas from Alaska, DOE/FE Opinion and Order No. 350 (November 16, 1989); see also ConocoPhillips Alaska Natural Gas Corporation and Marathon Oil Company: Order Granting Authorization to Export Liquefied Natural Gas from Alaska, DOE Opinion and Order No. 2500, at 8-9 (June 3, 2008) (noting that long-term authorization for export to Japan of Alaskan LNG was granted in 1967 and has subsequently been through multiple amendments and extensions).
trade is not prohibited by United States law.” 26 The DOE also allowed export of Alaskan natural gas to Russia in 2007.27 Additionally, the DOE issued multiple authorizations for exports of foreign-sourced natural gas (i.e., natural gas that is first imported into the U.S. and then exported) to “any country with the capacity to import ocean-going LNG and with which trade is not prohibited by U.S. law or policy.”28 After considering the public interest factors discussed above, the DOE has determined the exports will be good for the regional economies, help foster healthy competition, mitigate trade imbalances with the foreign recipients, and encourage efficient management of our natural resources.29

Given this history and the current regulatory regime, restricting exports of LNG would be inconsistent with the underlying principles of natural gas regulation and the DOE’s longstanding practice of authorizing exportation.

B. The Limited Exceptions in U.S. Law Would Not Permit the U.S. Government to Deny License Applications Submitted by U.S. Companies to Export LNG Under Current Conditions

Certain U.S. laws provide for existing or potential export restraints on natural gas, but these are either inapplicable at present or do not provide for blanket restrictions on exports of

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26 ConocoPhillips Alaska Natural Gas Corporation and Marathon Oil Company: Order Granting Authorization to Export Liquefied Natural Gas from Alaska, DOE Opinion and Order No. 2500, at Glossary of Terms and Abbreviations (June 3, 2008).

27 See ConocoPhillips Alaska Natural Gas Corporation and Marathon Oil Company: Order Granting Authorization to Export Liquefied Natural Gas from Alaska, DOE Opinion and Order No. 2500, at 9 (June 3, 2008) (stating that there has been an export from the Kenai, Alaska LNG facility to Russia to condition the Sakhalin LNG facility); see also Phillips Alaska Natural Gas Corporation and Marathon Oil Company: Order Granting Blanket Authorization to Export Liquefied Natural Gas from Alaska, DOE/FE Opinion and Order No. 1580, at 7 (April 10, 2000) (granting two-year blanket authorization to export up to 10 Btus of LNG from Kenai, Alaska, to “international markets”).


domestic LNG.

1. Economic Sanctions and Military-Related Controls Currently Restrict Certain Exports but These Do Not Per Se Apply to Exports of LNG

The U.S. export control and economic sanctions regimes effectively restrict certain exports, but neither set of laws justify imposing export bans on domestic LNG to countries and individuals with which trade is not prohibited.

U.S. export controls generally govern exports of military-related items, primarily through the Export Administration Regulations\(^\text{30}\) (EAR) and the International Traffic in Arms Regulations\(^\text{31}\) (ITAR). The ITAR regulates defense articles and services that are “specifically designed, developed, configured, adapted, or modified for a military application,”\(^\text{32}\) and thus would not, on a general basis, apply to domestic LNG. The EAR, however, contains provisions relating to petroleum products and addresses exports of products from the Naval Petroleum Reserves (NPR).\(^\text{33}\) Although liquefied natural gas that is derived from the NPR or that is available for export as the result of an NPR-related exchange is controlled for reasons of short supply under the EAR, this provision does not extend to natural gas that is unrelated to the NPR.\(^\text{34}\) Accordingly, the U.S. export control regimes do not provide for broad justification to restrict exports of domestic natural gas that has no connection to the Naval Petroleum Reserves.

The U.S. economic sanctions regime effectively restricts trade with certain geographic regions and targeted individuals, entities and governments. The restrictions are imposed for a variety of national security and foreign policy reasons and apply to all exports, regardless of the product. Economic sanctions, therefore, also do not justify prohibiting or restricting particular

\(^{30}\) 15 C.F.R. § 730 et seq.

\(^{31}\) 22 C.F.R. § 120 et seq.

\(^{32}\) 22 C.F.R. § 120.3 (2010).

\(^{33}\) 15 C.F.R. Part 754 (2010).

\(^{34}\) See ECCN 1C983: Natural gas liquids and other natural gas derivatives listed in Supplement No. 1 to Part 754 of the EAR that were produced or derived from the Naval Petroleum Reserves (NPR) or became available for export as a result of an exchange of any NPR produced or derived commodities, 15 U.S.C. § 774, Supplement No. 1 (2010); see also 15 U.S.C. § 754.3 (2010).
items on their face, but rather the restrictions are triggered by the parties or destinations involved. Accordingly, the sanctions may still restrict a proposed transaction to export natural gas if a prohibited party or destination is involved. This reality is reflected in the DOE’s recent orders that authorize export to “any country with the capacity to import ocean-going LNG and with which trade is not prohibited by U.S. law or policy.”

2. The President May, By Rule, Restrict Energy-Related Exports but Such a Rule Currently Is Not In Force

As part of the Energy Policy and Conservation Act of 1975, the President was granted the authority to restrict exports of energy-related products and supplies, including natural gas. The President may restrict such exports “by rule, under such terms and conditions as he determines to be appropriate and necessary to carry out the purposes of this chapter…. The Chapter in which the provision is contained is entitled “Energy Conservation.” The first section of this Chapter lists the Congressional purposes, which include, inter alia, creating a Strategic Petroleum Reserve to reduce the impact of severe energy supply disruptions, to provide for more energy efficient motor vehicles, major appliances and other consumer products, and “to conserve energy supplies through energy conservation programs, and, where necessary, the regulation of certain energy uses.” Taken together, these provisions allow for the President to issue a rule that restricts exports of natural gas in order to conserve energy supplies. However, the President has not issued such a rule that currently restricts natural gas exports.

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35 For example, prohibited parties include “specially designated nationals” (SDNs), as well as “blocked persons and vessels” and “denied” persons. Prohibited destinations include Cuba and Iran as well as certain other areas.


39 U.S. Code Title 42, Chapter 77 (2010).

3. **Provisions in the Defense Production Act Can Be Applied to Allocate Domestic Energy Supplies with the Potential to Restrict LNG Exports, But the DOE is Not Currently Using its Authority Under these Provisions**

   The Defense Production Act of 1950 (DPA), as amended, authorizes the President to, *inter alia*, “require the allocation of, or the priority performance under contracts or orders…relating to, materials, equipment, and services in order to maximize domestic energy supplies” under certain conditions.41 In order to use this authority, the President must find that:

   (A) such materials, services, and facilities are scarce, critical, and essential –
   
   (i) to maintain or expand exploration, production, refining, transportation;
   
   (ii) to conserve energy supplies; or
   
   (iii) to construct or maintain energy facilities; and
   
   (B) maintenance or expansion of exploration, production, refining, transportation, or conservation of energy supplies or the construction and maintenance of energy facilities cannot reasonably be accomplished without exercising the authority {regarding allocation and prioritization of contracts or orders.}42

   These provisions again concern domestic energy supply, similar to the Energy Policy and Conservation Act provisions discussed immediately above, and can only be utilized under the strict terms outlined in the statute and pursuant to the DOE’s corresponding regulations.43 Accordingly, although these provisions have the ability to restrict exports in the event that certain circumstances arise that require allocation of domestic natural gas or prioritization of contracts or orders, the DPA cannot be viewed as providing justification for denying export applications for domestic natural gas in non-critical situations.44


   43 See 10 C.F.R. Part 216. The Department of Energy has been delegated the function of determining whether supplies are critical and essential. 10 C.F.R. § 216.1 (2010).

   44 Indeed, a 2008 GAO report states that DOE has “little or no experience using {DPA} Title I authorities.” Aside from certain instances where the National Nuclear Security Administration, an agency
C. U.S. Trade Law Treats Export Bans as Conferring Potentially Countervailable Subsidies on Domestic Processing Industries

The U.S. government has found certain export restraints imposed by foreign governments to be countervailable subsidies within the definitions of the Trade Act of 1930 (as amended). The statute generally defines a subsidy as:

the case in which an authority –
(i) provides a financial contribution,
(ii) provides any form of income or price support within the meaning of Article XVI of the GATT 1994, or
(iii) makes a payment to a funding mechanism to provide a financial contribution, or entrusts or directs a private entity to make a financial contribution, if providing the contribution would normally be vested in the government and the practice does not differ in substance from practices normally followed by governments, to a person and a benefit thereby is conferred.

The U.S. government has held that export bans on inputs to downstream products qualify as an indirect subsidy within this definition. For example, in the investigation concerning Coated Free Sheet Paper from Indonesia, the Department of Commerce concluded that an export ban on logs provided a financial contribution to the specific downstream industries using logs as

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47 The Statement of Administrative Action explains that the Administration intended a broad scope for the definition of a subsidy so that indirect subsidies did not become a loophole used to injure domestic industries. See Uruguay Round Agreements Act, Statement of Administrative Action, House Document 103-316 (1994) at 926 (“Article VI of the GATT 1994 continues to refer to subsidies provided ‘directly or indirectly’ by a government. Accordingly, the Administration intends that the ‘entrusts or directs’ standard shall be interpreted broadly. The Administration plans to continue its policy of not permitting the indirect provision of a subsidy to become a loophole when unfairly traded imports enter the United States and injure a U.S. industry.”).
an input (i.e., pulp and paper mills). The export restriction was found to suppress domestic prices for logs, which allowed the downstream industries to purchase a primary input at artificially low prices.

The imposition of export restrictions on domestic natural gas would, similarly, provide a financial contribution to all downstream users of natural gas in the U.S. market by suppressing the price for the natural gas input. While both U.S. domestic and trade policy recognize that there are some legitimate purposes and methods by which subsidies can and should be permitted in order to achieve economic goals, the U.S. government policy has been to avoid the use of trade distorting subsidies. This policy is reflected in the context of numerous international agreements where the U.S. has agreed not to introduce measures that convey export subsidies or other types of subsidies that cause material harm or serious prejudice to other countries.  

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48 See Issues and Decision Memorandum for the Final Affirmative Countervailing Duty Determination: Coated Free Sheet Paper from Indonesia, U.S. Department of Commerce, Import Administration, at 95 (October 17, 2007); see also id. at 97 (rejecting the argument that US – Measures Treating Export Restraints as Subsidies (WT/DS194/R) is controlling).

49 For example, The U.S. undertook the obligation in the context of GATT Article VI not to impose countervailing duties unless the effect of the subsidy against which the duties were to be imposed is to cause or threaten material injury:

6. (a) No contracting party shall levy any anti-dumping or countervailing duty on the importation of any product of the territory of another contracting party unless it determines that the effect of the dumping or subsidization, as the case may be, is such as to cause or threaten material injury to an established domestic industry, or is such as to retard materially the establishment of a domestic industry.

But the GATT Agreement limited this discipline on the use of countervailing duties by agreeing that:

6. (b) . . . The CONTRACTING PARTIES shall waive the requirements of subparagraph (a) of this paragraph, so as to permit the levying of a countervailing duty, in cases in which they find that a subsidy is causing or threatening material injury to an industry in the territory of another contracting party exporting the product concerned to the territory of the importing.

The U.S., together with all the other countries that are signatories to the GATT, also recognized the need to limit subsidization, whether direct or indirect GATT Article XVI:

Section A — Subsidies in General
Moreover, the U.S. and its trading partners in the World Trade Organization specifically identified quantitative restrictions as a type of measure to be avoided except in the narrowest of circumstances:

Article XI*: General Elimination of Quantitative Restrictions

1. No prohibitions or restrictions other than duties, taxes or other charges, whether made effective through quotas, import or export licences or other measures, shall be instituted or maintained by any contracting party on the importation of any product of the territory of any other contracting party or on the exportation or sale for export of any product destined for the territory of any other contracting party.\(^{50}\)

Given these clearly analogous holdings by the U.S. government opposing the imposition of restrictions upon exports and the underpinning U.S. policy, it would be incongruous for the U.S. government to restrict exports of natural gas in a manner that could provide a similar downstream benefit to domestic purchasers of natural gas.

**D. Increasing U.S. Exports is a High Priority Objective of the Current Administration and Restricting Exports of LNG Would Be Inconsistent with this High-Priority Trade Policy**

In the State of the Union address in January 2010, President Obama stated his goal of
doubling exports over the next five years. On March 11, 2010, the President unveiled the National Export Initiative (NEI) via Executive Order.51 The NEI is designed to reduce barriers to trade and promote U.S. businesses with the goal of increasing exports, thereby creating jobs and boosting the economy. The NEI is to be implemented by the Export Promotion Cabinet, consisting of:

- the Secretary of State;
- the Secretary of the Treasury;
- the Secretary of Agriculture;
- the Secretary of Commerce;
- the Secretary of Labor;
- the Director of the Office of Management and Budget;
- the United States Trade Representative;
- the Assistant to the President for Economic Policy;
- the National Security Advisor;
- the Chair of the Council of Economic Advisers;
- the President of the Export-Import Bank of the United States;
- the Administrator of the Small Business Administration;
- the President of the Overseas Private Investment Corporation;
- the Director of the United States Trade and Development Agency; and
- the heads of other executive branch departments, agencies, and offices as the President may, from time to time, designate.

Increasing U.S. exports is clearly a priority for the Administration. Thus, it would be inconsistent with this U.S. export-oriented trade policy to restrict exports of a valuable, lucrative product such as liquefied natural gas. The President’s export policy also strongly implies that exports should be deemed to be in the public interest, as they lead to job creation and economic growth. Accordingly, denying exports of U.S.-origin natural gas would be inconsistent with both a high-priority government policy and the public interest.

III. UNDER THE WTO AGREEMENT, THE U.S. IS OBLIGATED NOT TO ADOPT MEASURES OR PRACTICES THAT RESTRICT GAS EXPORTS DESTINED FOR OTHER WTO MEMBERS

A. Natural Gas is Subject to the WTO Agreement Provisions on Trade in Goods

Annex 1 to the WTO Agreement is divided into three sections covering trade in goods, trade in services, and trade-related aspects of intellectual property rights. Annex 1A consists of the Multilateral Agreements on Trade in Goods, which includes the General Agreement on Tariffs and Trade 1994 (“GATT 1994”). Like other energy products, natural gas is a commodity or “good” and, thus, a WTO Member’s trade in natural gas is covered by the obligations contained in Annex 1A.52

As explained in Sections III.B, III.C, and III.D of this memorandum, the U.S. statute (15 U.S.C. § 717b(a)) establishes a discretionary or non-automatic export licensing requirement that is arguably inconsistent with U.S. obligations under GATT 1994 Articles XI:1 and XIII:1, which impose disciplines on the use of export restrictions if such restrictions are not otherwise waived or justified by exceptions in other GATT articles.

A “waiver” under GATT Article XXV releasing a WTO Member from its obligations and disciplines is available only in “exceptional circumstances” and requires a vote of approval by the WTO Members acting jointly.53 A review of all publicly available WTO documents

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52 According to Director-General Pascal Lamy, existing WTO rules governing trade in goods apply to energy goods:

So the rules of the WTO do not deal with energy as a distinct sector. Yet since our basic rules are applicable to all forms of trade, they also apply to trade in energy goods and services. And these rules can be enforced through the WTO dispute settlement mechanism even if they were not negotiated with energy in mind.


53 Under GATT Article XXV, WTO Members can request a waiver of obligations in “exceptional circumstances” not elsewhere provided for in the WTO agreement. Such a waiver would require a specific request by the United States for waiver of the GATT obligations and disciplines on the use of export restrictions based on such “exceptional circumstances” and a two-thirds vote of approval by the WTO Members acting jointly as the CONTRACTING PARTIES.

XXV: 5. “In exceptional circumstances not elsewhere provided for in this Agreement, the
indicates, however, that the U.S. has never submitted a request for waiver nor received a waiver with respect to its GATT obligations regarding exports of natural gas. Thus, the U.S. cannot rely upon a waiver under GATT Article XXV to impose export restrictions on natural gas that otherwise would be inconsistent with its GATT obligations.

There are certain exemptions justifying various actions of WTO Members that otherwise would be inconsistent with the disciplines of their GATT obligations. Such actions are justified by the exceptions contained in Articles XI:2(a) (critical shortages), XX(g) (conservation of natural resources), XX(i) (government stabilization plan), XX(j) (short supply), XXI (national security), or XXIV:5(b) (free trade agreements). These exemptions, discussed further in Section III.C. of this memorandum below, are generally construed narrowly and are unlikely to be applicable to actions by the U.S. to limit exports of natural gas.

As explained in Section III.D below, whether or not the export licensing requirement in 15 U.S.C. § 717b(a) is inconsistent with U.S. obligations under the WTO Agreement provisions, the DOE’s administration of 15 U.S.C. § 717b, adopting a practice of granting export licenses for natural gas exports for brief limited periods, could be challenged as unreasonable and arbitrary contrary to U.S. obligations under GATT 1994 Article X:3(a) (requiring “reasonable” administration).

CONTRACTING PARTIES may waive an obligation imposed upon a contracting party by this Agreement; Provided that any such decision shall be approved by a two-thirds majority of the votes cast and that such majority shall comprise more than half of the contracting parties.”

B. The WTO Agreement Generally Prohibits Export Restrictions on Trade in Goods Destined for Other WTO Members

1. GATT 1994 Article XI:1 Specifically Prohibits Export Restrictions on Any Product Destined for a WTO Member, Whether Restrictions are Implemented Through Export Licenses or Other Measures

In recognition of the fact that export restrictions can be highly distortive to trade, and the desire of the WTO Members to allow such measures only very rarely, GATT 1994 Article XI:1 prohibits WTO Members from instituting or maintaining export bans or restrictions (other than duties, taxes or other charges) on any product destined for another WTO Member that is made effective through export licenses or other measures.\(^5^4\)

\[\text{No prohibitions or restrictions other than duties, taxes or other charges, whether made effective through quotas, import or export licences or other measures, shall be instituted or maintained by any contracting party on the importation of any product of the territory of any other contracting party or on the exportation or sale for export of any product destined for the territory of any other contracting party.}\!]^{55}

The term “restriction” in Article XI:1 has been interpreted broadly to cover not just blanket prohibitions or precise numerical limits but also the imposition of limitations or limiting conditions on exportation that generate a disincentive to export not only due to their effect on trade volumes but also by creating uncertainties affecting investment plans, by restricting market access, or by increasing transaction costs to make exportation prohibitively costly.\(^5^6\)

\(^{54}\) A list of WTO Members is provided in Annex B. WTO Members now account for 77% of all countries in the world.

\(^{55}\) GATT 1994 Article XI:1, in WTO, THE LEGAL TEXTS: THE RESULTS OF THE URUGUAY ROUND OF MULTILATERAL TRADE NEGOTIATIONS at 437 (1999) (emphasis added). Likewise, as explained in Section IV infra, the United States’ free trade agreements also prohibit export restrictions on exports destined to FTA Members.

While an automatic licensing requirement would be permissible, a discretionary or non-automatic export licensing requirement has long been considered to be a restriction prohibited by Article XI:1. For example, a WTO panel in *India – Autos* found that a “trade balancing condition” on import licenses, that limited the value of imports an importer could make to the value of its exports, was a restriction on importation contrary to Article XI:1. Likewise, a GATT panel in *Japan – Semi-Conductors* agreed with the United States’ complaint that Japan’s export license procedures, which led to delays of up to three months in the issuance of licenses for semi-conductors due to the monitoring of costs and export prices, were non-automatic and constituted a restriction on the exportation of those products contrary to Article XI:1.

The Article XI:1 prohibition on import and export restrictions has been found to protect competitive opportunities and reflects the strong preference for Members to rely on transparent, negotiated tariffs rather than non-tariff barriers to trade:

The prohibition on the use of quantitative restrictions forms one of


59 GATT Panel Report, *Japan – Trade in Semi-Conductors*, BISD 35S/116, adopted May 4, 1988, paras. 118, 132(b), citing GATT Panel Report, *EEC – Programme of Minimum Import Prices, Licenses and Surety Deposits for Certain Processed Fruits and Vegetables*, BISD 25S/68, adopted Oct. 18, 1978, para. 4.1. The GATT Panel in Japan – Trade in Semi-Conductors “noted that the CONTRACTING PARTIES had found in a previous case that automatic licensing did not constitute a restriction within the meaning of Article XI:1 and that an import licence issued on the fifth working day following the day on which the licence application was lodged could be deemed to have been automatically granted (BISD 25S/95).”

the cornerstones of the GATT system. A basic principle of the GATT system is that tariffs are the preferred and acceptable form of protection. Tariffs, to be reduced through reciprocal concessions, ought to be applied in a non-discriminatory manner independent of the origin of the goods (the "most-favoured-nation" (MFN) clause). Article I, which requires MFN treatment, and Article II, which specifies that tariffs must not exceed bound rates, constitute Part I of GATT. Part II contains other related obligations, inter alia to ensure that Members do not evade the obligations of Part I. Two fundamental obligations contained in Part II are the national treatment clause and the prohibition against quantitative restrictions. The prohibition against quantitative restrictions is a reflection that tariffs are GATT's border protection "of choice". Quantitative restrictions impose absolute limits on imports, while tariffs do not. In contrast to MFN tariffs which permit the most efficient competitor to supply imports, quantitative restrictions usually have a trade distorting effect, their allocation can be problematic and their administration may not be transparent.

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Participants in the Uruguay Round recognized the overall detrimental effects of non-tariff border restrictions (whether applied to imports or exports) and the need to favour more transparent price-based, i.e. tariff-based, measures; to this end they devised mechanisms to phase-out quantitative restrictions in the sectors of agriculture and textiles and clothing. This recognition is reflected in the GATT 1994 Understanding on Balance-of-Payments Provisions, the Agreement on Safeguards, the Agreement on Agriculture where quantitative restrictions were eliminated and the Agreement on Textiles and Clothing (further discussed below) where MFA derived restrictions are to be completely eliminated by 2005.61

Thus, in addition to Article XI, other WTO Agreement provisions specifically identify export restraints and similar measures as inhibiting or distorting trade. For example, the WTO Agreement on Agriculture identifies “voluntary export restraints” as non-tariff barriers to trade, and the Safeguards Agreement specifically prohibits their use as safeguard measures as well as “similar measures on the export or the import side,” including export moderation, export-price

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monitoring systems, export surveillance, and discretionary export licensing schemes “which afford protection.” As another example, the Agreement on Trade-Related Investment Measures (“TRIMs”) further prohibits WTO Members from applying any TRIM that is inconsistent with Article XI and identifies in its illustrative list those TRIMs that restrict:

the exportation or sale for export by an enterprise of products, whether specified in terms of particular products, in terms of volume or value of products, or in terms of a proportion of volume or value of its local production.

Therefore, unless the export restriction is justified as an exception to the general rule in Article XI:1, discretionary or non-automatic export licensing requirements are prohibited by Article XI:1.


For exports of natural gas not benefitting from the expedited application and approval process applicable to exports destined for FTA countries in 15 U.S.C. § 717b(c), the statute (15 U.S.C. § 717b(a)) gives the DOE discretion to grant or deny an application to export natural gas based on additional consideration of the “public interest,” or grant an application in whole or in part, with modifications or additional terms and conditions, and make any supplemental order:

§ 717b (a) Mandatory authorization order
After six months from June 21, 1938, no person shall export any natural gas from the United States to a foreign country or import any natural gas from a foreign country without first having secured an order of the Commission authorizing it to do so. The


63 WTO Agreement on Trade-Related Investment Measures, Annex para. 2(c), in WTO, The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations at 146 (1999).
Commission shall issue such order upon application, unless, after opportunity for hearing, it finds that the proposed exportation or importation will not be consistent with the public interest. The Commission may by its order grant such application, in whole or in part, with such modification and upon such terms and conditions as the Commission may find necessary or appropriate, and may from time to time, after opportunity for hearing, and for good cause shown, make such supplemental order in the premises as it may find necessary or appropriate.\textsuperscript{64}

According to DOE guidelines, natural gas exports shall be regulated “based on a consideration of the domestic need for the gas to be exported and such other matters” found in the circumstances of a particular case to be appropriate.\textsuperscript{65} While the DOE has adopted a presumption of approval for export applications, the presumption is rebuttable.\textsuperscript{66}

Thus, the export license process required by 15 U.S.C. § 717b(a) for natural gas has a potentially limiting effect on exportation by creating serious uncertainties affecting exporters’ investment plans and by negatively affecting their competitive opportunities.\textsuperscript{67} The DOE’s discretion also could affect WTO Members’ access to adequate U.S. supplies of natural gas at fair prices if the U.S. export restriction would thereby affect world market prices in natural gas. Indeed, for similar reasons, the United States is currently challenging China’s non-automatic export licensing for certain key raw materials as being contrary to GATT 1994 Article XI:1 and China’s commitments with respect to the elimination of export restrictions in its Working Party

\textsuperscript{64} 15 U.S.C. § 717b(a). Separately, 42 U.S.C. § 6212(a) further gives the President the authority to restrict exports of natural gas “by rule, under such terms and conditions as he determines to be appropriate and necessary to carry out the purposes” of Chapter 77 on Energy Conservation. Section 6201 identifies the following objectives for Chapter 77:

\begin{itemize}
  \item (1) to grant specific authority to the President to fulfill obligations of the United States under the international energy program;
  \item * * *
  \item (4) to conserve energy supplies through energy conservation programs, and, where necessary, the regulation of certain energy uses….
\end{itemize}

\textsuperscript{65} DOE Policy Guidelines at 6690.

\textsuperscript{66} \textit{See supra} Section II.A.2.

Report and Accession Protocol. As explained in Section III.B.1 above, discretionary or non-automatic export licensing requirements are prohibited by GATT 1994 Article XI:1 unless they can be justified under one of the exceptions.

C. The Limited Exceptions to the Bar on Export Restrictions in the WTO Agreement Are Unlikely To Apply To Justify Denial of Natural Gas Export License Applications Pursuant to 15 U.S.C. § 717b(a)

The strong prohibition of export restrictions in Article XI:1 only gives way to a handful of limited and conditional exceptions that are unlikely to apply to the DOE’s non-automatic export license approval process under 15 U.S.C. § 717b(a) at the present time based on available

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68 See U.S. First Written Submission in China -- Raw Materials Exports, WT/DS394, DS395, DS398, at paras. 331-42 (June 1, 2010). During China’s accession process, certain members of the Working Party noted the limited scope of the exceptions to Article XI:

Certain members of the Working Party noted the conditions in the GATT 1994 in regard to non-automatic licensing and export restrictions. They pointed out that export prohibitions, restrictions and non-automatic licensing could only temporarily be applied under Article XI of the GATT 1994 to prevent or relieve critical shortages of foodstuffs or other products essential to an exporting WTO Member. Article XX of the GATT 1994 also allowed for restrictive export measures, but only if such measures were made effective in conjunction with restrictions on domestic production or consumption. These members noted that some of the criteria of the Foreign Trade Law referred to above did not at present meet the specific conditions laid down in Articles XI and XX of the GATT 1994.


69 WTO Members can challenge export restrictions as being either de jure or de facto inconsistent with Article XI:1. In a de jure challenge, the complaining party challenges the measure on the basis of its design, structure, and underlying architecture having a potential limiting effect on exportation by negatively affecting competitive opportunities. See Panel Report, Colombia – Ports of Entry, paras. 7.250-57, 7.275. In a de facto challenge, the complaining party must provide additional evidence concerning the actual trade impact of a measure and establish a causal link between the contested measure and the low level of exports. See Panel Report, Argentina – Hides and Leather, para. 11.21.

70 See Appellate Body Report, US – Shrimp, WT/DS58/AB/R, adopted Nov. 6, 1998, para. 157 (“In our view, the language of the chapeau makes clear that each of the exceptions in paragraphs (a) to (j) of Article XX is a limited and conditional exception from the substantive obligations contained in the other provisions of the GATT 1994, that is to say, the ultimate availability of the exception is subject to the compliance by the invoking Member with the requirements of the chapeau.”).
facts. If challenged, the United States would bear the burden of proving that its export licensing requirements were justified under the temporary exception in GATT 1994 Article XI:2(a), or the specific exceptions in Articles XX(g), (i), or (j), including the chapeau to Article XX. As explained below, it is not clear that the breadth of the discretionary “public interest” language in 15 U.S.C. § 717b(a) governing the export license approval process for natural gas would be sufficiently tailored to the limited objectives identified in the exceptions.

1. The GATT 1994 Article XI:2(a) Temporary Exception for Critical Shortages is Unlikely to Justify Denial of a Natural Gas Export License Application Under 15 U.S.C. § 717b(a)

GATT 1994 Article XI:2(a) specifically provides an exception for temporary export restrictions, otherwise prohibited by Article XI:1, that address critical shortages of products essential to the exporting Member:

(2) The provisions of paragraph 1 of this Article shall not extend to the following:

* * *

(a) Export prohibitions or restrictions temporarily applied to prevent or relieve critical shortages of foodstuffs or other products essential to the exporting contracting party.

As the DOE recently recognized, however, U.S. consumers “presently have access to substantial quantities of natural gas sufficient to meet domestic demand from multiple other sources ….” Therefore, there appears to be no basis for the United States to rely on the temporary Article XI:2(a) exception at the present time.

Nor is it clear that the United States could rely on the exceptions in Article XI:2(a) to justify the broad, discretionary language governing the export license approval process for natural gas in 15 U.S.C. § 717b(a). Nothing in that statutory provision states that denial of an


72 See, e.g., Appellate Body Report, United States – Shrimp, para. 141.

73 DOE Opinion and Order No. 2795, FE Docket No. 10-31-LNG, at 7 (June 1, 2010).
application would be temporary or limited to situations involving “critical shortages” of natural gas. Instead, the statute refers broadly to “public interest” considerations, and the DOE guidelines refer to considerations of domestic need or “such other matters.” When actually faced with a “critical shortage,” the President would presumably rely on 42 U.S.C. § 6212(a), not 15 U.S.C. § 717b(a), to restrict natural gas exports or other energy exports because the statute gives the President broader discretion as well as unilateral authority to restrict exports across the board:

(a) Export restrictions

The President may, by rule, under such terms and conditions as he determines to be appropriate and necessary to carry out the purposes of this chapter, restrict exports of—

(1) coal, petroleum products, natural gas, or petrochemical feedstocks, and

(2) supplies of materials or equipment which he determines to be necessary

(A) to maintain or further exploration, production, refining, or transportation of energy supplies, or

(B) for the construction or maintenance of energy facilities within the United States.

2. The GATT 1994 Article XX(g) Exception for the Conservation of Natural Resources is Unlikely to Justify Denial of a Natural Gas Export License Application Under 15 U.S.C. § 717b(a)

While GATT 1994 Article XX(g) does permit the adoption or enforcement of export restrictions relating to the conservation of “exhaustible natural resources,” the exception only applies to export restrictions that are made effective in conjunction with restrictions on domestic production or consumption:

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74 DOE Policy Guidelines at 6690.
75 42 U.S.C. § 6212(a) (emphasis added).
76 For example, the Appellate Body has recognized that clean air is an exhaustible natural resources within the meaning of GATT 1994 Article XX(g). See Appellate Body Report, United States -- Gasoline, WT/DS2/AB/R, adopted May 20, 1996, p. 17.
Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures:

* * *

(g) relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption….77

First, Article XX(g) requires consideration of “the relationship between the measure at stake and the legitimate policy of conserving exhaustible natural resources.”78 Whether measures “relate to” the conservation of natural resources involves an examination of the “relationship between the general structure and design of the measure … and the policy goal it purports to serve” to determine whether the measure is “primarily aimed at” conservation or whether there is a “substantial” or “close and genuine relationship of ends and means” so that “[t]he means are, in principle, reasonably related to the ends.”79 In other words, the design of the measure cannot be “disproportionately wide in its scope and reach in relation to the policy objective of protection and conservation….80

Second, Article XX(g) requires consideration of whether the measures are “made effective in conjunction with restrictions on domestic production or consumption.” According to the Appellate Body, this clause requires even-handedness in the imposition of restrictions.81 Accordingly, “if no restrictions on domestically-produced like products are imposed at all, and all limitations are placed upon imported products alone, the measure cannot be accepted as

77 GATT 1994 Article XX(g).
80 Appellate Body Report, United States – Shrimp, para. 141.
primarily or even substantially designed for implementing conservationist goals.\textsuperscript{82}

It is important to point out that the United States has repeatedly failed to justify important U.S. measures aimed at conserving tuna, clean air, and sea turtles because such measures were found to be inconsistent with Article XX(g). For example, in \textit{US – Tuna}, a GATT panel rejected the U.S. defense because its import ban to conserve tuna stocks was not made effective in conjunction with restrictions on U.S. domestic production or consumption on all tuna and tuna products.\textsuperscript{83} In \textit{US – Gasoline}, the Appellate Body rejected the U.S. defense because the rules applied to imports constituted “unjustifiable discrimination” and a “disguised restriction on international trade” contrary to the chapeau to Article XX.\textsuperscript{84} Finally, in \textit{US – Shrimp}, the Appellate Body rejected the U.S. defense because differences in the measures’ application constituted “unjustifiable discrimination” and “arbitrary discrimination” between exporting WTO Members within the meaning of the chapeau of Article XX.\textsuperscript{85}

For the reasons outlined above, it is again not clear that the United States could rely on the exceptions in Article XX(g) to justify export restrictions contained in the broad, discretionary language governing export licenses for natural gas in 15 U.S.C. § 717b(a). Nothing in that statutory provision indicates that denial of an application would implement conservationist objectives. Instead, the statute refers broadly to “public interest” considerations, and the DOE guidelines refer to considerations of domestic need or “such other matters.”\textsuperscript{86} Nor does that statutory language make denial of an export license contingent on restrictions on domestic producers or domestic consumption. Therefore, it is likely that the discretionary export licensing requirement in 15 U.S.C. § 717b(a) would not qualify for exceptional treatment under Article


\textsuperscript{86} DOE Policy Guidelines at 6690.

GATT 1994 Article XX(i) provides an exception for certain necessary export restrictions when domestic prices for materials are held below the world price as part of a government stabilization plan:

Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures:

(ii) involving restrictions on exports of domestic materials necessary to ensure essential quantities of such materials to a domestic processing industry during periods when the domestic price of such materials is held below the world price as part of a governmental stabilization plan; Provided that such restrictions shall not operate to increase the exports of or the protection afforded to such domestic industry, and shall not depart from the provisions of this Agreement relating to non-discrimination;

Assuming that LNG would qualify as a “domestic material,” there are no remaining federal controls on natural gas wellhead prices. Therefore, in the absence of any government stabilization plan, the exception in Article XX(i) cannot apply to U.S. export restrictions on natural gas.

4. The GATT 1994 Article XX(j) Short Supply Exception Is Unlikely to Justify Denial of a Natural Gas Export License Application Under 15 U.S.C. § 717b(a)

GATT 1994 Article XX(j) establishes an exception for measures essential to the
acquisition or distribution of products in general or local short supply:

Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures:

* * *

(j) essential to the acquisition or distribution of products in general or local short supply; Provided that any such measures shall be consistent with the principle that all contracting parties are entitled to an equitable share of the international supply of such products, and that any such measures, which are inconsistent with the other provisions of the Agreement shall be discontinued as soon as the conditions giving rise to them have ceased to exist. The CONTRACTING PARTIES shall review the need for this sub paragraph not later than 30 June 1960.

With respect to 15 U.S.C. § 717b(a), it is again not clear that the United States could rely on the limited “short supply” exceptions in Article XX(j) to justify the broad, discretionary “public interest” language governing export licenses for natural gas in 15 U.S.C. § 717b(a). As Article XX(j) was initially intended to permit export restrictions when prompted by emergency situations like wars and natural catastrophes. As the DOE recently recognized, however, U.S. consumers “presently have access to substantial quantities of natural gas sufficient to meet domestic demand from multiple other sources at competitive prices....” Therefore, there appears to be no basis for the United States to rely on the Article XX(j) exception at the present time.

Any U.S. export restriction under 15 U.S.C. § 717b(a) also would have to satisfy the non-discrimination requirements in Article XX(j) and the requirements of the chapeau to Article XX.

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88 As explained above in Section II, this memorandum does not address the exceptional short supply export controls on natural gas authorized pursuant to 50 U.S.C. App. § 2406 and 10 U.S.C. § 7430 and sourced from the Naval Petroleum reserves. See Export Administration Regulations, Short Supply Controls, § 754.3 (Aug. 21, 2008).

89 See GATT Analytical Index at 593-95.

90 DOE Opinion and Order No. 2795, FE Docket No. 10-31-LNG, at 7 (June 1, 2010).
Article XX(j) states that “any such measures shall be consistent with the principle that all contracting parties are entitled to an equitable share of the international supply of such products…. The chapeau to Article XX further states that the measures must not be (1) applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or (2) a disguised restriction on international trade. According to the Appellate Body, the analysis of whether discrimination is arbitrary or unjustifiable usually relates to the cause or rationale of the discrimination.91

For example, in the Brazil – Retreaded Tyres dispute, the Appellate Body relied on the chapeau to GATT 1994 Article XX to reject Brazil’s discriminatory application of an import ban to non-MERCOSUR imports.92 The Appellate Body explained that “there is arbitrary or unjustifiable discrimination when a measure provisionally justified under a paragraph of Article XX is applied in a discriminatory manner ‘between countries where the same conditions prevail’, and when the reasons given for this discrimination bear no rational connection to the objective falling within the purview of a paragraph of Article XX, or would go against that objective.”93 In that case, the Appellate Body pointed out that the reason given for the discrimination (i.e., Brazil’s compliance with its MERCOSUR obligations) had nothing to do with pursuing the objective of the import ban under Article XX(b).94 Therefore, the Appellate Body found that Brazil’s import ban was applied in a manner that constituted arbitrary or unjustified discrimination and that discrimination did not result from a conflict between Brazil’s MERCOSUR commitments (under Article XXIV) and the GATT 1994.95

Likewise, the U.S. statute at issue (15 U.S.C. §§ 717b(a) and (e)) governing export

92 Appellate Body Report, Brazil – Retreaded Tyres, para. 233. As explained in Section III.D.2, GATT 1994 Article XXIV specifically allows WTO Members to enter into customs unions and free trade agreements, like MERCOSUR.
94 Appellate Body Report, Brazil – Retreaded Tyres, para. 228.
95 Appellate Body Report, Brazil – Retreaded Tyres, paras. 231-34.
licenses for natural gas clearly discriminates between non-FTA and FTA members with agreements requiring national treatment for trade in natural gas. As explained further in Section III.D below, it is difficult to see how the United States could justify discriminating between WTO Members when the rationale for the discrimination (i.e., the FTA provisions) would be unrelated to GATT Article XX objectives. In sum, even if the U.S. statute could satisfy one of the exceptions under the specific subsection to Article XX, it is unlikely that the United States could satisfy the non-discrimination requirements in Article XX(j) or the requirements in the chapeau to Article XX.

5. The GATT 1994 Article XXI National Security Exception is Unlikely to Justify Denial of a Natural Gas Export License Application Under 15 U.S.C. § 717b(a)

Finally, GATT 1994 Article XXI provides a broad exception for actions taken for the protection of “essential security interests”:

Nothing in this Agreement shall be construed * * *

(b) to prevent any contracting party from taking any action which it considers necessary for the protection of its essential security interests
(i) relating to fissible materials or the materials from which they are derived;
(ii) relating to the traffic in arms, ammunition and implements of war and to such traffic in other goods and materials as is carried on directly or indirectly for the purpose of supplying a military establishment;
(iii) taken in time of war or other emergency in international relations….

While is it possible for the United States to justify export restrictions of natural gas to particular WTO Members that are “necessary for the protection of its essential security interests,” as

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96 Indeed, it is not clear why FTA provisions would justify distinguishing between WTO Members on the basis of the national treatment obligations in those FTAs when all WTO Members are subject to the same national treatment obligations. For this reason and the reasons expressed in Section III.D.5, the United States is unlikely to be able to rely on GATT 1994 Article XXIV (permitting FTAs) as a defense to an alleged WTO violation.
explained in Section II.B.1, natural gas unrelated to the Naval Petroleum Reserves is not currently on the list of products subject to export controls for national security reasons as required by 50 U.S.C. App. § 2404(a)(1) and (c)(1), which state:

§ 2404. National security controls
(a) Authority
(1) In order to carry out the policy set forth in section 3(2)(A) of this Act [section 2402 (2)(A) of this Appendix], the President may, in accordance with the provisions of this section, prohibit or curtail the export of any goods or technology subject to the jurisdiction of the United States or exported by any person subject to the jurisdiction of the United States. The authority contained in this subsection includes the authority to prohibit or curtail the transfer of goods or technology within the United States to embassies and affiliates of controlled countries. For purposes of the preceding sentence, the term “affiliates” includes both governmental entities and commercial entities that are controlled in fact by controlled countries. The authority contained in this subsection shall be exercised by the Secretary, in consultation with the Secretary of Defense, and such other departments and agencies as the Secretary considers appropriate, and shall be implemented by means of export licenses described in section 4(a) of this Act [section 2403 (a) of this Appendix].

* * *

(c) Control list
(1) The Secretary shall establish and maintain, as part of the control list, a list of all goods and technology subject to export controls under this section. Such goods and technology shall be clearly identified as being subject to controls under this section.

Because natural gas is not currently on the list of products subject to export controls for national security reasons, export restrictions on natural gas unrelated to the U.S. Naval Petroleum Reserves would not be eligible for this exemption from the WTO ban on export restrictions.

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97 The Export Administration Act has currently lapsed, but the U.S. Department of Commerce Bureau of Industry and Security’s Export Administration regulations remain in effect through the President’s powers under the International Emergency Economic Powers Act.
D. **Even if the Language of U.S. Laws Governing the Licensing of Natural Gas Exports Is Consistent With GATT 1994 Article XI:1, The DOE's Administration of those Laws Also Must Be Reasonable Under GATT 1994 Article X:3(a), Non-Discriminatory Under GATT Article XIII; and Consistent with Most-Favoured-Nation Treatment Under GATT Article I in Order to be Consistent With U.S. WTO Obligations**

1. **GATT 1994 Article X:3(a) Requires the United States to Administer its Trade Laws in a Reasonable Manner**

Even if the U.S. statute is not inconsistent with WTO obligations governing export restrictions under GATT 1994 Article XI, the DOE’s adoption of a practice of granting natural gas export licenses only for brief limited periods could be unreasonable and arbitrary, contrary to GATT 1994 Article X:3(a).

GATT 1994 Article X establishes obligations concerning the publication and administration of trade regulations. Article X:3(a) specifically requires the United States to administer its trade laws in a reasonable manner:

> “Each Member shall administer in a uniform, impartial and reasonable manner all its laws, regulations, decisions and rulings of the kind described in paragraph 1 of this Article.”

Article X:3 has been interpreted as establishing certain minimum standards for procedural

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98 See WTO Panel Report, *EC – Bananas III (US)*, WT/DS27/R/USA, adopted September 25, 1997, para. 7.206 (“Given that this provision enumerates national legislation regarding border measures as well as internal measures, and customs tariffs as well as quantitative measures, the coverage of Article X could hardly be more comprehensive.”).

99 In *Dominican Republic – Import and Sale of Cigarettes*, the WTO dispute settlement panel interpreted GATT Article X:3(a) to permit a challenge to an *unreasonable* administration of its tax law:

The Panel considers that the obligation under Article X:3(a) of the GATT is that Members administer the provisions covered by that Article in a uniform manner, in an impartial manner, and in a reasonable manner. These are not cumulative requirements. A Member may thus act in a breach of its obligations under Article X:3(a) of the GATT, if it administers the provisions in an unreasonable manner, even if there is no evidence that that Member has also administered the provisions in a non-uniform manner or in a partialized manner.

fairness and due process\textsuperscript{100} in the WTO Members’ administration of trade regulations, which encompass notions such as notice, transparency, fairness and equity.\textsuperscript{101}

According to the Appellate Body, the term “administer” in GATT 1994 Article X:3 “refers to putting into practical effect, or applying, a legal instrument of the kind described in Article X:1.”\textsuperscript{102} Article X:1 covers “[l]aws, regulations, judicial decisions and administrative rulings of general application” … that apply to a range of situations or cases, rather than being limited in their scope of application.”\textsuperscript{103} Thus, the obligations imposed by Article X:3(a) do not apply only to the written language of the substantive rules governing the enforcement of U.S. export laws but also to their administration,\textsuperscript{104} including administrative processes and practices.\textsuperscript{105}

\textsuperscript{100} According to the WTO panel in EC – Selected Customs Matters, WT/DS315/R, adopted Dec. 11, 2006, para. 7.108, “[t]he due process theme underlying Article X of the GATT 1994 suggests that the aim of Article X:3(a) of the GATT 1994 is to ensure that traders are treated fairly and consistently when seeking to import from or export to a particular WTO Member.” The Appellate Body has further pointed out that “it is only reasonable that rigorous compliance with the fundamental requirements of due process should be required in the application and administration of a measure which purports to be an exception to the treaty obligations of the Member imposing the measure and which effectively results in a suspension pro hac vice of the treaty rights of other Members.” WTO Appellate Body Report, US – Shrimp, WT/DS58/AB/R, adopted Nov. 6, 1998, para. 182.


\textsuperscript{102} WTO Appellate Body Report, EC – Selected Customs Matters, para. 224 (emphasis in original). According to the panel in EC – Customs Matters:

\{T\}here would appear to be nothing in the ordinary meaning of the term "administer" that would suggest that it covers laws and regulations as such. On the contrary, the relevant dictionary definitions indicate that the term "administer" refers to positive action or steps taken to put into effect measures such as laws and regulations, but not the laws and regulations themselves, which merely exist without effect until they are actually applied in practice.

WTO Panel Report, EC – Selected Customs Matters, para. 7.106 (emphasis in original).


\textsuperscript{105} WTO Appellate Body Report, EC – Selected Customs Matters, para. 226. In the EC – Selected Customs Matters dispute, the United States specifically challenged, inter alia, the EC’s administration of its customs laws, including the administrative practices of customs authorities of member States of the European Communities. Id. at Annex III.
Applying this interpretation from the WTO Appellate Body, it is clear that regardless of whether the underlying U.S. statutes and regulations are held to be consistent with U.S. WTO obligations, there is a risk of running afoul of the WTO obligations if the DOE’s practices in administering the laws have the result of being unreasonable or arbitrary.

Moreover, evidence of “trade damage” from the unreasonable or arbitrary administration of laws is not necessary in order for such administration or practice to be found to be inconsistent with U.S. obligations under the WTO. Article X:3(a) concerns the “real effect that a measure might have on traders operating in the commercial world” and “whether there is a possible impact on the competitive situation” due to the alleged unreasonable application of the trade laws.106

2. The DOE’s Grant of Licenses for Export of Gas to WTO Members for Only a Brief Limited Period Would Likely Be Found To Be Inconsistent With GATT 1994 Article X:3(a), as Unreasonable and Arbitrary

As explained above, the U.S. statute (15 U.S.C. § 717b) establishes application and approval requirements for natural gas exports. Once export authorization is granted, however, the DOE has adopted a consistent practice of requiring applicants to renew their blanket export licenses on a recurring basis. Thus, the U.S. statute is a measure of “general application” within the meaning of Article X:1, which is administered by the DOE through its adoption of a blanket authorization renewal requirement for export licensing.

Presumably, the DOE’s decision to grant license applications for a brief limited period is to allow the agency to revisit its public interest determinations. The DOE, however, has not explained why a limited period is reasonable or necessary for blanket authorizations. For example, for applications to export natural gas to an FTA member, the statute specifically directs the Commission to find that the exportation of natural gas to countries with which the U.S. has an FTA would be in the public interest. The statute also requires that applications for the

exportation of natural gas to those FTA members be granted “without modification or delay.” Therefore, to the extent that the DOE can impose other “terms and conditions” on the grant of these export applications, the other “terms and conditions” would presumably not involve “public interest” considerations.

Even if it would not be inconsistent with U.S. WTO obligations for the DOE to periodically reconsider the “public interest” for exports of natural gas to WTO Members (whether or not they have an FTA with the U.S.), the DOE’s current licensing scheme could be viewed as unreasonable within the interpretation of GATT Article X. As the DOE recently recognized, U.S. consumers “presently have access to substantial quantities of natural gas sufficient to meet domestic demand from multiple other sources at competitive prices….“

Given that the timeframe for recovery and distribution of natural gas to both domestic and export markets requires a decade or more of exploration, drilling, and recovery, as well as building collection, storage, and distribution infrastructure, the DOE’s adoption of a consistent practice of granting for only very short periods blanket authorizations to export natural gas could be seen as arbitrary and unreasonable within the framework of WTO jurisprudence. In such a capital-intensive industry, the DOE’s licensing requirement could be viewed as arbitrary because it not only imposes an unnecessary administrative burden on applicants but actively discourages investment in the infrastructure necessary to export natural gas. Because the DOE’s practice has the practical effect of discouraging the requisite investment to support exports without a clearly articulated and reasonable basis, current DOE practice could be challenged as inconsistent with U.S. obligations under GATT 1994 on the grounds that the laws are being applied in an unreasonable or arbitrary manner.

If the basis for the DOE’s decision to so severely limit the period of authorization is potential concerns over the quantity of natural gas actually exported, the DOE can and, in fact, has addressed this concern by including monthly reporting requirements regarding delivery

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107 15 U.S.C. § 717b(a) (note that § 717b(a) allows the Commission to modify the “terms and conditions” as necessary or appropriate, but the same language does not appear in § 717b(c)) .

108 DOE Opinion and Order No. 2795, FE Docket No. 10-31-LNG, at 7 (June 1, 2010).
volumes and prices in its blanket authorizations.\footnote{See, e.g., DOE Opinion and Order No. 2795, FE Docket No. 10-31-LNG, at 12 (June 1, 2010). According to the DOE, the monthly reporting requirement was adopted “to perform market and regulatory analyses; improve the capability of industry and the government to respond to any future energy-related problems; and keep the general public informed of international natural gas trade.” Office of Fossil Energy; Procedural Order Requiring Monthly Reporting, 70 Fed. Reg. 60,305 (Dep’t Energy Oct. 17, 2005).} It is not clear why the DOE would need to require frequent renewal of export licenses when it has access to and is presumably reviewing ongoing export activity to identify and address any potential problems arising out of quantities exported.

Indeed, the United States is, at present, challenging China’s administration of its coke export quotas and its export quota bidding regime as being unreasonable contrary to GATT 1994 Article X:3(a).\footnote{See U.S. First Written Submission in the WTO dispute settlement proceeding initiated by the U.S., EU and Mexico in China -- Raw Materials Exports, WT/DS394, DS395, DS398, at paras. 291-314 (June 1, 2010). Other WTO Members have also successfully challenged the administration of laws as being unreasonable contrary to Article X:3(a). For example, in the Dominican Republic – Cigarettes dispute, a WTO panel found that the administration of tax laws was unreasonable when the selection of the tax base was chosen without regard to existing rules and evidence:

The Panel thus finds that the manner in which the Dominican Republic administered the provisions governing the Selective Consumption Tax, in particular with respect to the determination of the tax base for the application of the tax on cigarettes, and the use in this regard of the "nearest similar product on the domestic market", was unreasonable. \textit{The fact that the Dominican Republic authorities did not support its decisions regarding the determination of the tax base for imported cigarettes by resorting to the rules in force at the time and that they decided to disregard retail selling prices of imported cigarettes, is not "in accordance with reason", "having sound judgement", "sensible", "within the limits of reason", nor "articulate".}

WTO Panel Report, Dominican Republic – Import and Sale of Cigarettes, para. 7.388 (emphasis added); see also WTO Panel Report, Argentina – Hides and Leather, para. 11.94 (finding administrative process aimed at ensuring proper classification of products, but possibly revealing confidential business information, to be unreasonable).}
that WTO Members must administer their trade laws in a reasonable manner. Absent a justification for the DOE’s current practice of granting short-term blanket authorizations to export natural gas that is strongly defensible as a reasonable measure to restrict exports, the United States could be subject to claims that its practice is unreasonable and arbitrary contrary to its GATT Article X:3(a) obligations.

3. GATT 1994 Article XIII Requires the United States to Administer Any Measures That Impose Quantitative Restrictions in a Non-Discriminatory Manner with Respect to All WTO Members

As noted above in Sections III.B and C, GATT 1994 Article XI:1 specifically prohibits export restrictions on any product destined for a WTO member country, whether such restrictions are made effective through export licenses or other measures:

Article XI: General Elimination of Quantitative Restrictions

1. No prohibitions or restrictions other than duties, taxes or other charges, whether made effective through quotas, import or export licences or other measures, shall be instituted or maintained by any contracting party on the importation of any product of the territory of any other contracting party or on the exportation or sale for export of any product destined for the territory of any other contracting party.

In addition, where exports are restricted in any way under an exception to GATT 1994 Article XI, GATT Article XIII:1 also prohibits discriminatory application of such export restrictions as between or among any WTO Members.111

Article XIII: Non-discriminatory Administration of Quantitative Restrictions

111 Although WTO Members in other disputes have challenged import restrictions as being inconsistent with both GATT 1994 Articles XI:1 and XIII, a WTO panel or the Appellate Body sitting in judgement of a dispute may exercise judicial economy with respect to either claim. Compare WTO Panel Report, Colombia – Ports of Entry, paras. 7.281-92 (exercising judicial economy with respect to GATT 1994 Article XIII:1 claim after finding a violation of GATT 1994 Article XI:1), with WTO Appellate Body Report, Turkey – Textiles, para. 66 (finding that GATT 1994 Article XXIV did not justify quantitative restrictions on Indian imports found to violate both GATT 1994 Articles XI:1 and XIII:1).
1. No prohibition or restriction shall be applied by any contracting party on the importation of any product of the territory of any other contracting party or on the exportation of any product destined for the territory of any other contracting party, unless the importation of the like product of all third countries or the exportation of the like product to all third countries is similarly prohibited or restricted.

The Appellate Body has made it clear that a “quantitative restriction” that is lawful under Article XI:1 by reason of an exception in Article XI:2 or another provision in the covered agreements “must nevertheless satisfy the requirements of Article XIII in respect of its non-discriminatory administration.” Thus, the same conditions for licensing or other certification applied by the United States to the exportation of LNG or natural gas to any WTO Member (whether or not the U.S. has an FTA with that country) must also be applied in a non-discriminatory manner with respect to the exportation of LNG or natural gas to any other WTO Member.

4. The Natural Gas Act of 1938, As Amended, Appears To Create A Process For Consideration Of Export Licenses That Is Discriminatory On Its Face and That Disadvantages WTO Members That Do Not Have FTAs With the U.S., Which Would Likely Be Deemed Inconsistent with GATT Articles I and XIII

As explained above in Section II, the Natural Gas Act of 1938, as amended (15 U.S.C. § 717b(c)) establishes an expedited application and approval process for natural gas exports to FTA members:

(c) Expedited application and approval process
For purposes of subsection (a) of this section, the importation of the natural gas referred to in subsection (b) of this section, or the exportation of natural gas to a nation with which there is in effect a free trade agreement requiring national treatment for trade in natural gas, shall be deemed to be consistent with the public interest, and applications for such importation or exportation shall

be granted without modification or delay.\textsuperscript{113}

Unlike applications for exports destined to non-FTA members, the statute requires the DOE to grant an application to export natural gas to those FTA countries automatically, without any additional consideration of the “public interest” and without modification or delay.

For exports of natural gas to countries that do not have an FTA with the U.S. and, therefore, that do not benefit from the expedited application and approval process, the statute gives the DOE discretion to grant or deny an application to export natural gas based on additional consideration of the “public interest,” or grant an application in whole or in part, with modifications or additional terms and conditions, and make any supplemental order:

\textbf{§ 717b (a) Mandatory authorization order}

After six months from June 21, 1938, no person shall export any natural gas from the United States to a foreign country or import any natural gas from a foreign country without first having secured an order of the Commission authorizing it to do so. The Commission shall issue such order upon application, unless, after opportunity for hearing, it finds that the proposed exportation or importation will not be consistent with the public interest. The Commission may by its order grant such application, in whole or in part, with such modification and upon such terms and conditions as the Commission may find necessary or appropriate, and may from time to time, after opportunity for hearing, and for good cause shown, make such supplemental order in the premises as it may find necessary or appropriate.\textsuperscript{114}

For applications to export natural gas to an FTA member country, the statute specifically requires the Commission to find that the exportation of natural gas to those countries would be in the public interest. The statute also requires that applications for the exportation of natural gas to those FTA members be granted “without modification or delay.”

Because the same requirements would not apply for applications to export natural gas to a

\textsuperscript{113} 15 U.S.C. § 717b(c) (emphasis added).

\textsuperscript{114} 15 U.S.C. § 717b(a).
WTO Member that does not have an FTA with the United States, the Natural Gas Act of 1938, as amended (15 U.S.C. § 717b), appears to be discriminatory on its face.

5. **GATT Article I Most-Favoured-Nation Treatment Requires That No Discrimination Be Imposed on Exports to Any WTO Member Country**

When current U.S. law and practices governing the review and approval of licenses for the export of natural gas are reviewed in the context of U.S. international legal obligations under the WTO Agreement and U.S. free trade agreements, these laws and practices appear to be measures affecting exports that could be deemed inconsistent with U.S. international obligations to provide most-favored-nation (MFN) treatment and national treatment with respect to exports to (and imports from) other WTO member countries. As noted in Section II.A.1 supra, the logic of the House Report of the Committee of Energy and Commerce that accompanies H.R. 776 (the bill that went on to become the Energy Policy Act of 1992) focused on imports from Canada and recognized that "because of the 1988 Canadian Free Trade Agreement, old distinctions between Canadian and U.S. gas are illegal in any event." Although this comment was made with respect to a specific free trade agreement and in reference to what is now 15 U.S.C. § 717b(c), this same logic applies to all WTO Members that have committed, by virtue of their WTO accession, to most-favored-nation and national treatment of each others’ goods and services.

Specifically, Article I (General Most-Favoured-Nation Treatment) and Article III (National Treatment on Internal Taxation and Regulation) are incorporated into the GATT 1994 directly from the GATT 1947 text. Thus, the U.S. (as well as all other WTO member

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115 See discussion in Section II.A.1 supra at notes 5 – 11.


118 The General Agreement on Tariffs and Trade of 1994 (GATT 1994) incorporates the text of
countries) has specifically committed to afford most-favored-nation treatment and national treatment to all WTO Members in its schedule of commitments and have done so since entering into GATT 1947. The schedule of U.S. exemptions from the MFN commitment in GATT 1994 includes specific references to the duties on liquefied natural gas but does not exempt LNG or natural gas in any form from the MFN disciplines and rules of GATT 1994.\footnote{See Marrakesh Protocol to the General Agreement on Tariffs and Trade 1994, Schedule XX-United States of America, Part I, Section II, page 54 at HTS 2711.11.00 “Liquefied Natural Gas”. See also Annex C setting forth the U.S. exemptions from MFN treatment, which includes transport services associated with natural gas pipelines but does not exempt natural gas in any form from MFN treatment.}

National treatment, as defined under GATT 1947 and incorporated in GATT 1994, requires the treatment of imports from WTO member countries no less favorably than domestic products, so the national treatment obligation only indirectly affects exports insofar as the products are reexported following importation into a WTO member country. The discussion of “national treatment” in the context of the statutory language as well as the legislative history of the Natural Gas Act of 1938 (as amended in 1992 at provision 15 U.S.C. § 717b(c)) granted more favorable terms for export of gas from the U.S. to countries with which the U.S. has an FTA and justified it on the grounds that the U.S.-Canada FTA made “old distinctions between Canadian and U.S. gas . . . illegal.” This is correct but in the GATT sense, the Article I commitment to provide MFN treatment addresses both imports and exports (directly and indirectly), while the GATT Article III commitment to provide national treatment addresses treatment of imports.

the relevant provisions on Most Favored nation treatment and national treatment from GATT 1947:

1. The General Agreement on Tariffs and Trade 1994 (“GATT 1994”) shall consist of:

   (a) the provisions in the General Agreement on Tariffs and Trade, dated 30 October 1947, annexed to the Final Act Adopted at the Conclusion of the Second Session of the Preparatory Committee of the United Nations Conference on Trade and Employment (excluding the Protocol of Provisional Application), as rectified, amended or modified by the terms of legal instruments which have entered into force before the date of entry into force of the WTO Agreement;

In any case, the U.S. and all of its FTA partner countries all adopted both the MFN and national treatment obligations of the GATT in all of the FTAs. Moreover, all of the FTA countries also are WTO member countries and all have taken an identical commitment to each other in the context of agreeing and acceding to GATT 1994.120

Thus, the statutory language of the Natural Gas Act of 1938 (as amended) at provision 15 U.S.C. § 717b(c)) may refer only to “national treatment,” but the U.S. was and is, in any case, committed to afford GATT consistent MFN treatment as well as national treatment for both exports and imports to Canada and all other WTO member countries.

Therefore, based on the MFN obligations and commitments taken by the U.S. in GATT 1994, it would be inconsistent with U.S. commitments under the WTO agreements to restrain exports to any WTO Members under 15 U.S.C. § 717b(a), especially in light of the more favorable terms of provision at 15 U.S.C. § 717b(c) requiring approval of export applications involving countries with which the U.S. has separate FTAs. The preferential treatment accorded exports to countries with which the U.S. has a FTA in effect discriminates against exports to non-FTA countries whether or not such countries are WTO Members. This distinction in the treatment accorded to exports destined to WTO member countries is likely to be deemed inconsistent with U.S. obligations under the WTO.

Although there are a number of exceptions to the U.S. obligations to provide MFN treatment that are potentially available in cases involving critical shortages, the conservation of natural resources, government stabilization plans, short supply situations, or national security interests, it is not clear that the U.S. government would be justified in relying on any of these exceptions to deny a license application to export natural gas to any WTO member country at the present time based on available facts. As noted above, the U.S. has challenged similar export restrictions imposed by other countries in WTO dispute settlement proceedings.

120 See Annex D for excerpts from the GATT 1994 and each of the FTAs to which the US is a party committing to accord most-favored-nation treatment to the other signatories.
Therefore, a WTO Member that does not have an FTA with the United States could claim that 15 U.S.C. § 717b fails to satisfy the requirements of both most-favoured-nation treatment in GATT 1994 Article I and non-discrimination in GATT 1994 Article XIII:1

6. It is Not Clear That GATT 1994 Article XXIV Permitting FTAs Would Provide a Convincing Defense of Discriminatory Export Licensing Requirements Applicable to FTA and Non-FTA Members

Although the WTO Agreement specifically allows Members to enter into FTAs, those FTAs cannot be used to raise barriers to trade with non-FTA members. Paragraph 5 of GATT 1994 Article XXIV allows WTO Members to enter into voluntary trade agreements to establish customs unions or free trade areas to develop “closer integration between the economies” of members:

The contracting parties recognize the desirability of increasing freedom of trade by the development, through voluntary agreements, of closer integration between the economies of the countries parties to such agreements. They also recognize that the purpose of a customs union or of a free-trade area should be to facilitate trade between the constituent territories and not to raise barriers to the trade of other contracting parties with such territories.121

The preamble to the WTO Understanding on the Interpretation of Article XXIV of the General Agreement on Tariffs and Trade 1994 further recognizes the “contribution to the expansion of world trade that may be made by closer integration between the economies of the parties to such agreements” and reaffirmed that the purpose of such agreements was to facilitate trade not to “raise barriers to the trade of other Members with such territories….”122

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The exception in Article XXIV:5 for free-trade areas, however, does not provide a comprehensive defense for unrelated WTO violations:

5. Accordingly, the provisions of this Agreement shall not prevent, as between the territories of contracting parties, the formation of a customs union or of a free-trade area or the adoption of an interim agreement necessary for the formation of a customs union or of a free-trade area; Provided that:

** * * * **

(b) with respect to a free-trade area, or an interim agreement leading to the formation of a free-trade area, the duties and other regulations of commerce maintained in each if the constituent territories and applicable at the formation of such free-trade area or the adoption of such interim agreement to the trade of contracting parties not included in such area or not parties to such agreement shall not be higher or more restrictive than the corresponding duties and other regulations of commerce existing in the same constituent territories prior to the formation of the free-trade area, or interim agreement as the case may be….123

On the contrary, the Appellate Body has interpreted GATT 1994 Article XXIV as providing a limited defense to a finding of a WTO inconsistency:

First, in examining the text of the chapeau to establish its ordinary meaning, we note that the chapeau states that the provisions of the GATT 1994 "shall not prevent" the formation of a customs union. We read this to mean that the provisions of the GATT 1994 shall not make impossible the formation of a customs union. Thus, the chapeau makes it clear that Article XXIV may, under certain conditions, justify the adoption of a measure which is inconsistent with certain other GATT provisions, and may be invoked as a

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possible "defence" to a finding of inconsistency.\textsuperscript{124}

Specifically, Article XXIV can justify the adoption of a measure which is inconsistent with certain other GATT provisions only (1) if the measure is introduced upon the formation of a free-trade area, which fully meets, \textit{inter alia}, the requirements in Article XXIV:5(b) relating to “other regulations of commerce” applied by the FTA members to trade with third countries, and (2) to the extent that the formation of the free-trade area would be prevented if the introduction of the measure were not allowed.\textsuperscript{125}

For example, the Appellate Body specifically rejected Turkey’s GATT 1994 Article XXIV defense that its quantitative import restrictions, which discriminated against certain Indian textile and clothing products contrary to GATT 1994 Articles XI:1 and XIII:1, were somehow necessary to form a customs union with the European Communities. Although the Appellate Body made no finding on the issue of whether quantitative restrictions found to be inconsistent with Article XI and Article XIII of the GATT 1994 would ever be justified by Article XXIV, the Appellate Body found that Turkey has failed to demonstrate that the formation of the customs union would have been prevented if it were not allowed to adopt the quantitative restrictions.\textsuperscript{126}

Given that discretionary or non-automatic export licensing requirement in 15 U.S.C. § 717b(a) applicable to non-FTA members was enacted in 1938, long before the United States entered into the free trade agreements at issue,\textsuperscript{127} it is not clear that the United States would be able to argue that any discrimination between WTO Members was necessary for the formation of its free-trade agreements within the meaning of Article XXIV:5. Section 717b(a) has absolutely nothing to do with implementing U.S. obligations under its free trade agreements and, therefore, cannot justify why the statute distinguishes between FTA and non-FTA members.


\textsuperscript{125} Appellate Body Report, \textit{Turkey – Textiles}, paras. 46, 52, 58.


\textsuperscript{127} As indicated in Annexes A and B, the United States has FTAs with 17 other countries, and all of those countries are also WTO Members.
E. U.S. Economic and International Trade Policies Strongly Encourage Exportation and Oppose Unreasonable and Burdensome Administrative Requirements on Imports and Exports

As explained in Section II.D, increasing exports is currently a high priority for the U.S. government. On March 11, 2010, the President unveiled the National Export Initiative (NEI) via Executive Order, which is designed to reduce barriers to trade and promote U.S. exports.\footnote{“Executive Order – National Export Initiative,” The White House (March 11, 2010), available at http://www.whitehouse.gov/the-press-office/executive-order-national-export-initiative.} The goal is to double U.S. exports over the next five years, which in turn will create jobs and boost the economy. Requirements that tend to restrict exports, including licensing procedures that reduce the certainty that certain exports will be permitted for a timeframe long enough to recover the costs of developing the export capacity, would, thus, be inconsistent with this current policy and a long-term Administration objective.

Furthermore, the U.S. routinely views burdensome and unreasonable administrative procedures relating to importing and exporting requirements as foreign trade barriers. In the United States Trade Representative’s annual National Trade Estimate Report on Foreign Trade Barriers, there are numerous instances where burdensome regulations are cited as presenting barriers to trade.\footnote{2010 National Trade Estimate Report on Foreign Trade Barriers, Office of the United States Trade Representative, available at http://www.ustr.gov/about-us/press-office/reports-and-publications/2010.} For instance, Argentina’s non-automatic import licensing requirements for footwear and toys are viewed as delaying imports,\footnote{Id. at 19.} and Cambodia’s import policies are described as “unnecessarily burdensome” and “driven by excessively discretionary practices.”\footnote{Id. at 43. There are multiple other examples of burdensome regulatory schemes that serve to restrict trade, such as China’s overly burdensome regulatory regime that creates barriers to its services industry (id. at 70) and burdensome regulations concerning import registration with the Indonesian food and drug agency (id. at 184).} This demonstrates a distinct U.S. policy view that unreasonable, burdensome regulatory practices can act as barriers to foreign trade, which again is inconsistent with the above-referenced pro-export stance of the current Administration.
IV. **Under Its Free Trade Agreements, the U.S. is Obligated Not to Restrict Gas Exports Destined For Other FTA Member Countries**

A. **U.S. Free Trade Agreements Generally Prohibit Export Restrictions on Trade in Goods Destined for Other FTA Member Countries**

1. **U.S. FTAs Generally Prohibit Export Restrictions on Trade in Goods**

As explained in Section III.E of this memorandum, the WTO Agreement specifically allows Members to enter into free trade agreements (“FTAs”) as long as they do not raise barriers to trade with non-FTA members. The United States currently has FTAs in force with 17 countries.\(^{132}\) Under U.S. law (15 U.S.C. § 717b(c)), the DOE is required to grant export license applications without modification or delay for exports of natural gas destined to any country with which there is in effect a free trade agreement requiring national treatment for trade in natural gas:

\[(c) \text{ Expedited application and approval process}\]

For purposes of \(15\) U.S.C. § 717b(a), the importation of the natural gas referred to in \(15\) U.S.C. § 717b(b), or the exportation of natural gas to a nation with which there is in effect a free trade agreement requiring national treatment for trade in natural gas, shall be deemed to be consistent with the public interest, and applications for such importation or exportation shall be granted without modification or delay.\(^{133}\)

Each of the U.S. FTAs contains a national treatment clause from which natural gas is not excluded.\(^{134}\) Therefore, it should follow that the DOE must grant license applications for the export of natural gas to FTA members.

Even if 15 U.S.C. § 717b(c) could somehow be construed not to require the automatic grant of license applications for natural gas export to all FTA members, the United States would

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\(^{132}\) The countries are Australia, Bahrain, Canada, Chile, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Israel, Jordan, Mexico, Morocco, Nicaragua, Oman, Peru, and Singapore. *See Office of the United States Trade Representative at* www.ustr.gov/trade-agreements/free-trade-agreements.


\(^{134}\) The relevant provisions of the FTAs addressing national treatment are included as Annex A to this memorandum.
still have a general obligation under the FTAs not to institute or maintain export restrictions made effective through export licenses. Except for the FTA with Jordan, all of the FTAs to which the United States is a member contain a general provision prohibiting export restrictions for any good destined for the territory of another FTA member consistent with the requirements of GATT 1994 Article XI:1. As explained in Section III.B.1 of this memorandum, export restrictions are prohibited by GATT 1994 Article XI:1 unless they can be justified under an exception.

2. NAFTA Articles 603 and 605 Specifically Prohibit Export Restrictions on Trade in Natural Gas

Like the other U.S. FTAs, the North American Free Trade Agreement (“NAFTA”) Article 309 specifically prohibits member countries from restricting the exportation of any goods destined for any other member country except in accordance with GATT 1994 Article XI. NAFTA Article 315 establishes limits on the available exceptions to GATT 1994 Article XI:1 affecting the level of shipments, prices, and channels of supply.

In addition to NAFTA Articles 309 and 315 covering export restrictions in general, NAFTA also includes provisions in Chapter 6 specifically covering energy and basic petrochemicals, including natural gas. Article 603.1 specifically incorporates the GATT provisions “with respect to prohibitions or restrictions on trade in energy and basic petrochemical goods”:

Subject to the further rights and obligations of this Agreement, the Parties incorporate the provisions of the General Agreement on Tariffs and Trade (GATT), with respect to prohibitions or restrictions on trade in energy and basic petrochemical goods. The Parties agree that this language does not incorporate their respective protocols of provisional application to the GATT.

Article 609 specifically defines “restriction” to include “any limitation, whether made

135 See Annex A.

136 “Energy and basic petrochemicals” are defined to include goods classified under HS 27.11 (except for ethylene, propylene, butylene and butadiene in purities over 50 percent), which includes liquefied natural gas under US HTS 27.11.11.00.
effective through quotas, licenses, permits, minimum or maximum price requirements or any other means.” Article 603.5 further permits an export licensing system for energy or basic petrochemical goods provided that such system is operated in a manner consistent with NAFTA provisions, including Article 603.1 and Article 1502 (Monopolies and State Enterprises). Finally, Article 605 establishes limits on the available exceptions to GATT 1994 Article XI:1 affecting the level of shipments, prices, and channels of supply:

Subject to Annex 605, a Party may adopt or maintain a restriction otherwise justified under Articles XI:2(a) or XX(g), (i) or (j) of the GATT with respect to the export of an energy or basic petrochemical good to the territory of another Party, only if:

a) the restriction does not reduce the proportion of the total export shipments of the specific energy or basic petrochemical good made available to that other Party relative to the total supply of that good of the Party maintaining the restriction as compared to the proportion prevailing in the most recent 36 month period for which data are available prior to the imposition of the measure, or in such other representative period on which the Parties may agree;

b) the Party does not impose a higher price for exports of an energy or basic petrochemical good to that other Party than the price charged for such good when consumed domestically, by means of any measure such as licenses, fees, taxation and minimum price requirements. The foregoing provision does not apply to a higher price that may result from a measure taken pursuant to subparagraph (a) that only restricts the volume of exports; and

c) the restriction does not require the disruption of normal channels of supply to that other Party or normal proportions among specific energy or basic petrochemical goods supplied to that other Party, such as, for example, between crude oil and refined products and among different categories of crude oil and of refined products.

Annexes 603.6 and 605 include reservations and exceptions to Articles 603 and 605. Specifically, Annex 603.6 provides an exception for Mexico’s import and export licenses, and Annex 605 states that the provisions of Article 605 “shall not apply as between other Parties and Mexico.”
In sum, the United States has a specific obligation under NAFTA not to establish export restrictions on natural gas.

B. The Limited Exceptions in U.S. Free Trade Agreements Are Unlikely To Justify Denial of Natural Gas Export License Applications

1. The General FTA Exceptions to the Prohibition of Export Restrictions on Trade in Goods are Unlikely to Justify the DOE’s Denial of a Natural Gas Export License Application

All of the FTAs to which the United States is a member also contain a general exception provision that specifically incorporates the list of exceptions contained in GATT 1994 Article XX. As explained above in Section III.C, however, the limited and conditional exceptions137 are unlikely to justify denial of a license application for natural gas exports to an FTA member at the present time based on available facts under Articles XI:2(a) (critical shortages), XX(g) (conservation of natural resources), XX(i) (government stabilization plan), or XX(j) (short supply).

The United States has also routinely sought and received exemptions from its FTA obligations regarding export restrictions and other controls on specific items such as: the export of logs; certain measures under the Merchant Marine Act, Passenger Vessel Act, and 46 U.S.C. § 12108; actions authorized by the Dispute Settlement Body of the WTO; and actions authorized by the Agreement on Textiles and Clothing -- but not natural gas.138 Therefore, for the reasons expressed in Section III.C, the available general exceptions are unlikely to justify the DOE’s denial of a license application for natural gas exports to an FTA member at the present time based on available facts.

137 See Appellate Body Report, US – Shrimp, para. 157 (“In our view, the language of the chapeau makes clear that each of the exceptions in paragraphs (a) to (j) of Article XX is a limited and conditional exception from the substantive obligations contained in the other provisions of the GATT 1994, that is to say, the ultimate availability of the exception is subject to the compliance by the invoking Member with the requirements of the chapeau.”).

138 See Annex A.
2. The FTA National Security Exceptions to the Prohibition of Export Restrictions on Trade in Goods are Unlikely to Justify Denial of a Natural Gas Export License Application

All of the FTAs to which the United States is a member also contain a general national security exception provision that contains fairly broad language allowing member countries to apply measures necessary to protect their own security interests. NAFTA Article 2102 likewise establishes general national security exceptions, and NAFTA Article 607 provides additional limitations on the national security exceptions for exports of an energy or basic petrochemical good to another NAFTA member country. Specifically, NAFTA Article 2102 is very similar to the exception contained in GATT 1994 Article XXI and states:

1. Subject to Articles 607 (Energy - National Security Measures) and 1018 (Government Procurement Exceptions), nothing in this Agreement shall be construed:

   (a) to require any Party to furnish or allow access to any information the disclosure of which it determines to be contrary to its essential security interests;

   (b) to prevent any Party from taking any actions that it considers necessary for the protection of its essential security interests

   (i) relating to the traffic in arms, ammunition and implements of war and to such traffic and transactions in other goods, materials, services and technology undertaken directly or indirectly for the purpose of supplying a military or other security establishment,

   (ii) taken in time of war or other emergency in international relations, or

   (iii) relating to the implementation of national policies or international agreements respecting the non-proliferation of nuclear weapons or other nuclear explosive devices; or

   (c) to prevent any Party from taking action in pursuance of its obligations under the United Nations Charter for the maintenance of international peace and security.

Article 607 further limits the ability of NAFTA Members to rely on GATT 1994 Article XXI (national security):
Subject to Annex 607, no Party may adopt or maintain a measure restricting imports of an energy or basic petrochemical good from, or exports of an energy or basic petrochemical good to, another Party under Article XXI of the GATT or under Article 2102 (National Security), except to the extent necessary to:

a) supply a military establishment of a Party or enable fulfillment of a critical defense contract of a Party;
b) respond to a situation of armed conflict involving the Party taking the measure;
c) implement national policies or international agreements relating to the non-proliferation of nuclear weapons or other nuclear explosive devices; or
d) respond to direct threats of disruption in the supply of nuclear materials for defense purposes.

According to Annex 607.1, Mexico is not covered by Article 607. Instead, Annex 607.2 states that Article 2102 “shall apply as between Mexico and the other parties.”

For the reasons expressed in Section III.C, however, the United States has an obligation under its FTAs not to establish export restrictions on natural gas, and it is not clear that the United States could rely on a national security exception to deny an export license application for natural gas unrelated to the Naval Petroleum Reserves at this time when it is not even on the list of products subject to export controls for national security reasons.

V. U.S. LAWS OR PRACTICES GOVERNING OR RESTRICTING EXPORTS OF LNG THAT ARE VIEWED BY U.S. TRADING PARTNERS AS INCONSISTENT WITH TRADE AGREEMENTS OR NULLIFYING OR IMPAIRING RIGHTS UNDER TRADE AGREEMENTS COULD BE SUBMITTED TO A WTO OR FTA DISPUTE SETTLEMENT PROCEEDING FOR RESOLUTION

The foregoing sections of this memorandum identify a number of U.S. international trade-related legal obligations and policy considerations governing U.S. export licenses for liquefied natural gas.\textsuperscript{139} Should the DOE decide to deny export license applications for LNG, or should U.S. trading partners\textsuperscript{140} regard the administration of U.S. law governing export licensing to be unreasonable or arbitrary, those countries could raise potential claims of WTO or FTA-

\textsuperscript{139} As such, the memorandum does not weigh the relative merits of various claims or defenses that could be raised before U.S. courts or international dispute settlement bodies.

\textsuperscript{140} This analysis is restricted to U.S. trading partner countries that are members of the WTO or that are signatories to FTAs with the U.S.
related violations in international dispute settlement fora.

For example, WTO Members have access to dispute settlement proceedings under the WTO Dispute Settlement Understanding (DSU) to challenge measures taken by another WTO Member that are perceived to be inconsistent with their obligations under the WTO Agreement, including GATT 1994. The WTO dispute settlement system exists to address “situations in which a Member considers that any benefits accruing to it directly or indirectly under the covered agreements are being impaired by measures taken by another Member.” 141 Since its creation in 1994, the WTO dispute settlement system has been a “plaintiff’s” court with the vast majority of cases resulting in a finding of at least one WTO violation. WTO Members can challenge measures, like U.S. laws, before they have ever been applied142 in any particular case and an adverse impact on the challenging WTO Member (in the form of nullification or impairment of rights under the covered agreements) is presumed.143 Similarly, FTA Members can rely on the dispute settlement provisions contained in each of the FTAs to raise FTA-related violations.

For the foregoing reasons, the DOE’s denial of an export license application pursuant to the “public interest” requirement under 15 U.S.C. § 717b(a) could expose the United States to a potential WTO dispute settlement proceeding or, if the country is a signatory to an FTA with the U.S., a similar proceeding under the terms of the FTA.

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141 Appellate Body Report, United States – Continued Zeroing, WT/DS350/AB/R, para. 176, quoting DSU Art. 3.3.

142 Although WTO panels have distinguished between the reviewability of mandatory versus discretionary measures “as such”, the Appellate Body has not embraced the distinction. Therefore, it is not entirely clear whether the discretionary language in 15 U.S.C. § 717b(a) would be reviewable in the absence of a denial of an export license application.

143 DSU at art. 3.8.
ANNEX A

Containing full text of GATT Article III (national treatment provision) and relevant excerpts from U.S. Free Trade Agreements (provisions regarding national treatment, import and export restrictions, and exceptions)
GATT 1994 – Article III & Ad Note
National Treatment Provision
PART II

Article III*

National Treatment on Internal Taxation and Regulation

1. The contracting parties recognize that internal taxes and other internal charges, and laws, regulations and requirements affecting the internal sale, offering for sale, purchase, transportation, distribution or use of products, and internal quantitative regulations requiring the mixture, processing or use of products in specified amounts or proportions, should not be applied to imported or domestic products so as to afford protection to domestic production.*

2. The products of the territory of any contracting party imported into the territory of any other contracting party shall not be subject, directly or indirectly, to internal taxes or other internal charges of any kind in excess of those applied, directly or indirectly, to like domestic products. Moreover, no contracting party shall otherwise apply internal taxes or other internal charges to imported or domestic products in a manner contrary to the principles set forth in paragraph 1.*

3. With respect to any existing internal tax which is inconsistent with the provisions of paragraph 2, but which is specifically authorized under a trade agreement, in force on April 10, 1947, in which the import duty on the taxed product is bound against increase, the contracting party imposing the tax shall be free to postpone the application of the provisions of paragraph 2 to such tax until such time as it can obtain release from the obligations of such trade agreement in order to permit the increase of such duty to the extent necessary to compensate for the elimination of the protective element of the tax.

4. The products of the territory of any contracting party imported into the territory of any other contracting party shall be accorded treatment no less favourable than that accorded to like products of national origin in respect of all laws, regulations and requirements affecting their internal sale, offering for sale, purchase, transportation, distribution or use. The provisions of this paragraph shall not prevent the application of differential internal transportation charges which are based exclusively on the economic operation of the means of transport and not on the nationality of the product.
5. No contracting party shall establish or maintain any internal quantitative regulation relating to the mixture, processing or use of products in specified amounts or proportions which requires, directly or indirectly, that any specified amount or proportion of any product which is the subject of the regulation must be supplied from domestic sources. Moreover, no contracting party shall otherwise apply internal quantitative regulations in a manner contrary to the principles set forth in paragraph 1.*

6. The provisions of paragraph 5 shall not apply to any internal quantitative regulation in force in the territory of any contracting party on July 1, 1939, April 10, 1947, or March 24, 1948, at the option of that contracting party; Provided that any such regulation which is contrary to the provisions of paragraph 5 shall not be modified to the detriment of imports and shall be treated as a customs duty for the purpose of negotiation.

7. No internal quantitative regulation relating to the mixture, processing or use of products in specified amounts or proportions shall be applied in such a manner as to allocate any such amount or proportion among external sources of supply.

8. (a) The provisions of this Article shall not apply to laws, regulations or requirements governing the procurement by governmental agencies of products purchased for governmental purposes and not with a view to commercial resale or with a view to use in the production of goods for commercial sale.

   (b) The provisions of this Article shall not prevent the payment of subsidies exclusively to domestic producers, including payments to domestic producers derived from the proceeds of internal taxes or charges applied consistently with the provisions of this Article and subsidies effected through governmental purchases of domestic products.

9. The contracting parties recognize that internal maximum price control measures, even though conforming to the other provisions of this Article, can have effects prejudicial to the interests of contracting parties supplying imported products. Accordingly, contracting parties applying such measures shall take account of the interests of exporting contracting parties with a view to avoiding to the fullest practicable extent such prejudicial effects.

10. The provisions of this Article shall not prevent any contracting party from establishing or maintaining internal quantitative regulations relating to exposed cinematograph films and meeting the requirements of Article IV.
ANNEX I

Ad Article II

Paragraph 2 (a)

The cross-reference, in paragraph 2 (a) of Article II, to paragraph 2 of Article III shall only apply after Article III has been modified by the entry into force of the amendment provided for in the Protocol Modifying Part II and Article XXVI of the General Agreement on Tariffs and Trade, dated September 14, 1948.¹

Paragraph 2 (b)

See the note relating to paragraph 1 of Article I.

Paragraph 4

Except where otherwise specifically agreed between the contracting parties which initially negotiated the concession, the provisions of this paragraph will be applied in the light of the provisions of Article 31 of the Havana Charter.

Ad Article III

Any internal tax or other internal charge, or any law, regulation or requirement of the kind referred to in paragraph 1 which applies to an imported product and to the like domestic product and is collected or enforced in the case of the imported product at the time or point of importation, is nevertheless to be regarded as an internal tax or other internal charge, or a law, regulation or requirement of the kind referred to in paragraph 1, and is accordingly subject to the provisions of Article III.

Paragraph 1

The application of paragraph 1 to internal taxes imposed by local governments and authorities with the territory of a contracting party is subject to the provisions of the final paragraph of Article XXIV. The term "reasonable measures" in the last-mentioned paragraph would not require, for example, the repeal of existing national legislation authorizing local governments to impose internal taxes which, although technically inconsistent with the letter of Article III, are not in fact inconsistent with its spirit, if such repeal would result in a serious financial hardship for the local governments or authorities concerned. With regard to taxation by local governments or authorities which is inconsistent with both the letter and spirit of Article III, the term "reasonable measures" would permit a contracting party to eliminate the inconsistent taxation gradually over a transition period, if abrupt action would create serious administrative and financial difficulties.

Paragraph 2

A tax conforming to the requirements of the first sentence of paragraph 2 would be considered to be inconsistent with the provisions of the second sentence only in cases where competition was

¹This Protocol entered into force on 14 December 1948.
involved between, on the one hand, the taxed product and, on the other hand, a directly competitive or substitutable product which was not similarly taxed.

Paragraph 5

Regulations consistent with the provisions of the first sentence of paragraph 5 shall not be considered to be contrary to the provisions of the second sentence in any case in which all of the products subject to the regulations are produced domestically in substantial quantities. A regulation cannot be justified as being consistent with the provisions of the second sentence on the ground that the proportion or amount allocated to each of the products which are the subject of the regulation constitutes an equitable relationship between imported and domestic products.

Ad Article V

Paragraph 5

With regard to transportation charges, the principle laid down in paragraph 5 refers to like products being transported on the same route under like conditions.

Ad Article VI

Paragraph 1

1. Hidden dumping by associated houses (that is, the sale by an importer at a price below that corresponding to the price invoiced by an exporter with whom the importer is associated, and also below the price in the exporting country) constitutes a form of price dumping with respect to which the margin of dumping may be calculated on the basis of the price at which the goods are resold by the importer.

2. It is recognized that, in the case of imports from a country which has a complete or substantially complete monopoly of its trade and where all domestic prices are fixed by the State, special difficulties may exist in determining price comparability for the purposes of paragraph 1, and in such cases importing contracting parties may find it necessary to take into account the possibility that a strict comparison with domestic prices in such a country may not always be appropriate.

Paragraphs 2 and 3

1. As in many other cases in customs administration, a contracting party may require reasonable security (bond or cash deposit) for the payment of anti-dumping or countervailing duty pending final determination of the facts in any case of suspected dumping or subsidization.

2. Multiple currency practices can in certain circumstances constitute a subsidy to exports which may be met by countervailing duties under paragraph 3 or can constitute a form of dumping.
United States-Australia Free Trade Agreement
Entered into force on January 1, 2005
CHAPTER TWO  
NATIONAL TREATMENT AND MARKET ACCESS FOR GOODS

ARTICLE 2.1: SCOPE AND COVERAGE

Except as otherwise provided, this Chapter applies to trade in goods of a Party.

Section A: National Treatment

ARTICLE 2.2: NATIONAL TREATMENT

Each Party shall accord national treatment to the goods of the other Party in accordance with Article III of GATT 1994, including its interpretative notes. To this end, Article III of GATT 1994 and its interpretative notes are incorporated into and made a part of this Agreement, subject to Annex 2-A (Application of Chapter 2).

Section B: Tariffs

ARTICLE 2.3: ELIMINATION OF CUSTOMS DUTIES

1. Except as otherwise provided in this Agreement, each Party shall progressively eliminate its customs duties on originating goods of the other Party in accordance with Annex 2-B (Tariff Elimination).

2. Neither Party may increase an existing customs duty or introduce a new customs duty on imports of an originating good, other than as permitted by this Agreement, subject to Annex 2-A (Application of Chapter 2).

ARTICLE 2.4: CUSTOMS VALUE

The Parties shall apply the provisions of the Customs Valuation Agreement for the purposes of determining the customs value of goods traded between the Parties.

ARTICLE 2.5: TEMPORARY ADMISSION

1. Each Party shall grant duty-free temporary admission for the following goods, imported by or for the use of a resident of the other Party:

   (a) professional equipment, including software and broadcasting and cinematographic equipment, necessary for carrying out the business activity, trade, or profession of a person who qualifies for temporary entry pursuant to the laws of the importing Party;

   (b) goods intended for display or demonstration at exhibitions, fairs, or similar events, including commercial samples for the solicitation of orders, and advertising films and recordings; and
Each Party shall grant duty-free entry to commercial samples of negligible value, and to printed advertising materials, imported from the territory of the other Party, regardless of their origin, but may require that:

(a) the samples be imported solely for the solicitation of orders for goods of, or services provided from the territory of, the other Party or a non-Party; or

(b) the advertising materials be imported in packets that each contain no more than one copy of each such material and that neither those materials nor packets form part of a larger consignment.

ARTICLE 2.8 : WAIVER OF CUSTOMS DUTIES

1. Neither Party may adopt a new waiver of customs duties, or expand with respect to existing recipients or extend to any new recipient the application of an existing waiver of customs duties, where the waiver is conditioned, explicitly or implicitly, on the fulfilment of a performance requirement.

2. Neither Party may condition, explicitly or implicitly, the continuation of any existing waiver of customs duties on the fulfilment of a performance requirement.

3. This Article shall not apply to drawback or duty deferral programs.

Section C : Non-Tariff Measures

ARTICLE 2.9 : IMPORT AND EXPORT RESTRICTIONS

1. Except as otherwise provided in this Agreement, neither Party may adopt or maintain any prohibition or restriction on the importation of any good of the other Party or on the exportation or sale for export of any good destined for the territory of the other Party, except in accordance with Article XI of GATT 1994, including its interpretative notes, and to this end Article XI of GATT 1994, including its interpretative notes, is incorporated into and made a part of this Agreement.

2. The Parties understand that the rights and obligations incorporated by paragraph 1 prohibit, in any circumstances in which any other form of restriction is prohibited, import licensing conditioned on the fulfilment of a performance requirement, export price requirements, and, except as permitted in enforcement of countervailing and antidumping orders and undertakings, import price requirements.

3. In the event that a Party adopts or maintains a prohibition or restriction on the importation from or exportation to a non-Party of a good, nothing in this Agreement shall be construed as preventing the Party from:

(a) limiting or prohibiting the importation from the territory of the other Party of such good of that non-Party; or
(b) requiring as a condition of export of such good of the Party to the territory of the other Party, that the good not be re-exported to the non-Party, directly or indirectly, without being consumed in the territory of the other Party.

4. Paragraphs 1 through 3 shall not apply to the measures set out in Annex 2-A.

5. Nothing in this Article shall be construed as affecting a Party’s rights and obligations under the Agreement on Textiles and Clothing.

ARTICLE 2.10 : ADMINISTRATIVE FEES AND FORMALITIES

1. Each Party shall ensure, in accordance with Article VIII:1 of GATT 1994 and its interpretive notes, that all fees and charges of whatever character (other than customs duties, charges equivalent to an internal tax or other internal charges applied consistently with Article III:2 of GATT 1994, and antidumping and countervailing duties applied pursuant to a Party’s law), imposed on or in connection with importation or exportation, are limited in amount to the approximate cost of services rendered and do not represent indirect protection of domestic products or a taxation of imports or exports for fiscal purposes.

2. Neither Party may require consular transactions, including related fees and charges, in connection with the importation of any good of the other Party.

3. Each Party shall make available on the Internet a current list of the fees and charges it imposes in connection with importation or exportation.

ARTICLE 2.11 : EXPORT TAXES

Neither Party may adopt or maintain any duty, tax, or other charge on the export of any good to the territory of the other Party, unless such duty, tax, or charge is adopted or maintained on any such good when destined for consumption in its territory.

Section D : Other Measures

ARTICLE 2.12 : MERCHANDISE PROCESSING FEE

Neither Party may adopt or maintain a merchandise processing fee on originating goods.

Section E : Institutional Provisions

ARTICLE 2.13 : COMMITTEE ON TRADE IN GOODS

1. The Parties hereby establish a Committee on Trade in Goods, comprising representatives of each Party.

2. The Committee shall meet on the request of either Party or the Joint Committee established in Chapter 21 (Institutional Arrangements and Dispute Settlement) to consider any
ANNEX 2-A
APPLICATION OF CHAPTER TWO

Section A-Measures of the United States

Articles 2.2, 2.3, and 2.9 shall not apply to:

(a) controls by the United States on the export of logs of all species;

(b) (i) measures under existing provisions of the Merchant Marine Act of 1920, 46 App. U.S.C. § 883; the Passenger Vessel Act, 46 App. U.S.C. §§ 289, 292, and 316; and 46 U.S.C. § 12108, to the extent that such measures were mandatory legislation at the time of the accession of the United States to the General Agreement on Tariffs and Trade 1947 (“GATT 1947”) and have not been amended so as to decrease their conformity with Part II of GATT 1947;

(ii) the continuation or prompt renewal of a non-conforming provision of any statute referred to in clause (i); and

(iii) the amendment to a non-conforming provision of any statute referred to in clause (i) to the extent that the amendment does not decrease the conformity of the provision with Articles 2.2 and 2.9; and

(c) actions by the United States authorized by the Dispute Settlement Body of the WTO.
Section B – Measures of Australia

Articles 2.2, 2.3, and 2.9 shall not apply to:

(a) controls by Australia on the exports of woodchips and unprocessed forest products (e.g., whole logs) sourced from native forests outside Regional Forest Agreement regions, or plantation forests within States where Codes of Practice have not been approved by the Australian Government, and Sandalwood (Santalum spicatum) sourced from any State, the Australian Capital Territory, or the Northern Territory;

(b) controls on importation of second hand motor vehicles under Section 17A of the Motor Vehicles Standards Act of 1989 and the Motor Vehicles Standards Regulations of 1989;

(c) wheat marketing arrangements under the Wheat Marketing Act 1989 and the Customs (Prohibited Exports) Regulations 1958, as amended;


(e) sugar marketing arrangements under the Queensland Sugar Industry Amendment Act 2000, as amended;

(f) rice marketing arrangements under the New South Wales Marketing of Primary Products Act 1983, as amended;

(g) horticulture export efficiency licensing arrangements under the Horticulture Marketing and Research and Development Services Act 2000 and Horticulture Marketing and Research and Development (Export Efficiency) Regulations 2002, as amended;

(h) the provisions of and measures under the Livestock Export (Merino) Orders, made under the Export Control Act of 1982, as amended; and

(i) actions by Australia authorized by the Dispute Settlement Body of the WTO.
CHAPTER TWENTY-TWO

GENERAL PROVISIONS AND EXCEPTIONS

ARTICLE 22.1: GENERAL EXCEPTIONS

1. For the purposes of Chapters Two through Eight (National Treatment and Market Access for Goods, Agriculture, Textiles, Rules of Origin, Customs Administration, Sanitary and Phytosanitary Measures, and Technical Barriers to Trade), GATT 1994 Article XX and its interpretive notes are incorporated into and made part of this Agreement, mutatis mutandis. The Parties understand that the measures referred to in GATT 1994 Article XX(b) include environmental measures necessary to protect human, animal, or plant life or health, and that GATT 1994 Article XX(g) applies to measures relating to the conservation of living and non-living exhaustible natural resources.

2. For the purposes of Chapters Ten, Twelve, and Sixteen (Cross Border Trade in Services, Telecommunications, and Electronic Commerce), GATS Article XIV (including its footnotes) is incorporated into and made part of this Agreement, mutatis mutandis. The Parties understand that the measures referred to in GATS Article XIV(b) include environmental measures necessary to protect human, animal, or plant life or health.

ARTICLE 22.2: ESSENTIAL SECURITY

Nothing in this Agreement shall be construed:

(a) to require a Party to furnish or allow access to any information the disclosure of which it determines to be contrary to its essential security interests; or

(b) to preclude a Party from applying measures that it considers necessary for the fulfilment of its obligations with respect to the maintenance or restoration of international peace or security, or the protection of its own essential security interests.

ARTICLE 22.3: TAXATION

1. Except as set out in this Article, nothing in this Agreement shall apply to taxation measures.

2. (a) Nothing in this Agreement shall affect the rights and obligations of either Party under any tax convention. In the event of any inconsistency between this Agreement and any such convention, that convention shall prevail to the extent of the inconsistency.

(b) In the case of a tax convention between the Parties the competent authorities under that convention shall have sole responsibility for
determining whether any inconsistency exists between this Agreement and that
convention.

3. Notwithstanding paragraph 2:
   (a) Article 2.2 (National Treatment) and such other provisions of this Agreement as
       are necessary to give effect to that Article shall apply to taxation measures to the
       same extent as does GATT 1994 Article III; and
   (b) Article 2.11 (Export Taxes) shall apply to taxation measures.

4. Subject to paragraph 2:
   (a) Article 10.2 (National Treatment), Article 13.2 (National Treatment), and Article
       13.5.1 (Cross-Border Trade) shall apply to taxation measures on income, capital
       gains, or on the taxable capital of corporations that relate to the purchase or
       consumption of particular services, except that nothing in this sub-paragraph shall
       prevent a Party from conditioning the receipt or continued receipt of an advantage
       relating to the purchase or consumption of particular services on requirements to
       provide the service in its territory;\textsuperscript{22}\textsuperscript{-1} and
   (b) Articles 11.3, 11.4 (Most-Favoured-Nation Treatment), 10.2 (National
       Treatment), 10.3 (Most-Favoured-Nation Treatment), 13.2, 13.3 (Most-Favoured-
       Nation Treatment), and 13.5.1 shall apply to all taxation measures, other than
       those on income, capital gains, or on the taxable capital of corporations, taxes on
       estates, inheritances, gifts, and generation-skipping transfers;

except that nothing in those Articles shall apply:
   (c) any most-favoured-nation obligation in this Agreement with respect to an
       advantage accorded by a Party pursuant to a tax convention;
   (d) to a non-conforming provision of any existing taxation measure;
   (e) to the continuation or prompt renewal of a non-conforming provision of any
       existing taxation measure;
   (f) to an amendment to a non-conforming provision of any existing taxation measure
       to the extent that the amendment does not decrease its conformity, at the time of
       the amendment, with any of those Articles;

\textsuperscript{22}\textsuperscript{-1}\textsuperscript{}For the avoidance of doubt, nothing in this exception to the obligation imposed by sub-paragraph 4(a) allows a
Party to condition the receipt or continued receipt of an advantage relating to the purchase or consumption of
particular services on the nationality of the service supplier.
(g) to the adoption or enforcement of any taxation measure aimed at ensuring the equitable or effective imposition or collection of taxes (as permitted by GATS Article XIV(d) without regard to the limitation in Article XIV(d) to direct taxes); or

(h) to a provision that conditions the receipt, or continued receipt of an advantage relating to the contributions to, or income of, a pension trust, superannuation fund, or other arrangement to provide pension, superannuation, or similar benefits on a requirement that the Party maintain continuous jurisdiction, regulation, or supervision over such trust, fund, or other arrangement.

5. Subject to paragraph 2 and without prejudice to the rights and obligations of the Parties under paragraph 3, paragraphs 2, 3, and 4 of Article 11.9 (Performance Requirements) shall apply to taxation measures.

6. (a) Article 11.7 (Expropriation and Compensation) shall apply to taxation measures.

(b) Where a Party alleges in writing that a taxation measure of the other Party is an expropriation, that other Party’s designated authority may request in writing consultations between the designated authorities regarding whether a determination that the taxation measure is an expropriation under this Agreement would give rise to an inconsistency with any tax convention between the Parties. Unless the designated authorities agree within sixty days after receipt of the request for consultations (which period may be extended by mutual agreement of such designated authorities) that an inconsistency would arise in case of such determination, the Party alleging an expropriation may pursue the matter under Section B of Chapter 21 (Dispute Settlement Procedures). Notwithstanding sub-paragraph 2(b), the designated authorities shall have sole responsibility with respect to this issue of whether a determination that a taxation measure alleged by a Party to be an expropriation under this Agreement would give rise to an inconsistency with any tax convention between the Parties.

(c) For the purposes of this paragraph, designated authority means:

(i) in the case of Australia, the Secretary to the Treasury or his authorised representative; and

(ii) in the case of the United States, the Assistant Secretary of the Treasury (Tax Policy).
7. For the purposes of this Article, **taxes** and **taxation measures** do not include any import or customs duties.

**ARTICLE 22.4 : DISCLOSURE OF INFORMATION**

1. Nothing in this Agreement shall be construed as requiring a Party to furnish or allow access to confidential information the disclosure of which would impede law enforcement or otherwise be contrary to the public interest\(^{\text{22-2}}\) or which would prejudice the legitimate commercial interests of particular enterprises, public or private.

2. When a Party provides written information pursuant to a request or a requirement under this Agreement and informs the other Party that it considers the information to be of the type described in paragraph 1, the Party receiving the information shall not disclose or use the information for a purpose other than that for which it was requested or required, except where the disclosure or use is required or authorised pursuant to the receiving Party’s law and regulations or with the prior consent of the Party providing the information.

**ARTICLE 22.5 : ANTI-CORRUPTION**

The Parties shall cooperate in seeking to eliminate bribery and corruption and to promote transparency in international trade. They are committed to seeking avenues in relevant international fora to address bribery, corruption, and transparency and to build on anti-corruption efforts in these fora.

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\(^{22-2}\) For the purposes of this paragraph the public interest includes, for Australia, compliance with the Privacy Act (Cth) 1988.
United States-Bahrain Free Trade Agreement
Entered into force in August 2006
CHAPTER TWO
NATIONAL TREATMENT AND MARKET ACCESS FOR GOODS

ARTICLE 2.1: SCOPE AND COVERAGE

Except as otherwise provided, this Chapter applies to trade in goods of a Party.

Section A: National Treatment

ARTICLE 2.2: NATIONAL TREATMENT

1. Each Party shall accord national treatment to the goods of the other Party in accordance with Article III of GATT 1994, including its interpretive notes, and to this end Article III of GATT 1994 and its interpretative notes are incorporated into and made a part of this Agreement, mutatis mutandis.

2. The treatment to be accorded by a Party under paragraph 1 means, with respect to a regional level of government, treatment no less favorable than the most favorable treatment that regional level government accords to any like, directly competitive, or substitutable goods, as the case may be, of the Party of which it forms a part.

3. Paragraphs 1 and 2 shall not apply to the measures set out in Annex 2-A.

Section B: Tariff Elimination

ARTICLE 2.3: TARIFF ELIMINATION

1. Except as otherwise provided in this Agreement, neither Party may increase any existing customs duty, or adopt any new customs duty, on an originating good.

2. Except as otherwise provided in this Agreement, each Party shall progressively eliminate its customs duties on originating goods, in accordance with its Schedule to Annex 2-B.

3. On the request of either Party, the Parties shall consult to consider accelerating the elimination of customs duties set out in their Schedules to Annex 2-B. An agreement by the Parties to accelerate the elimination of a customs duty on a good shall supercede any duty rate or staging category determined pursuant to their Schedules to Annex 2-B for that good when approved by each Party in accordance with its applicable legal procedures.

4. For greater certainty, a Party may:

   (a) raise a customs duty back to the level established in its Schedule to Annex 2-B following a unilateral reduction; or

   (b) maintain or increase a customs duty as authorized by the Dispute Settlement Body of the WTO.
ARTICLE 2.7: DUTY-FREE ENTRY OF COMMERCIAL SAMPLES OF NEGLIGIBLE VALUE AND PRINTED ADVERTISING MATERIALS

Each Party shall grant duty-free entry to commercial samples of negligible value, and to printed advertising materials, imported from the territory of the other Party, regardless of their origin, but may require that:

(a) such samples be imported solely for the solicitation of orders for goods, or services provided from the territory, of the other Party or a non-Party; or

(b) such advertising materials be imported in packets that each contain no more than one copy of each such material and that neither such materials nor packets form part of a larger consignment.

Section D: Non-Tariff Measures

ARTICLE 2.8: IMPORT AND EXPORT RESTRICTIONS

1. Except as otherwise provided in this Agreement, neither Party may adopt or maintain any prohibition or restriction on the importation of any good of the other Party or on the exportation or sale for export of any good destined for the territory of the other Party, except in accordance with Article XI of GATT 1994 and its interpretive notes, and to this end Article XI of GATT 1994 and its interpretive notes are incorporated into and made a part of this Agreement, mutatis mutandis.\(^1\)

2. The Parties understand that GATT 1994 rights and obligations incorporated by paragraph 1 prohibit, in any circumstances in which any other form of restriction is prohibited, a Party from adopting or maintaining:

(a) export and import price requirements, except as permitted in enforcement of countervailing and antidumping duty orders and undertakings;

(b) measures conditioning the grant of an import license on the fulfillment of a performance requirement; or

(c) voluntary export restraints inconsistent with Article VI of GATT 1994, as implemented under Article 18 of the WTO Agreement on Subsidies and Countervailing Measures and Article 8.1 of the WTO Agreement on Implementation of Article VI of GATT 1994.

3. In the event that a Party adopts or maintains a prohibition or restriction on the importation from or exportation to a non-Party of a good, no provision of this Agreement shall be construed to prevent the Party from:

(a) limiting or prohibiting the importation of the good of the non-Party from the territory of the other Party;

(b) requiring as a condition for exporting the good of the Party to the territory of the other Party, that the good not be re-exported to the non-Party, directly or indirectly, without being consumed in the territory of the other Party.

4. In the event that a Party adopts or maintains a prohibition or restriction on the importation of a good from a non-Party, the Parties, on the request of either Party,

\(^1\) For greater certainty, paragraph 1 applies to prohibitions or restrictions on the importation of remanufactured products.
shall consult with a view to avoiding undue interference with or distortion of pricing, marketing, and distribution arrangements in the other Party.

5. Paragraphs 1 through 4 shall not apply to the measures set out in Annex 2-A.

ARTICLE 2.9: ADMINISTRATIVE FEES AND FORMALITIES

1. Each Party shall ensure, in accordance with Article VIII:1 of GATT 1994 and its interpretive notes, that all fees and charges of whatever character (other than import and export duties, charges equivalent to an internal tax or other internal charges applied consistently with Article III:2 of GATT 1994, and antidumping and countervailing duties applied pursuant to a Party’s law) imposed on, or in connection with, importation or exportation are limited in amount to the approximate cost of services rendered and do not represent an indirect protection to domestic goods or a taxation of imports or exports for fiscal purposes.

2. Neither Party may require consular transactions, including related fees and charges, in connection with the importation of any good of the other Party.

3. Each Party shall make available on the Internet a current list of the fees and charges it imposes in connection with importation or exportation.

4. The United States shall eliminate its merchandise processing fee on originating goods.

ARTICLE 2.10: EXPORT TAXES

Neither Party may adopt or maintain any tax, duty, or other charge on the export of any good to the territory of other Party, unless the tax, duty, or charge is also adopted or maintained on the good when destined for domestic consumption.

Section E: Agriculture

ARTICLE 2.11: AGRICULTURAL EXPORT SUBSIDIES

1. The Parties share the objective of the multilateral elimination of export subsidies for agricultural goods and shall work together toward an agreement in the WTO to eliminate those subsidies and prevent their reintroduction in any form.

2. Except as provided in paragraph 3, neither Party may introduce or maintain any export subsidy on any agricultural good destined for the territory of the other Party.

3. Where an exporting Party considers that a non-Party is exporting an agricultural good to the territory of the other Party with the benefit of export subsidies, the importing Party shall, on written request of the exporting Party, consult with the exporting Party with a view to agreeing on specific measures that the importing Party may adopt to counter the effect of such subsidized imports. If the importing Party adopts the agreed-on measures, the exporting Party shall refrain from applying any export subsidy to exports of such good to the territory of the importing Party.2

Section F: Definitions

ARTICLE 2.12: DEFINITIONS

2 For greater certainty, each Party confirms that any measure that it adopts pursuant to this paragraph shall be consistent with the WTO Agreement.
ANNEX 2-A
NATIONAL TREATMENT AND IMPORT AND EXPORT RESTRICTIONS

Section A: Measures of the United States

Paragraphs 1 and 2 of Article 2.2 and paragraphs 1 through 4 of Article 2.8 shall not apply to:

(a) controls on the export of logs of all species;

(b) (i) measures under existing provisions of the *Merchant Marine Act of 1920*, 46 App. U.S.C. § 883; the *Passenger Vessel Act*, 46 App. U.S.C. §§ 289, 292, and 316; and 46 U.S.C. § 12108, to the extent that such measures were mandatory legislation at the time the United States acceded to the *General Agreement on Tariffs and Trade 1947* (“GATT 1947”) and have not been amended so as to decrease their conformity with Part II of GATT 1947;

(ii) the continuation or prompt renewal of a non-conforming provision of any statute referred to in clause (i); and

(iii) the amendment to a non-conforming provision of any statute referred to in clause (i) to the extent that the amendment does not decrease the conformity of the provision with Articles 2.2 and 2.8;

(c) actions authorized by the Dispute Settlement Body of the WTO; and

(d) actions authorized by the Agreement on Textiles and Clothing.

Section B: Measures of Bahrain

Paragraphs 1 and 2 of Article 2.2 and paragraphs 1 through 4 of Article 2.8 shall not apply to:

(a) prohibitions on the importation of retreaded tires, for ten years from the effective date of this Agreement; and

(b) actions authorized by the Dispute Settlement Body of the WTO.
CHAPTER TWENTY
EXCEPTIONS

ARTICLE 20.1: GENERAL EXCEPTIONS

1. For purposes of Chapters Two through Seven (National Treatment and Market Access for Goods, Textiles and Apparel, Rules of Origin, Customs Administration, Sanitary and Phytosanitary Measures, and Technical Barriers to Trade), Article XX of GATT 1994 and its interpretive notes are incorporated into and made part of this Agreement, *mutatis mutandis*. The Parties understand that the measures referred to in Article XX(b) of GATT 1994 include environmental measures necessary to protect human, animal, or plant life or health, and that Article XX(g) of GATT 1994 applies to measures relating to the conservation of living and non-living exhaustible natural resources.

2. For purposes of Chapters Ten, Twelve, and Thirteen\(^1\) (Cross-Border Trade in Services, Telecommunications, and Electronic Commerce), Article XIV of GATS (including its footnotes) is incorporated into and made part of this Agreement, *mutatis mutandis*. The Parties understand that the measures referred to in Article XIV(b) of GATS include environmental measures necessary to protect human, animal, or plant life or health.

ARTICLE 20.2: ESSENTIAL SECURITY

Nothing in this Agreement shall be construed:

(a) to require a Party to furnish or allow access to any information the disclosure of which it determines to be contrary to its essential security interests; or

(b) to preclude a Party from applying measures that it considers necessary for the fulfillment of its obligations with respect to the maintenance or restoration of international peace or security or the protection of its own essential security interests.

ARTICLE 20.3: TAXATION

1. Except as set out in this Article, nothing in this Agreement shall apply to taxation measures.

2. Nothing in this Agreement shall affect the rights and obligations of either Party under any tax convention. In the event of any inconsistency between this Agreement and any such convention, that convention shall prevail to the extent of the inconsistency. In the case of a tax convention between the Parties, the competent authorities under that convention shall have sole responsibility for determining whether any inconsistency exists between this Agreement and that convention.

3. Notwithstanding paragraph 2:

(a) Article 2.2 (National Treatment and Market Access for Goods – National Treatment) and such other provisions of this Agreement as are necessary to give effect to that Article shall apply to taxation measures to the same extent as does Article III of GATT 1994; and

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\(^1\) This Article is without prejudice to whether digital products should be classified as goods or services.
(b) Article 2.10 (National Treatment and Market Access for Goods – Export Taxes) shall apply to taxation measures.

4. Subject to paragraph 2:

(a) Article 10.2 (Cross-Border Trade in Services – National Treatment) and Article 11.2 (Financial Services – National Treatment) shall apply to taxation measures on income, capital gains, or on the taxable capital of corporations that relate to the purchase or consumption of particular services, except that nothing in this subparagraph shall prevent a Party from conditioning the receipt or continued receipt of an advantage relating to the purchase or consumption of particular services on requirements to provide the service in its territory; and

(b) Articles 10.2 (Cross-Border Trade in Services – National Treatment) and 10.3 (Cross-Border Trade in Services – Most-Favored-Nation Treatment) and Articles 11.2 (Financial Services – National Treatment) and 11.3 (Financial Services – Most-Favored-Nation Treatment) shall apply to all taxation measures other than those on income, capital gains, or on the taxable capital of corporations, taxes on estates, inheritances, gifts, and generation-skipping transfers, except that nothing in those Articles shall apply:

(c) any most-favored-nation obligation with respect to an advantage accorded by a Party pursuant to a tax convention;

(d) to a non-conforming provision of any existing taxation measure;

(e) to the continuation or prompt renewal of a non-conforming provision of any existing taxation measure;

(f) to an amendment to a non-conforming provision of any existing taxation measure to the extent that the amendment does not decrease its conformity, at the time of the amendment, with any of those Articles;

(g) to the adoption or enforcement of any taxation measure aimed at ensuring the equitable or effective imposition or collection of taxes (as permitted by Article XIV(d) of GATS); or

(h) to a provision that conditions the receipt, or continued receipt, of an advantage relating to the contributions to, or income of, pension trusts or pension plans on a requirement that the Party maintain continuous jurisdiction over the pension trust or pension plan.

ARTICLE 20.4: DISCLOSURE OF INFORMATION

Nothing in this Agreement shall be construed to require a Party to furnish or allow access to information the disclosure of which would impede law enforcement or would be contrary to the Party’s law protecting personal privacy or the financial affairs and accounts of individual customers of financial institutions.
United States-Chile Free Trade Agreement
Entered into force on January 1, 2004
Chapter Three
National Treatment and Market Access for Goods

Article 3.1:  Scope and Coverage

Except as otherwise provided, this Chapter applies to trade in goods of a Party.

Section A - National Treatment

Article 3.2:  National Treatment

1. Each Party shall accord national treatment to the goods of the other Party in accordance with Article III of GATT 1994, including its interpretative notes, and to this end Article III of GATT 1994, and its interpretative notes, are incorporated into and made part of this Agreement, mutatis mutandis.

2. The provisions of paragraph 1 regarding national treatment shall mean, with respect to a regional level of government, treatment no less favorable than the most favorable treatment that regional level of government accords to any like, directly competitive, or substitutable goods, as the case may be, of the Party of which it forms a part.¹

3. Paragraphs 1 and 2 shall not apply to the measures set out in Annex 3.2.

Section B - Tariff Elimination

Article 3.3:  Tariff Elimination

1. Except as otherwise provided in this Agreement, neither Party may increase any existing customs duty, or adopt any customs duty, on an originating good.

2. Except as otherwise provided in this Agreement, each Party shall progressively eliminate its customs duties on originating goods in accordance with Annex 3.3.

3. The United States shall eliminate customs duties on any non-agricultural originating goods that, after the date of entry into force of this Agreement, are designated as articles eligible for duty-free treatment under the U.S. Generalized System of Preferences, effective from the date of such designation.

4. On the request of either Party, the Parties shall consult to consider accelerating the elimination of customs duties set out in their Schedules to Annex 3.3. An agreement

¹ For greater certainty, “goods of the Party” includes goods produced in a state or region of that Party.
Section D - Non-Tariff Measures

Article 3.11: Import and Export Restrictions

1. Except as otherwise provided in this Agreement, neither Party may adopt or maintain any prohibition or restriction on the importation of any good of the other Party or on the exportation or sale for export of any good destined for the territory of the other Party, except in accordance with Article XI of GATT 1994 and its interpretative notes and to this end Article XI of GATT 1994 and its interpretative notes are incorporated into and made a part of this Agreement, mutatis mutandis.

2. The Parties understand that the GATT rights and obligations incorporated by paragraph 1 prohibit, in any circumstances in which any other form of restriction is prohibited, a Party from adopting or maintaining:

   (a) export and import price requirements, except as permitted in enforcement of countervailing and antidumping orders and undertakings;

   (b) import licensing conditioned on the fulfilment of a performance requirement; or

   (c) voluntary export restraints not consistent with Article VI of GATT 1994, as implemented under Article 18 of the SCM Agreement and Article 8.1 of the AD Agreement.

3. In the event that a Party adopts or maintains a prohibition or restriction on the importation from or exportation to a non-Party of a good, nothing in this Agreement shall be construed to prevent the Party from:

   (a) limiting or prohibiting the importation from the territory of the other Party of such good of that non-Party; or

   (b) requiring as a condition of export of such good of the Party to the territory of the other Party, that the good not be re-exported to the non-Party, directly or indirectly, without being consumed in the territory of the other Party.

4. In the event that a Party adopts or maintains a prohibition or restriction on the importation of a good from a non-Party, the Parties, on the request of either Party, shall consult with a view to avoiding undue interference with or distortion of pricing, marketing, and distribution arrangements in the other Party.

5. Paragraphs 1 through 4 shall not apply to the measures set out in Annex 3.2.
Annex 3.2

National Treatment and Import and Export Restrictions

Section A - Measures of the United States

Article 3.2 and Article 3.11 shall not apply to:

(a) controls by the United States on the export of logs of all species;

(b) (i) measures under existing provisions of the Merchant Marine Act of 1920, 46 App. U.S.C. § 883; the Passenger Vessel Act, 46 App. U.S.C. §§ 289, 292 and 316; and 46 U.S.C. § 12108, to the extent that such measures were mandatory legislation at the time of the United States accession to the General Agreement on Tariffs and Trade 1947 and have not been amended so as to decrease their conformity with Part II of GATT 1947;

(ii) the continuation or prompt renewal of a non-conforming provision of any statute referred to in clause (i); and

(iii) the amendment to a non-conforming provision of any statute referred to in clause (i) to the extent that the amendment does not decrease the conformity of the provision with Articles 3.2 and 3.11;

(c) actions by the United States authorized by the Dispute Settlement Body of the WTO; and

(d) actions by the United States authorized by the Agreement on Textiles and Clothing.
Section B - Measures of Chile

1. Article 3.2 and Article 3.11 shall not apply to actions by Chile authorized by the Dispute Settlement Body of the WTO.

2. Article 3.11 shall not apply to measures of Chile relating to imports of used vehicles.
Chapter Twenty-Three

Exceptions

Article 23.1: General Exceptions

1. For purposes of Chapters Three through Seven (National Treatment and Market Access for Goods, Rules of Origin and Origin Procedures, Customs Administration, Sanitary and Phytosanitary Measures, and Technical Barriers to Trade), Article XX of GATT 1994 and its interpretive notes are incorporated into and made part of this Agreement, mutatis mutandis. The Parties understand that the measures referred to in Article XX(b) of GATT 1994 include environmental measures necessary to protect human, animal, or plant life or health, and that Article XX(g) of GATT 1994 applies to measures relating to the conservation of living and non-living exhaustible natural resources.

2. For purposes of Chapters Eleven, Thirteen, and Fifteen (Cross-Border Trade in Services, Telecommunications, and Electronic Commerce), Article XIV of GATS (including its footnotes) is incorporated into and made part of this Agreement. The Parties understand that the measures referred to in Article XIV(b) of GATS include environmental measures necessary to protect human, animal, or plant life or health.

Article 23.2: Essential Security

Nothing in this Agreement shall be construed:

(a) to require a Party to furnish or allow access to any information the disclosure of which it determines to be contrary to its essential security interests; or

(b) to preclude a Party from applying measures that it considers necessary for the fulfillment of its obligations under the United Nations Charter with respect to the maintenance or restoration of international peace or security, or the protection of its own essential security interests.

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1 This Article is without prejudice to whether digital products should be classified as goods or services.

2 If Article XIV of GATS is amended, this Article shall be amended, as appropriate, after consultations between the Parties.
Article 23.3: Taxation

1. Except as set out in this Article, nothing in this Agreement shall apply to taxation measures.

2. Nothing in this Agreement shall affect the rights and obligations of either Party under any tax convention. In the event of any inconsistency between this Agreement and any such convention, that convention shall prevail to the extent of the inconsistency. In the case of a tax convention between the Parties, the competent authorities under that convention shall have sole responsibility for determining whether any inconsistency exists between this Agreement and that convention.

3. Notwithstanding paragraph 2:

   (a) Article 3.2 (Market Access – National Treatment) and such other provisions of this Agreement as are necessary to give effect to that Article shall apply to taxation measures to the same extent as does Article III of the GATT 1994; and

   (b) Articles 3.13 (Market Access – Export Taxes) and 3.14 (Market Access – Luxury Tax) shall apply to taxation measures.

4. Subject to paragraph 2:

   (a) Article 11.2 (Cross-Border Trade in Services – National Treatment) and Article 12.2 (Financial Services – National Treatment) shall apply to taxation measures on income, capital gains, or on the taxable capital of corporations that relate to the purchase or consumption of particular services, except that nothing in this subparagraph shall prevent a Party from conditioning the receipt or continued receipt of an advantage relating to the purchase or consumption of particular services on requirements to provide the service in its territory; and

   (b) Articles 10.2 (Investment – National Treatment) and 10.3 (Investment – Most-Favored-Nation Treatment), Articles 11.2 (Cross-Border Trade in Services – National Treatment) and 11.3 (Cross-Border Trade in Services – Most-Favored Nation Treatment), and Articles 12.2 (Financial Services – National Treatment) and 12.3 (Financial Services – Most-Favored-Nation Treatment) shall apply to all taxation measures, other than those on income, capital gains, or on the taxable capital of corporations, taxes on estates, inheritances, gifts, and generation-skipping transfers,
except that nothing in those Articles shall apply:

(c) any most-favored-nation obligation with respect to an advantage accorded by a Party pursuant to a tax convention;

(d) to a non-conforming provision of any existing taxation measure;

(e) to the continuation or prompt renewal of a non-conforming provision of any existing taxation measure;

(f) to an amendment to a non-conforming provision of any existing taxation measure to the extent that the amendment does not decrease its conformity, at the time of the amendment, with any of those Articles;

(g) to the adoption or enforcement of any taxation measure aimed at ensuring the equitable or effective imposition or collection of taxes (as permitted by Article XIV(d) of GATS);

(h) to a provision that conditions the receipt, or continued receipt, of an advantage relating to the contributions to, or income of, pension trusts or pension plans on a requirement that the Party maintain continuous jurisdiction over the pension trust or pension plan; or

(i) to any excise tax on insurance premiums adopted by Chile to the extent that such tax would, if levied by the United States, be covered by subparagraphs (d), (e), or (f).

5. Subject to paragraph 2 and without prejudice to the rights and obligations of the Parties under paragraph 3, Article 10.5(2), (3), and (4) (Investment – Performance Requirements) shall apply to taxation measures.

6. Article 10.9 (Expropriation and Compensation) and Article 10.15 (Submission of a Claim to Arbitration) shall apply to a taxation measure alleged to be an expropriation or a breach of an investment agreement or investment authorization. However, no investor may invoke Article 10.9 as the basis of a claim where it has been determined pursuant to this paragraph that the measure is not an expropriation. An investor that seeks to invoke Article 10.9 with respect to a taxation measure must first refer to the competent authorities set out in Annex 23.3 at the time that it gives its notice of intent under Article 10.15(4) the issue of whether that taxation measure involves an expropriation. If the competent authorities do not agree to consider the issue or, having agreed to consider it, fail to agree that the measure is not an expropriation within a period of six months of such referral, the investor may submit its claim to arbitration under Article 10.15.
Article 23.4: Balance of Payments Measures on Trade in Goods

Should a Party decide to impose measures for balance of payments purposes, it shall do so only in accordance with that Party’s rights and obligations under GATT 1994, including the Declaration on Trade Measures Taken for Balance of Payments Purposes (1979 Declaration) and the Understanding on the Balance of Payments Provisions of the GATT 1994 (BOP Understanding). In adopting such measures, the Party shall immediately consult with the other Party and shall not impair the relative benefits accorded to the other Party under this Agreement.3

Article 23.5: Disclosure of Information

Nothing in this Agreement shall be construed to require a Party to furnish or allow access to information the disclosure of which would impede law enforcement or would be contrary to the Party’s law protecting personal privacy or the financial affairs and accounts of individual customers of financial institutions.

Article 23.6: Definitions

For purposes of this Chapter:

tax convention means a convention for the avoidance of double taxation or other international taxation agreement or arrangement; and

taxes and taxation measures do not include:

(a) a customs duty; or

(b) the measures listed in exceptions (b) and (c) of the definition of customs duty.

3 For greater certainty, this Article applies to balance of payments measures imposed on trade in goods.
Annex 23.3

Competent Authorities

For purposes of this Chapter:

**competent authorities** means

(a) in the case of Chile, the *Director del Servicio de Impuestos Internos, Ministerio de Hacienda*; and

(b) in the case of the United States, the Assistant Secretary of the Treasury (Tax Policy), Department of the Treasury.
Dominican Republic-Central America-United States Free Trade Agreement (CAFTA-DR)
Entered into force on rolling basis between March 1, 2006 and January 1, 2009

Countries: Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and the Dominican Republic
Chapter Three

National Treatment and Market Access for Goods

Article 3.1: Scope and Coverage

Except as otherwise provided, this Chapter applies to trade in goods of a Party.

Section A: National Treatment

Article 3.2: National Treatment

1. Each Party shall accord national treatment to the goods of another Party in accordance with Article III of the GATT 1994, including its interpretive notes, and to this end Article III of the GATT 1994 and its interpretative notes are incorporated into and made part of this Agreement, mutatis mutandis.

2. The provisions of paragraph 1 regarding national treatment shall mean, with respect to a regional level of government, treatment no less favorable than the most favorable treatment that regional level of government accords to any like, directly competitive, or substitutable goods, as the case may be, of the Party of which it forms a part.

3. Paragraphs 1 and 2 shall not apply to the measures set out in Annex 3.2.

Section B: Tariff Elimination

Article 3.3: Tariff Elimination

1. Except as otherwise provided in this Agreement, no Party may increase any existing customs duty, or adopt any new customs duty, on an originating good.

2. Except as otherwise provided in this Agreement, each Party shall progressively eliminate its customs duties on originating goods, in accordance with Annex 3.3.¹

¹ For greater certainty, except as otherwise provided in this Agreement, each Central American Party and the Dominican Republic shall provide that any originating good is entitled to the tariff treatment for the good set out in its Schedule to Annex 3.3, regardless of whether the good is imported into its territory from the territory of the United States or any other Party. An originating good may include a good produced in a Central American Party or the Dominican Republic with materials from the United States.
Article 3.6: Goods Re-entered after Repair or Alteration

1. No Party may apply a customs duty to a good, regardless of its origin, that re-enters its territory after that good has been temporarily exported from its territory to the territory of another Party for repair or alteration, regardless of whether such repair or alteration could be performed in the territory of the Party from which the good was exported for repair or alteration.

2. No Party may apply a customs duty to a good, regardless of its origin, admitted temporarily from the territory of another Party for repair or alteration.

3. For purposes of this Article, repair or alteration does not include an operation or process that:
   
   (a) destroys a good’s essential characteristics or creates a new or commercially different good; or
   
   (b) transforms an unfinished good into a finished good.

Article 3.7: Duty-Free Entry of Commercial Samples of Negligible Value and Printed Advertising Materials

Each Party shall grant duty-free entry to commercial samples of negligible value and to printed advertising materials, imported from the territory of another Party, regardless of their origin, but may require that:

   (a) such samples be imported solely for the solicitation of orders for goods, or services provided from the territory, of another Party or a non-Party; or

   (b) such advertising materials be imported in packets that each contain no more than one copy of each such material and that neither such materials nor packets form part of a larger consignment.

Section D: Non-Tariff Measures

Article 3.8: Import and Export Restrictions

1. Except as otherwise provided in this Agreement, no Party may adopt or maintain any prohibition or restriction on the importation of any good of another Party or on the exportation or sale for export of any good destined for the territory of another Party, except in accordance with Article XI of the GATT 1994 and its interpretative notes, and to this end Article XI of the GATT
1994 and its interpretative notes are incorporated into and made a part of this Agreement, *mutatis mutandis*.

2. The Parties understand that the GATT 1994 rights and obligations incorporated by paragraph 1 prohibit, in any circumstances in which any other form of restriction is prohibited, a Party from adopting or maintaining:

   (a) export and import price requirements, except as permitted in enforcement of countervailing and antidumping duty orders and undertakings;

   (b) import licensing conditioned on the fulfillment of a performance requirement, except as provided in a Party’s Schedule to Annex 3.3; or

   (c) voluntary export restraints inconsistent with Article VI of the GATT 1994, as implemented under Article 18 of the SCM Agreement and Article 8.1 of the AD Agreement.

3. In the event that a Party adopts or maintains a prohibition or restriction on the importation from or exportation to a non-Party of a good, nothing in this Agreement shall be construed to prevent the Party from:

   (a) limiting or prohibiting the importation from the territory of another Party of such good of that non-Party; or

   (b) requiring as a condition of export of such good of the Party to the territory of another Party, that the good not be re-exported to the non-Party, directly or indirectly, without being consumed in the territory of the other Party.

4. In the event that a Party adopts or maintains a prohibition or restriction on the importation of a good from a non-Party, the Parties, on the request of any Party, shall consult with a view to avoiding undue interference with or distortion of pricing, marketing, or distribution arrangements in another Party.

5. Paragraphs 1 through 4 shall not apply to the measures set out in Annex 3.2.

6. Neither a Central American Party nor the Dominican Republic may, as a condition for engaging in importation or for the import of a good, require a person of another Party to establish or maintain a contractual or other relationship with a dealer in its territory.

7. Neither a Central American Party nor the Dominican Republic may remedy a violation or alleged violation of any law, regulation, or other measure regulating or otherwise relating to the

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2 For greater certainty, this paragraph applies, *inter alia*, to prohibitions or restrictions on the importation of remanufactured goods.
relationship between any dealer in its territory and any person of another Party, by prohibiting or restricting the importation of any good of another Party.

8. For purposes of this Article:

**dealer** means a person of a Party who is responsible for the distribution, agency, concession, or representation in the territory of that Party of goods of another Party; and

**remedy** means to obtain redress or impose a penalty, including through a provisional, precautionary, or permanent measure.

**Article 3.9: Import Licensing**

1. No Party may adopt or maintain a measure that is inconsistent with the Import Licensing Agreement.

2. Promptly after entry into force of this Agreement, each Party shall notify the other Parties of any existing import licensing procedures, and thereafter shall notify the other Parties of any new import licensing procedure and any modification to its existing import licensing procedures, within 60 days before it takes effect. A notification provided under this Article shall:

   (a) include the information specified in Article 5 of the Import Licensing Agreement; and

   (b) be without prejudice as to whether the import licensing procedure is consistent with this Agreement.

3. No Party may apply an import licensing procedure to a good of another Party unless it has provided notification in accordance with paragraph 2.

**Article 3.10: Administrative Fees and Formalities**

1. Each Party shall ensure, in accordance with Article VIII:1 of the GATT 1994 and its interpretive notes, that all fees and charges of whatever character (other than customs duties, charges equivalent to an internal tax or other internal charge applied consistently with Article III:2 of the GATT 1994, and antidumping and countervailing duties) imposed on or in connection with importation or exportation are limited in amount to the approximate cost of services rendered and do not represent an indirect protection to domestic products or a taxation of imports or exports for fiscal purposes.

2. No Party may require consular transactions, including related fees and charges, in connection with the importation of any good of another Party.
Annex 3.2

National Treatment and Import and Export Restrictions

Section A: Measures of Costa Rica

Articles 3.2 and 3.8 shall not apply to:

(a) controls on the import of crude oil, its fuel, derivatives, asphalt, and gasoline pursuant to Law No. 7356 of September 6, 1993;

(b) controls on the export of wood in logs and boards from forests pursuant to Law No. 7575 of April 16, 1996;

(c) controls on the export of hydrocarbons pursuant to Law No. 7399 of May 3, 1994;

(d) controls on the export of coffee pursuant to Law No. 2762 of June 21, 1961;

(e) controls on the import and export of ethanol and crude rums pursuant to Law No. 8 of October 31, 1885;

(f) controls to establish a minimum export price for bananas, pursuant to Law No. 7472 of January 19, 1995; and

(g) actions authorized by the Dispute Settlement Body of the WTO.

Section B: Measures of the Dominican Republic

Articles 3.2 and 3.8 shall not apply to:

(a) controls on the importation of motor vehicles and motorcycles older than five years, and vehicles greater or equal to five tons older than 15 years, pursuant to Law No. 147 of December 27, 2000, and Law No. 12-01 of January 17, 2001;8

(b) controls on the importation of used household appliances, pursuant to Law No. 147 of December 27, 2000;9

(c) controls on the importation of used clothes, pursuant to Law No. 458 of January 3,

8 The controls identified in this subparagraph do not apply to remanufactured goods.

9 The controls identified in this subparagraph do not apply to remanufactured goods.
controls on the importation of motor vehicles not suitable for operation, pursuant to Decree No. 671-02 of August 27, 2002;\(^{10}\) and

(e) actions by the Dominican Republic authorized by the Dispute Settlement Body of the WTO.

Section C: Measures of El Salvador

Articles 3.2 and 3.8 shall not apply to:

(a) controls on the importation of arms and ammunition, parts, and accessories included in HS Chapter 93, pursuant to Decree No. 655 of July 26, 1999 and its amendment pursuant to Decree No. 1035 of November 13, 2002;

(b) controls on the importation of motor vehicles older than eight years, and on buses and trucks older than 15 years, pursuant to Article 1 of Decree No. 357 of April 6, 2001;\(^{11}\)

(c) controls on the importation of sacks and bags made out of jute and other similar textile fibers in subheading 6305.10 pursuant to Article 1 of Decree No. 1097 of July 10, 1953. El Salvador shall eliminate the controls identified in this subparagraph ten years after the date of entry into force of this Agreement; and

(d) actions authorized by the Dispute Settlement Body of the WTO.

Section D: Measures of Guatemala

Articles 3.2 and 3.8 shall not apply to:

(a) controls on the exportation of timber in round logs or worked logs and sawn timber measuring more than 11 centimeters in thickness, pursuant to the *Ley de Bosques* Legislative Decree No. 101-96 of October 31, 1996;

(b) controls on the exportation of coffee pursuant to the *Ley del Café*, Legislative Decree No. 19-69 of April 22, 1969;

\(^{10}\) The controls identified in this subparagraph do not apply to remanufactured goods.

\(^{11}\) The controls identified in this subparagraph do not apply to remanufactured goods.
controls on the importation of weapons pursuant to the Ley de Armas y Municiones, Legislative Decree No. 39-89 of June 29, 1989; and

actions authorized by the Dispute Settlement Body of the WTO.

Section E: Measures of Honduras

Articles 3.2 and 3.8 shall not apply to:

(a) controls on the exportation of wood from broadleaved forests pursuant to Decree No. 323-98 of December 29, 1998;

(b) controls on the importation of arms and ammunitions pursuant to Article 292 of Decree No. 131 of January 11, 1982;

(c) controls on the importation of motor vehicles older than seven years and buses older than ten years pursuant to Article 7 of Decree No. 194-2002 of May 15, 2002; and

(d) actions authorized by the Dispute Settlement Body of the WTO.

Section F: Measures of Nicaragua

1. Articles 3.2 and 3.8 shall not apply to:

(a) controls on the exportation of basic foodstuffs provided that these controls are used to temporarily alleviate a critical shortage of that particular food item. For the purposes of this subparagraph, “temporarily” means up to one year, or such longer period as the United States and Nicaragua may agree;

(b) controls on the importation of motor vehicles older than seven years pursuant to Article 112 of Decree No. 453 of May 6, 2003; and

(c) actions authorized by the Dispute Settlement Body of the WTO.

2. For purposes of paragraph 1, “basic foodstuffs” include the following:

Beans

12 The controls identified in this subparagraph do not apply to remanufactured goods.

13 The controls identified in this subparagraph do not apply to remanufactured goods.
Brown sugar
Chicken meat
Coffee
Corn
Corn flour
Corn tortillas
Powdered milk
Rice
Salt
Vegetable oil

3. Notwithstanding Articles 3.2 and 3.8, for the first ten years after the date of entry into force of this Agreement, Nicaragua may maintain its existing prohibitions or restrictions on the importation of the used goods set out below:

<table>
<thead>
<tr>
<th>Tariff Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subheading 4012.10</td>
<td>Used retreaded tires(^{14})</td>
</tr>
<tr>
<td>Subheading 4012.20</td>
<td>Used pneumatic tires(^{15})</td>
</tr>
<tr>
<td>Heading 63.09</td>
<td>Used clothing</td>
</tr>
<tr>
<td>Heading 63.10</td>
<td>Rags, scrap twine, cordage, rope, and cable, and worn out or unusable articles of twine, cordage, rope, or cables, of textile materials</td>
</tr>
</tbody>
</table>

(Note: Descriptions are provided for reference purposes only. To the extent of a conflict between the tariff classification and the description, the tariff classification governs.)

**Section G: Measures of the United States**

Articles 3.2 and 3.8 shall not apply to:

(a) controls on the export of logs of all species;


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\(^{14}\) The controls identified in this subparagraph do not apply to remanufactured goods.

\(^{15}\) The controls identified in this subparagraph do not apply to remanufactured goods.
were mandatory legislation at the time of the accession of the United States to the General Agreement on Tariffs and Trade 1947 (GATT 1947) and have not been amended so as to decrease their conformity with Part II of the GATT 1947;

(ii) the continuation or prompt renewal of a non-conforming provision of any statute referred to in clause (i); and

(iii) the amendment to a non-conforming provision of any statute referred to in clause (i) to the extent that the amendment does not decrease the conformity of the provision with Articles 3.2 and 3.8;

(c) actions authorized by the Dispute Settlement Body of the WTO; and

(d) actions authorized by the Agreement on Textiles and Clothing.
Chapter Twenty-One

Exceptions

Article 21.1: General Exceptions

1. For purposes of Chapters Three through Seven (National Treatment and Market Access for Goods, Rules of Origin and Origin Procedures, Customs Administration and Trade Facilitation, Sanitary and Phytosanitary Measures, and Technical Barriers to Trade), Article XX of the GATT 1994 and its interpretive notes are incorporated into and made part of this Agreement, mutatis mutandis. The Parties understand that the measures referred to in Article XX(b) of the GATT 1994 include environmental measures necessary to protect human, animal, or plant life or health, and that Article XX(g) of the GATT 1994 applies to measures relating to the conservation of living and non-living exhaustible natural resources.

2. For purposes of Chapters Eleven, Thirteen, and Fourteen1 (Cross-Border Trade in Services, Telecommunications, and Electronic Commerce), Article XIV of the GATS (including its footnotes) is incorporated into and made part of this Agreement, mutatis mutandis. The Parties understand that the measures referred to in Article XIV(b) of the GATS include environmental measures necessary to protect human, animal, or plant life or health.

Article 21.2: Essential Security

Nothing in this Agreement shall be construed:

(a) to require a Party to furnish or allow access to any information the disclosure of which it determines to be contrary to its essential security interests; or

(b) to preclude a Party from applying measures that it considers necessary for the fulfillment of its obligations with respect to the maintenance or restoration of international peace or security, or the protection of its own essential security interests.

Article 21.3: Taxation

1. Except as set out in this Article, nothing in this Agreement shall apply to taxation measures.

2. Nothing in this Agreement shall affect the rights and obligations of any Party under any tax convention. In the event of any inconsistency between this Agreement and any such convention, that convention shall prevail to the extent of the inconsistency. In the case of a tax convention between two or more Parties, the competent authorities under that convention shall

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1 This Article is without prejudice to whether digital products should be classified as goods or services.
have sole responsibility for determining whether any inconsistency exists between this Agreement and that convention.

3. Notwithstanding paragraph 2:

(a) Article 3.2 (National Treatment) and such other provisions of this Agreement as are necessary to give effect to that Article shall apply to taxation measures to the same extent as does Article III of the GATT 1994; and

(b) Article 3.10 (Export Taxes) shall apply to taxation measures.

4. Subject to paragraph 2:

(a) Article 11.2 (National Treatment) and Article 12.2 (National Treatment) shall apply to taxation measures on income, capital gains, or on the taxable capital of corporations that relate to the purchase or consumption of particular services, except that nothing in this subparagraph shall prevent a Party from conditioning the receipt or continued receipt of an advantage relating to the purchase or consumption of particular services on requirements to provide the service in its territory; and

(b) Articles 10.3 (National Treatment) and 10.4 (Most-Favored-Nation Treatment), Articles 11.2 (National Treatment) and 11.3 (Most-Favored-Nation Treatment) and Articles 12.2 (National Treatment) and 12.3 (Most-Favored-Nation Treatment) shall apply to all taxation measures, other than those on income, capital gains, or on the taxable capital of corporations, taxes on estates, inheritances, gifts, and generation-skipping transfers,

except that nothing in those Articles shall apply:

(c) any most-favored-nation obligation with respect to an advantage accorded by a Party pursuant to any tax convention;

(d) to a non-conforming provision of any existing taxation measure;

(e) to the continuation or prompt renewal of a non-conforming provision of any existing taxation measure;

(f) to an amendment to a non-conforming provision of any existing taxation measure to the extent that the amendment does not decrease its conformity, at the time of the amendment, with any of those Articles;

(g) to the adoption or enforcement of any taxation measure aimed at ensuring the equitable or effective imposition or collection of taxes (as permitted by Article XIV(d) of the GATS); or
(h) to a provision that conditions the receipt, or continued receipt, of an advantage relating to the contributions to, or income of, pension trusts or pension plans on a requirement that the Party maintain continuous jurisdiction over the pension trust or pension plan.

5. Subject to paragraph 2 and without prejudice to the rights and obligations of the Parties under paragraph 3, Article 10.9.2, 10.9.3, and 10.9.4 (Performance Requirements) shall apply to taxation measures.

6. Article 10.7 (Expropriation and Compensation) and Article 10.16 (Submission of a Claim to Arbitration) shall apply to a taxation measure alleged to be an expropriation or a breach of an investment agreement or investment authorization. However, no investor may invoke Article 10.7 as the basis of a claim where it has been determined pursuant to this paragraph that the measure is not an expropriation. An investor that seeks to invoke Article 10.7 with respect to a taxation measure must first refer to the competent authorities of the Parties of the claimant and the respondent set out in Annex 21.3 at the time that it gives its notice of intent under Article 10.16.2 the issue of whether that taxation measure involves an expropriation. If the competent authorities do not agree to consider the issue or, having agreed to consider it, fail to agree that the measure is not an expropriation within a period of six months of such referral, the investor may submit its claim to arbitration under Article 10.16.

Article 21.4: Balance of Payments Measures on Trade in Goods

Should a Party decide to impose measures for balance of payments purposes, it shall do so only in accordance with that Party’s rights and obligations under the GATT 1994, including the Declaration on Trade Measures Taken for Balance of Payments Purposes (1979 Declaration) and the Understanding on the Balance of Payments Provisions of the GATT 1994 (BOP Understanding). In adopting such measures, the Party shall immediately consult with the other Parties and shall not impair the relative benefits accorded to the other Parties under this Agreement.²

Article 21.5: Disclosure of Information

Nothing in this Agreement shall be construed to require a Party to furnish or allow access to confidential information the disclosure of which would impede law enforcement, or otherwise be contrary to the public interest, or which would prejudice the legitimate commercial interests of particular enterprises, public or private.

Article 21.6: Definitions

For purposes of this Chapter:

² For greater certainty, this Article applies to balance of payments measures imposed on trade in goods.
**tax convention** means a convention for the avoidance of double taxation or other international taxation agreement or arrangement; and

**taxes** and **taxation measures** do not include:

(a) a customs duty; or

(b) the measures listed in exceptions (b) and (c) of the definition of customs duty.
Annex 21.3

Competent Authorities

For purposes of this Chapter:

**competent authorities** means

(a) in the case of Costa Rica, the *Viceministro de Hacienda*;

(b) in the case of the Dominican Republic, the *Subsecretario de Estado de Finanzas*;

(c) in the case of El Salvador, the *Viceministro de Hacienda*;

(d) in the case of Guatemala, the *Viceministro de Finanzas Públicas*;

(e) in the case of Honduras, the *Subsecretario en el Despacho de Finanzas*;

(f) in the case of Nicaragua, the *Viceministro de Hacienda y Crédito Publico*; and

(g) in the case of the United States, the Assistant Secretary of the Treasury (Tax Policy), Department of the Treasury,

or their successors.
United States-Israel Free Trade Agreement
Entered into force on August 19, 1985
Israel Free Trade Agreement

Entered into Force August 19, 1985

Agreement on the Establishment of a Free Trade Area between the Government of Israel and the Government of the United States of America

[PREAMBLE]

The Government of Israel and the Government of the United States of America,

Desiring to promote mutual relations and further the historic friendship between them;

Determined to strengthen and develop the economic relations between them for their mutual benefit;

Recognizing that Israel's economy is still in a process of development, wishing to contribute to the harmonious development and expansion of world trade;

Wishing to establish bilateral free trade between the two nations through the removal of trade barriers;

Wishing to promote cooperation in areas which are of mutual interest;

Have decided to conclude this Agreement:

ARTICLE 1

[ESTABLISHMENT OF A FREE TRADE AREA]

The governments of Israel and the United States of America (the Parties), consistent with Article XXIV (8) (b) of the General Agreement on Tariffs and Trade (GATT), establish hereby between them a Free Trade Area and will in accordance with the provisions of this Agreement eliminate the duties and other restrictive regulations of commerce on trade between the two nations in products originating therein.

ARTICLE 2

1. Products of Israel shall, when imported into the customs territory of the United States, be governed by the provisions of Annex 1.

2. Products of the United States shall, when imported into Israel, be governed by the provisions of Annex 2.

3. The rules of origin applicable to this Agreement are set forth in Annex 3.

4. The commitment with respect to export subsidies is contained in Annex 4.

5. The Annexes to this Agreement constitute an integral part thereof.
ARTICLE 3

[RELATIONSHIP TO OTHER AGREEMENTS]

The Parties affirm their respective rights and obligations with respect to each other under existing bilateral and multilateral agreements, including the Treaty of Friendship, Commerce and Navigation between the United States and Israel and the GATT. In the event of an inconsistency between provisions of this Agreement and such existing agreements, the provisions of this Agreement shall prevail.

ARTICLE 4

[NEW RESTRICTIONS ON TRADE]

New customs duties on imports or exports or any charge having equivalent effect and new quantitative restrictions on imports or exports or any measure having equivalent effect may be introduced in the trade between the Parties only if permitted by this Agreement or by the GATT as in effect on the date of entry into force of this Agreement and as interpreted by the CONTRACTING PARTIES to the GATT and in so far as not inconsistent with this Agreement.

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ARTICLE 7

[GENERAL AND SECURITY EXCEPTIONS]

Article XX and XXI of the GATT are hereby incorporated into and made a part of this Agreement.

ARTICLE 8

[SPECIAL EXCEPTION FOR KASHRUTH]

This Agreement shall not preclude the adoption or enforcement by either Party of measures relating to prohibitions on religious or ritual grounds provided that they are applied in accordance with the principle of national treatment.

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ANNEX I

Implementation of Duty-Free Treatment for United States Imports of Products of Israel

NOTE: Effective January 1, 1995 all duties on the vast majority of Israeli exports into the United States were eliminated. For certain agricultural products, Israel retains all of its special duty-free status for these products according to the pre-existing WTO commitments. In addition, Israel receives guaranteed duty-free quota allocations above the WTO commitments for some products specified in the U.S.-Israel Agricultural Trade Agreement, signed on November 4, 1996. SEE FULL TEXT OF U.S.-ISRAEL AGRICULTURAL AGREEMENT INCLUDED SEPARATELY.

ANNEX II

Implementation of Duty-Free Treatment for Israeli Imports of Products of the United States of America
NOTE: Effective January 1, 1995, duties on United States imports into Israel were eliminated. However, Israel maintains a system of import levies and tariff-rate quotas (TRQs) for certain agricultural products. Some of the levies are ad valorem while others are based on weight - and all are set at levels well below Israel's MFN commitments. Most of the TRQs allow a duty-free import into Israel of certain agricultural commodities above the WTO limit. SEE FULL TEXT OF U.S.-ISRAEL AGRICULTURAL AGREEMENT INCLUDED SEPARATELY.
United States-Jordan Free Trade Agreement
Entered into force on December 17, 2001
ARTICLE 1: ESTABLISHMENT OF A FREE TRADE AREA AND RELATIONSHIP TO OTHER AGREEMENTS

1. The Parties to this Agreement, consistent with Article XXIV of the General Agreement on Tariffs and Trade 1994 ("GATT 1994") and Article V of the General Agreement on Trade in Services ("GATS"), hereby establish a free trade area in accordance with the provisions of this Agreement.

2. The Parties reaffirm their respective rights and obligations with respect to each other under existing bilateral and multilateral agreements to which both Parties are party, including the Marrakesh Agreement Establishing the World Trade Organization ("WTO Agreement").

3. This Agreement shall not be construed to derogate from any international legal obligation between the Parties that entitles a good or service, or the supplier of a good or service, to treatment more favorable than that accorded by this Agreement.

4. Nothing in Article 17 shall be construed to authorize a Party to apply a measure that is inconsistent with the Party’s obligations under the WTO Agreement.

ARTICLE 2: TRADE IN GOODS

1. Except as otherwise provided in this Agreement, each Party shall progressively eliminate its customs duties on originating goods of the other Party in accordance with Annex 2.1 and its schedule to Annex 2.1.

2. For purposes of this Agreement, originating good means an article described in Annex 2.2.

3. Each Party shall accord national treatment to the goods of the other Party in accordance with Article III of the GATT 1994, including its interpretative notes. To this end, Article III of GATT 1994 and its interpretative notes are incorporated into and made a part of this Agreement, subject to Annex 2.3.

4. A Party may not introduce a new customs duty on imports or a new quantitative restriction on imports in the trade between the Parties, other than as permitted by this Agreement, subject to Annex 2.3.

5. In the event that this Agreement enters into force on a date other than January 1, “year one” for purposes of Annex 2.1 and each Party’s schedule to Annex 2.1 shall mean the period from the date of entry into force of this Agreement through the end of the calendar year, and the duty reductions in each Party’s schedule to Annex 2.1 shall take effect on such date of entry into force. In such event, the term “January 1 of year one” for purposes of Annex 2.1 and each Party’s schedule to Annex 2.1 shall mean the date of entry into force of this Agreement.

ARTICLE 3: TRADE IN SERVICES

1. This Article applies to measures by a Party affecting trade in services between the Parties.

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1 For purposes of this Agreement, "schedule" shall include both the schedule and headnotes.
ANNEX 2.3

UNDERSTANDING CONCERNING ARTICLE 2

1. Articles 2.3 and 2.4 shall not apply to:

   (a) controls by the United States on the export of logs of all species;

   (b) (i) measures under existing provisions of the Merchant Marine Act of 1920, 46 App. U.S.C. § 883; the Passenger Vessel Act, 46 App. U.S.C. §§ 289, 292 and 316; and 46 U.S.C. § 12108, to the extent that such measures were mandatory legislation at the time of the United States’ access to the General Agreement on Tariffs and Trade 1947 and have not been amended so as to decrease their conformity with Part II of GATT 1947;

            (ii) the continuation or prompt renewal of a non-conforming provision of any statute referred to in subparagraph (b); and

            (iii) the amendment to a non-conforming provision of any statute referred to in subparagraph (b) to the extent that the amendment does not decrease the conformity of the provision with Articles 2.3 and 2.4; and

   (c) Actions authorized by the Dispute Settlement Body of the WTO

2. For purposes of Article 2.1 and 2.4:

   (a) “customs duty” includes any customs or import duty and a charge of any kind imposed in connection with the importation of a good, including any form of surtax or surcharge in connection with such importation, but does not include any:

            (i) charge equivalent to an internal tax imposed consistently with Article III:2 GATT 1994, in respect of like, directly competitive or substitutable goods of the Party, or in respect of goods from which the imported good has been manufactured or produced in whole or in part;

            (ii) antidumping or countervailing duty that is applied pursuant to a Party’s domestic law;

            (iii) fee or other charge in connection with importation commensurate with the cost of services rendered; and

            (iv) a duty imposed pursuant to Article 5 of the WTO Agreement on Agriculture.

   (b) “quantitative restriction” includes any prohibition or restriction on the importation of any good of another Party, except in accordance with Article XI of GATT 1994 or Article 6 of the WTO Agreement on Textiles and Clothing, including their interpretative notes, and to this end, Article XI of GATT 1994 and Article 6 of the WTO Agreement on Textiles and Clothing are incorporated into and made a part of this Annex.
substantial cause means a cause which is important and not less than any other cause;

threat of serious injury means serious injury that, on the basis of facts and not merely on allegation, conjecture or remote possibility, is clearly imminent; and

transition period means the 15-year period beginning on January 1 of the year following entry into force of this Agreement, except if such period is extended in accordance with paragraph 6 of this Article.

8. Each Party retains its rights and obligations under Article XIX of GATT 1994 and the WTO Agreement on Safeguards. This Agreement does not confer any additional rights or obligations on the Parties with regard to actions taken pursuant to Article XIX and the Agreement on Safeguards, except that a Party taking a safeguard measure under Article XIX and the Agreement on Safeguards may exclude imports of an originating good from the other Party if such imports are not a substantial cause of serious injury or threat thereof.

ARTICLE 11: BALANCE OF PAYMENTS

Should either Party decide to impose measures for balance of payments purposes, it shall do so in accordance with the Party’s obligations under the WTO Agreement. In adopting such measures, the Party shall strive not to impair the relative benefits accorded to the other Party under this Agreement.

ARTICLE 12: EXCEPTIONS

1. For purposes of Article 2 of this Agreement, Article XX of GATT 1994 and its interpretative notes are incorporated into and made a part of this Agreement. The Parties understand that the measures referred to in GATT 1994 Article XX(b) include environmental measures necessary to protect human, animal or plant life or health, and that GATT 1994 Article XX(g) applies to measures relating to conservation of living and non-living exhaustible natural resources.

2. Nothing in this Agreement shall be construed:

(a) to require any Party to furnish or allow access to any information the disclosure of which it determines to be contrary to its essential security interests;

(b) to prevent any Party from taking any actions that it considers necessary for the protection of its essential security interests:

(i) relating to the traffic in arms, ammunition and implements of war and to such traffic and transactions in other goods, materials, services and technology undertaken directly or indirectly for the purpose of supplying a military or other security establishment,

(ii) taken in time of war or other emergency in international relations, or

(iii) relating to the implementation of national policies or international agreements respecting the non-proliferation of nuclear weapons or other nuclear explosive devices; or
(c) to prevent any Party from taking action in pursuance of its obligations under the United Nations Charter for the maintenance of international peace and security.

3. Except as set out in this paragraph, nothing in this Agreement shall apply to taxation measures.

(a) Nothing in this Agreement shall affect the rights and obligations of either Party under any tax convention. In the event of any inconsistency between this Agreement and any such convention, that convention shall prevail to the extent of the inconsistency.

(b) Notwithstanding subparagraph (a), Article 2.3 and such other provisions of this Agreement as are necessary to give effect to Article 2.3 shall apply to taxation measures to the same extent as does Article III of the GATT 1994.

(c) Notwithstanding subparagraph (a), the national treatment commitment under Article 3.2 shall apply to taxation measures to the same extent as under the GATS, and the national treatment commitment under Article 3.2(b) shall apply to taxation measures to the same extent as if the Party had made an identical national treatment commitment under Article XVII of the GATS.

ARTICLE 13: ECONOMIC COOPERATION AND TECHNICAL ASSISTANCE

To realize the objectives of this Agreement and to contribute to the implementation of its provisions:

(a) the Parties declare their readiness to foster economic cooperation; and

(b) in view of Jordan’s developing status, and the size of its economy and resources, the United States shall strive to furnish Jordan with economic technical assistance, as appropriate.

ARTICLE 14: RULES OF ORIGIN AND COOPERATION IN CUSTOMS ADMINISTRATION

1. The Parties recognize that the rules regarding eligibility for the preferential tariff treatment afforded by this Agreement, as set out in Article 2 and Annex 2.2, are crucial to the functioning of this Agreement, and each Party shall strive to administer such rules effectively, uniformly, and consistently with the object and purpose of this Agreement and the WTO Agreement.

2. The Parties shall consult as appropriate, through the Joint Committee or through the consultative mechanism established in Article 16:

(a) to agree upon the means to cooperate and provide administrative assistance to achieve the commitments in paragraph 1; and

(b) to address situations pertaining to claims of preferential treatment under this Agreement for imported goods that do not satisfy the requirements in Annex 2.2.
United States-Morocco Free Trade Agreement
Entered into force on January 1, 2006
CHAPTER TWO
NATIONAL TREATMENT AND MARKET ACCESS FOR GOODS

ARTICLE 2.1: SCOPE AND COVERAGE

Except as otherwise provided, this Chapter applies to trade in goods of a Party.

Section A: National Treatment

ARTICLE 2.2: NATIONAL TREATMENT

1. Each Party shall accord national treatment to the goods of the other Party in accordance with Article III of GATT 1994, including its interpretive notes, and to this end Article III of GATT 1994 and its interpretative notes are incorporated into and made a part of this Agreement, mutatis mutandis.

2. The treatment to be accorded by a Party under paragraph 1 means, with respect to a regional level of government, treatment no less favorable than the most favorable treatment that regional level government accords to any like, directly competitive, or substitutable goods, as the case may be, of the Party of which it forms a part.

3. Paragraphs 1 and 2 shall not apply to the measures set out in Annex 2-A.

Section B: Tariff Elimination

ARTICLE 2.3: TARIFF ELIMINATION

1. Except as otherwise provided in this Agreement, neither Party may increase any existing customs duty, or adopt any new customs duty, on an originating good.

2. Except as otherwise provided in this Agreement, each Party shall progressively eliminate its customs duties on originating goods, in accordance with its schedule to Annex IV (Tariff Elimination).
Section D: Non-Tariff Measures

Article 2.8: Import and Export Restrictions

1. Except as otherwise provided in this Agreement, neither Party may adopt or maintain any prohibition or restriction on the importation of any good of the other Party or on the exportation or sale for export of any good destined for the territory of the other Party, except in accordance with Article XI of GATT 1994 and its interpretative notes, and to this end Article XI of GATT 1994 and its interpretive notes are incorporated into and made a part of this Agreement, mutatis mutandis.  

2. The Parties understand that GATT 1994 rights and obligations incorporated by paragraph 1 prohibit, in any circumstances in which any other form of restriction is prohibited, a Party from adopting or maintaining:

   (a) export and import price requirements, except as permitted in enforcement of countervailing and antidumping duty orders and undertakings;

   (b) measures conditioning the grant of an import license on the fulfillment of a performance requirement; or

   (c) voluntary export restraints inconsistent with Article VI of GATT 1994, as implemented under Article 18 of the WTO Agreement on Subsidies and Countervailing Measures and Article 8.1 of the WTO Agreement on Implementation of Article VI of GATT 1994.

3. In the event that a Party adopts or maintains a prohibition or restriction on the importation from or exportation to a non-Party of a good, no provision of this Agreement shall be construed to prevent the Party from:

   (a) limiting or prohibiting the importation of the good of the non-Party from the territory of the other Party; or

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1 For greater certainty, paragraph 1 applies to prohibitions or restrictions on the importation of remanufactured products.
(b) requiring as a condition for exporting the good of the Party to the territory of the other Party, that the good not be re-exported to the non-Party, directly or indirectly, without being consumed in the territory of the other Party.

4. In the event that a Party adopts or maintains a prohibition or restriction on the importation of a good from a non-Party, the Parties, on the request of either Party, shall consult with a view to avoiding undue interference with or distortion of pricing, marketing, and distribution arrangements in the other Party.

5. Paragraphs 1 through 4 shall not apply to the measures set out in Annex 2-A.

ARTICLE 2.9: ADMINISTRATIVE FEES AND FORMALITIES

1. Each Party shall ensure, in accordance with Article VIII:1 of GATT 1994 and its interpretive notes, that all fees and charges of whatever character (other than import and export duties, charges equivalent to an internal tax or other internal charges applied consistently with Article III:2 of GATT 1994, and antidumping and countervailing duties applied pursuant to a Party’s law) imposed on, or in connection with, importation or exportation are limited in amount to the approximate cost of services rendered and do not represent an indirect protection to domestic goods or a taxation of imports or exports for fiscal purposes.

2. Neither Party may require consular transactions, including related fees and charges, in connection with the importation of any good of the other Party.

3. Each Party shall make available on the Internet a current list of the fees and charges it imposes in connection with importation or exportation.

ARTICLE 2.10: EXPORT TAXES

Except as provided in Annex 2-C, neither Party may adopt or maintain any tax, duty, or other charge on the export of any good to the territory of other Party, unless the tax, duty, or charge is also adopted or maintained on the good when destined for domestic consumption.
ANNEX 2-A
NATIONAL TREATMENT AND IMPORT AND EXPORT RESTRICTIONS

Section A: Measures of the United States

Articles 2.2 and 2.8 shall not apply to:

(a) controls on the export of logs of all species;

(b) (i) measures under existing provisions of the Merchant Marine Act of 1920, 46 App. U.S.C. § 883; the Passenger Vessel Act, 46 App. U.S.C. §§ 289, 292, and 316; and 46 U.S.C. § 12108, to the extent that such measures were mandatory legislation at the time the United States acceded to the General Agreement on Tariffs and Trade 1947 ("GATT 1947") and have not been amended so as to decrease their conformity with Part II of GATT 1947;

(ii) the continuation or prompt renewal of a non-conforming provision of any statute referred to in clause (i); and

(iii) the amendment to a non-conforming provision of any statute referred to in clause (i) to the extent that the amendment does not decrease the conformity of the provision with Articles 2.2 and 2.8;

(c) actions authorized by the Dispute Settlement Body of the WTO; and

(d) actions authorized by the Agreement on Textiles and Clothing.

Section B: Measures of Morocco

Articles 2.2 and 2.8 shall not apply to actions authorized by the Dispute Settlement Body of the WTO.
CHAPTER TWENTY-ONE
EXCEPTIONS

ARTICLE 21.1: GENERAL EXCEPTIONS

1. For purposes of Chapters Two through Seven (National Treatment and Market Access for Goods, Agriculture, Textiles and Apparel, Rules of Origin, Customs Administration, and Technical Barriers to Trade), Article XX of GATT 1994 and its interpretive notes are incorporated into and made part of this Agreement, mutatis mutandis.

2. For purposes of Chapters Eleven, Thirteen, and Fourteen¹ (Cross-Border Trade in Services, Telecommunications, and Electronic Commerce), Article XIV of GATS (including its footnotes) is incorporated into and made part of this Agreement.

ARTICLE 21.2: ESSENTIAL SECURITY

Nothing in this Agreement shall be construed:

(a) to require a Party to furnish or allow access to any information the disclosure of which it determines to be contrary to its essential security interests; or

(b) to preclude a Party from applying measures that it considers necessary for the fulfillment of its obligations with respect to the maintenance or restoration of international peace or security or the protection of its own essential security interests.

For greater certainty, measures that a Party considers necessary for the protection of its own essential security interests may include, inter alia, measures relating to the production of or traffic in arms, ammunition, and implements of war and to such traffic and transactions in other goods, materials, services, and technology undertaken directly or indirectly for the purpose of supplying a military or other security establishment.

ARTICLE 21.3: TAXATION

1. Except as set out in this Article, nothing in this Agreement shall apply to taxation measures.

¹ This Article is without prejudice to whether digital products should be classified as goods or services.
2. Nothing in this Agreement shall affect the rights and obligations of either Party under any existing or future tax convention. In the event of any inconsistency between this Agreement and any tax convention, the provisions of such convention shall prevail to the extent of such inconsistency. In the case of the Convention Between the Government of the United States of America and the Kingdom of Morocco for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with Respect to Taxes on Income, the competent authorities of the Parties, as defined in that convention, are exclusively responsible for determining whether any inconsistency exists between this Agreement and that convention.

3. Notwithstanding paragraph 2:

   (a) Article 2.2 (Market Access – National Treatment) and such other provisions of this Agreement as are necessary to give effect to that Article shall apply to taxation measures to the same extent as does Article III of GATT 1994; and

   (b) Article 2.10 (Market Access – Export Taxes) shall apply to taxation measures.

4. Subject to paragraph 2:

   (a) Article 11.2 (Cross-Border Trade in Services – National Treatment) and Article 12.2 (Financial Services – National Treatment) shall apply to taxation measures on income, capital gains, or on the taxable capital of corporations that relate to the purchase or consumption of particular services, except that nothing in this subparagraph shall prevent a Party from conditioning the receipt or continued receipt of an advantage relating to the purchase or consumption of particular services on requirements to provide the service in its territory; and

   (b) Articles 10.3 (Investment – National Treatment) and 10.4 (Investment – Most-Favored-Nation Treatment), Articles 11.2 (Cross-Border Trade in Services – National Treatment) and 11.3 (Cross-Border Trade in Services – Most-Favored-Nation Treatment), and Articles 12.2 (Financial Services – National Treatment) and 12.3 (Financial Services – Most-Favored-Nation Treatment) shall apply to all taxation measures other than those on income,
capital gains, or on the taxable capital of corporations, taxes on estates, inheritances, gifts, and generation-skipping transfers,

except that nothing in those Articles shall apply:

(c) any most-favored-nation obligation with respect to an advantage accorded by a Party pursuant to a tax convention;

(d) to a non-conforming provision of any existing taxation measure;

(e) to the continuation or prompt renewal of a non-conforming provision of any existing taxation measure;

(f) to an amendment to a non-conforming provision of any existing taxation measure to the extent that the amendment does not decrease its conformity, at the time of the amendment, with any of those Articles;

(g) to the adoption or enforcement of any taxation measure aimed at ensuring the equitable or effective imposition or collection of taxes (as permitted by Article XIV(d) of GATS); or

(h) to a provision that conditions the receipt, or continued receipt, of an advantage relating to the contributions to, or income of, pension trusts or pension plans on a requirement that the Party maintain continuous jurisdiction over the pension trust or pension plan.

5. Subject to paragraph 2 and without prejudice to the rights and obligations of the Parties under paragraph 3, paragraphs 2, 3, and 4 of Article 10.8 (Investment – Performance Requirements) shall apply to taxation measures.  

6. Article 10.6 (Expropriation and Compensation) and Article 10.15 (Submission of a Claim to Arbitration) shall apply to a taxation measure alleged to be an expropriation or a breach of an investment agreement or investment authorization. However, no investor may invoke Article 10.6 as the basis of a claim where it has been determined pursuant to this

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2 For greater certainty, nothing in paragraphs 2, 3, and 4 of Article 10.8 (Investment – Performance Requirements) shall be construed to prevent a Party from conditioning the receipt or continued receipt of a tax advantage for income earned from the export of any goods or services, in connection with an investment in its territory of an investor of a Party or of a non-Party, on compliance with a requirement that such income be denominated in a foreign currency and received in its territory.
paragraph that the measure is not an expropriation. An investor that seeks to invoke Article 10.6 with respect to a taxation measure must first refer to the competent authorities at the time that it gives notice of intent under Article 10.15.2 the issue of whether the measure involves an expropriation. If the competent authorities do not agree to consider the issue or, having agreed to consider it, fail to agree that the measure is not an expropriation within a period of six months of such referral, the investor may submit its claim to arbitration under Article 10.15.

7. For purposes of paragraph 6, competent authorities means (a) in the case of Morocco, the minister in charge of finances or his delegate (Director General of Taxes); and (b) in the case of the United States, the Assistant Secretary of the Treasury (Tax Policy).

ARTICLE 21.4: DISCLOSURE OF INFORMATION

Nothing in this Agreement shall be construed to require a Party to furnish or allow access to information the disclosure of which would impede law enforcement or would be contrary to the Party’s law protecting personal privacy or the financial affairs and accounts of individual customers of financial institutions.

ARTICLE 21.5: BALANCE OF PAYMENTS MEASURES ON TRADE IN GOODS

Should a Party decide to impose measures for balance of payments purposes, it shall do so only in accordance with that Party’s rights and obligations under GATT 1994, including the Declaration on Trade Measures Taken for Balance of Payments Purposes (1979 Declaration) and the Understanding on the Balance of Payments Provisions of the GATT 1994 (BOP Understanding). In adopting such measures, the Party shall immediately consult with the other Party and shall not impair the relative advantages accorded to the goods of the other Party under this Agreement.³

³ For greater certainty, this Article applies to balance of payments measures imposed on trade in goods.
The Honorable Taïb Fassi Fihri
Minister Delegate for Foreign Affairs and Cooperation
Kingdom of Morocco

Dear Minister Fassi Fihri:

I have the honor to propose the following understandings regarding Article 21.1 (General Exceptions) of the Free Trade Agreement signed this day between the Government of the United States of America and the Government of the Kingdom of Morocco:

The measures referred to in Article XX(b) of the General Agreement on Tariffs and Trade 1994 (“GATT 1994”) include environmental measures necessary to protect human, animal, or plant life or health, and Article XX(g) of GATT 1994 applies to measures relating to the conservation of living and non-living exhaustible natural resources.

The measures referred to in Article XIV(b) of the General Agreement on Trade in Services include environmental measures necessary to protect human, animal, or plant life or health.

I have the honor to propose that this letter and your letter of confirmation in reply shall constitute an agreement between our Governments, to enter into force on the entry into force of the Free Trade Agreement.

Sincerely,

Robert B. Zoellick
The Honorable Robert B. Zoellick  
United States Trade Representative  

Dear Ambassador Zoellick:

I am pleased to receive your letter of today’s date, which reads as follows:

“I have the honor to propose the following understandings regarding Article 21.1 (General Exceptions) of the Free Trade Agreement signed this day between the Government of the United States of America and the Government of the Kingdom of Morocco:

The measures referred to in Article XX(b) of the General Agreement on Tariffs and Trade 1994 (‘GATT 1994’) include environmental measures necessary to protect human, animal, or plant life or health, and Article XX(g) of GATT 1994 applies to measures relating to the conservation of living and non-living exhaustible natural resources.

The measures referred to in Article XIV(b) of the General Agreement on Trade in Services include environmental measures necessary to protect human, animal, or plant life or health.

I have the honor to propose that this letter and your letter of confirmation in reply shall constitute an agreement between our Governments, to enter into force on the entry into force of the Free Trade Agreement.”

I have the honor to confirm that the understandings referred to in your letter are shared by my Government, and that your letter and this letter in reply shall constitute an agreement between our Governments.

Sincerely,

Taïb Fassi Fihri  
Minister Delegate for Foreign Affairs and Cooperation
North American Free Trade Agreement
Entered into force on January 1, 1994
CHAPTER THREE: NATIONAL TREATMENT AND MARKET ACCESS FOR GOODS

Article 300: Scope and Coverage

This Chapter applies to trade in goods of a Party, including:

a) goods covered by Annex 300-A (Trade and Investment in the Automotive Sector),

b) goods covered by Annex 300-B (Textile and Apparel Goods), and

c) goods covered by another Chapter in this Part, except as provided in such Annex or Chapter.

Section A - National Treatment

Article 301: National Treatment

1. Each Party shall accord national treatment to the goods of another Party in accordance with Article III of the General Agreement on Tariffs and Trade (GATT), including its interpretative notes, and to this end Article III of the GATT and its interpretative notes, or any equivalent provision of a successor agreement to which all Parties are party, are incorporated into and made part of this Agreement.

2. The provisions of paragraph 1 regarding national treatment shall mean, with respect to a state or province, treatment no less favorable than the most favorable treatment accorded by such state or province to any like, directly competitive or substitutable goods, as the case may be, of the Party of which it forms a part.

3. Paragraphs 1 and 2 do not apply to the measures set out in Annex 301.3.

Section B - Tariffs

Article 302: Tariff Elimination

1. Except as otherwise provided in this Agreement, no Party may increase any existing customs duty, or adopt any customs duty, on an originating good.

2. Except as otherwise provided in this Agreement, each Party shall progressively eliminate its customs duties on originating goods in accordance with its Schedule to Annex 302.2.

3. On the request of any Party, the Parties shall consult to consider accelerating the elimination of customs duties set out in their Schedules. An agreement between two or more Parties to accelerate the elimination of a customs duty on a good shall supersede any duty rate or staging category determined pursuant to their Schedules for such good when approved by each such Party in accordance with its applicable legal procedures.

4. Each Party may adopt or maintain import measures to allocate in-quota imports made pursuant to a tariff rate quota set out in Annex 302.2, provided that such measures do not have trade restrictive effects on imports additional to those caused by the imposition of the tariff rate quota.
a) such samples be imported solely for the solicitation of orders for goods, or services provided from the territory, of another Party or non-Party; or

b) such advertising materials be imported in packets that each contain no more than one copy of each such material and that neither such materials nor packets form part of a larger consignment.

**Article 307: Goods Re-Entered after Repair or Alteration**

1. Except as set out in Annex 307.1, no Party may apply a customs duty to a good, regardless of its origin, that re enters its territory after that good has been exported from its territory to the territory of another Party for repair or alteration, regardless of whether such repair or alteration could be performed in its territory.

2. Notwithstanding Article 303, no Party may apply a customs duty to a good, regardless of its origin, imported temporarily from the territory of another Party for repair or alteration.

3. Annex 307.3 applies to the Parties specified in that Annex respecting the repair and rebuilding of vessels.

**Article 308: MostFavoredNation Rates of Duty on Certain Goods**

1. Annex 308.1 applies to certain automatic data processing goods and their parts.

2. Annex 308.2 applies to certain color television tubes.

3. Each Party shall accord mostfavorednation duty-free treatment to any local area network apparatus imported into its territory, and shall consult in accordance with Annex 308.3.

**Section C - Non-Tariff Measures**

**Article 309: Import and Export Restrictions**

1. Except as otherwise provided in this Agreement, no Party may adopt or maintain any prohibition or restriction on the importation of any good of another Party or on the exportation or sale for export of any good destined for the territory of another Party, except in accordance with Article XI of the GATT, including its interpretative notes, and to this end Article XI of the GATT and its interpretative notes, or any equivalent provision of a successor agreement to which all Parties are party, are incorporated into and made a part of this Agreement.

2. The Parties understand that the GATT rights and obligations incorporated by paragraph 1 prohibit, in any circumstances in which any other form of restriction is prohibited, export price requirements and, except as permitted in enforcement of countervailing and antidumping orders and undertakings, import price requirements.

3. In the event that a Party adopts or maintains a prohibition or restriction on the importation from or exportation to a non-Party of a good, nothing in this Agreement shall be construed to prevent the Party from:
a) limiting or prohibiting the importation from the territory of another Party of such good of that non-Party; or

b) requiring as a condition of export of such good of the Party to the territory of another Party, that the good not be re-exported to the non-Party, directly or indirectly, without being consumed in the territory of the other Party.

4. In the event that a Party adopts or maintains a prohibition or restriction on the importation of a good from a non-Party, the Parties, on request of any Party, shall consult with a view to avoiding undue interference with or distortion of pricing, marketing and distribution arrangements in another Party.

5. Paragraphs 1 through 4 shall not apply to the measures set out in Annex 301.3.

**Article 310: Customs User Fees**

1. No Party may adopt any customs user fee of the type referred to in Annex 310.1 for originating goods.

2. The Parties specified in Annex 310.1 may maintain existing such fees in accordance with that Annex.

**Article 311: Country of Origin Marking**

Annex 311 applies to measures relating to country of origin marking.

**Article 312: Wine and Distilled Spirits**

1. No Party may adopt or maintain any measure requiring that distilled spirits imported from the territory of another Party for bottling be blended with any distilled spirits of the Party.

2. Annex 312.2 applies to other measures relating to wine and distilled spirits.

**Article 313: Distinctive Products**

Annex 313 applies to standards and labelling of the distinctive products set out in that Annex.

**Article 314: Export Taxes**

Except as set out in Annex 314, no Party may adopt or maintain any duty, tax or other charge on the export of any good to the territory of another Party, unless such duty, tax or charge is adopted or maintained on:

a) exports of any such good to the territory of all other Parties; and

b) any such good when destined for domestic consumption.

**Article 315: Other Export Measures**

1. Except as set out in Annex 315, a Party may adopt or maintain a restriction otherwise justified under Articles XI:2(a) or XX(g), (i) or (j) of the GATT with respect to the export of a good of the Party to the territory of another Party, only if:
a) the restriction does not reduce the proportion of the total export shipments of the specific good made available to that other Party relative to the total supply of that good of the Party maintaining the restriction as compared to the proportion prevailing in the most recent 36month period for which data are available prior to the imposition of the measure, or in such other representative period on which the Parties may agree;

b) the Party does not impose a higher price for exports of a good to that other Party than the price charged for such good when consumed domestically, by means of any measure, such as licenses, fees, taxation and minimum price requirements. The foregoing provision does not apply to a higher price that may result from a measure taken pursuant to subparagraph (a) that only restricts the volume of exports; and

c) the restriction does not require the disruption of normal channels of supply to that other Party or normal proportions among specific goods or categories of goods supplied to that other Party.

2. The Parties shall cooperate in the maintenance and development of effective controls on the export of each other's goods to a non-Party in implementing this Article.

Section D - Consultations

Article 316: Consultations and Committee on Trade in Goods

1. The Parties hereby establish a Committee on Trade in Goods, comprising representatives of each Party.

2. The Committee shall meet on the request of any Party or the Commission to consider any matter arising under this Chapter.

3. The Parties shall convene at least once each year a meeting of their officials responsible for customs, immigration, inspection of food and agricultural products, border inspection facilities, and regulation of transportation for the purpose of addressing issues related to movement of goods through the Parties' ports of entry.

Article 317: Third Country Dumping

1. The Parties affirm the importance of cooperation with respect to actions under Article 12 of the Agreement on Implementation of Article VI of the General Agreement on Tariffs and Trade.

2. Where a Party presents an application to another Party requesting antidumping action on its behalf, those Parties shall consult within 30 days respecting the factual basis of the request, and the requested Party shall give full consideration to the request.

Section E - Definitions

Article 318: Definitions

For purposes of this Chapter:
satisfactory evidence means:

a) a receipt, or a copy of a receipt, evidencing payment of customs duties on a particular entry;

b) a copy of the entry document with evidence that it was received by a customs administration;

c) a copy of a final customs duty determination by a customs administration respecting the relevant entry;

d) any other evidence of payment of customs duties acceptable under the Uniform Regulations established in accordance with Chapter Five (Customs Procedures);

total export shipments means all shipments from total supply to users located in the territory of another Party;

total supply means all shipments, whether intended for domestic or foreign users, from:

a) domestic production;

b) domestic inventory; and

c) other imports as appropriate; and

waiver of customs duties means a measure that waives otherwise applicable customs duties on any good imported from any country, including the territory of another Party.

Annex 301.3: Exceptions to Articles 301 and 309

Section A - Canadian Measures

1. Articles 301 and 309 shall not apply to controls by Canada on the export of logs of all species.

2. Articles 301 and 309 shall not apply to controls by Canada on the export of unprocessed fish pursuant to the following existing statutes, as amended as of August 12, 1992:

a) New Brunswick Fish Processing Act, R.S.N.B. c. F18.01 (1982), and Fisheries Development Act, S.N.B. c. F15.1 (1977);

b) Newfoundland Fish Inspection Act, R.S.N. 1990, c. F12;

c) Nova Scotia Fisheries Act, S.N.S. 1977, c. 9;

d) Prince Edward Island Fish Inspection Act, R.S.P.E.I. 1988, c. F13; and
3. Articles 301 and 309 shall not apply to:

a) except as provided in Annex 300-A, Appendix 300-A.1, paragraph 4, measures by Canada respecting the importation of any goods enumerated or referred to in Schedule VII of the *Customs Tariff*, R.S.C. 1985, c. 41 (3rd Supp.), as amended,

b) measures by Canada respecting the exportation of liquor for delivery into any country into which the importation of liquor is prohibited by law under the existing provisions of the *Export Act*, R.S.C. 1985, c. E18, as amended,

c) measures by Canada respecting preferential rates for certain freight traffic under the existing provisions of the *Maritime Freight Rate Act*, R.S.C. 1985, c. M-1, as amended,

d) Canadian excise taxes on absolute alcohol used in manufacturing under the existing provisions of the *Excise Tax Act*, R.S.C. 1985, c. E-14, as amended, and

e) measures by Canada prohibiting the use of foreign or non-duty paid ships in the coasting trade of Canada unless granted a license under the *Coasting Trade Act*, S.C. 1992, c. 31,

to the extent that such provisions were mandatory legislation at the time of Canada's accession to the GATT and have not been amended so as to decrease their conformity with the GATT.

4. Articles 301 and 309 shall not apply to quantitative import restrictions on goods that originate in the territory of the United States, considering operations performed in, or materials obtained from, Mexico as if they were performed in, or obtained from, a non-Party, and that are indicated by asterisks in Chapter 89 in Annex 401.2 (Tariff Schedule of Canada) of the *Canada United States Free Trade Agreement* for as long as the measures taken under the Merchant Marine Act of 1920, 46 App. U.S.C. §§ 883, and the Merchant Marine Act of 1936, 46 App. U.S.C. §§ 1171, 1176, 1241 and 1241o, apply with quantitative effect to comparable Canadian origin goods sold or offered for sale into the U.S. market.

5. Articles 301 and 309 shall not apply to:

a) the continuation or prompt renewal of a non-conforming provision of any statute referred to in paragraph 2 or 3; and

b) the amendment to a non-conforming provision of any statute referred to in paragraph 2 or 3 to the extent that the amendment does not decrease the conformity of the provision with Articles 301 and 309.

**Section B - Mexican Measures**

1. Articles 301 and 309 shall not apply to controls by Mexico on the export of logs of all species.

2. Articles 301 and 309 shall not apply to:
a) measures under the existing provisions of Articles 192 through 194 of the General Ways of Communication Act ("Ley de Vías Generales de Comunicación") reserving exclusively to Mexican vessels all services and operations not authorized for foreign vessels and empowering the Mexican Ministry of Communications and Transportation to deny foreign vessels the right to perform authorized services if their country of origin does not grant reciprocal rights to Mexican vessels; and

b) export permit measures applied to goods for exportation to another Party that are subject to quantitative restrictions or tariff rate quotas adopted or maintained by that other Party.

3. Articles 301 and 309 shall not apply to:

a) the continuation or prompt renewal of a non-conforming provision of the statute referred to in paragraph 2(a); and

b) the amendment to a non-conforming provision of the statute referred to in paragraph 2(a) to the extent that the amendment does not decrease the conformity of the provision with Articles 301 and 309.

4. (a) Notwithstanding Article 309, for the first 10 years after the date of entry into force of this Agreement, Mexico may adopt or maintain prohibitions or restrictions on the importation of used goods provided for in the items, as of August 12, 1992, in the Tariff Schedule of the General Import Duty Act (Tarifa de la "Ley del Impuesto General de Importación") set out below:

Note: (For purposes of reference only, descriptions are provided next to the corresponding item.)

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<tbody>
<tr>
<td>8407.34.99</td>
<td>Gasoline engines of more than 1,000 cm³, except for motorcycles.</td>
</tr>
<tr>
<td>8413.11.01</td>
<td>Distributors fitted with a measuring device even if it includes a totalizing mechanism.</td>
</tr>
<tr>
<td>8413.40.01</td>
<td>Trailer type, from 36 up to 60 m³/hr capacity; without hydraulic elevator for the discharge hose.</td>
</tr>
<tr>
<td>8426.12.01</td>
<td>Mobile portals on tires and straddle carriers.</td>
</tr>
<tr>
<td>8426.19.01</td>
<td>Other (overhead travelling cranes, bridge cranes and straddle carriers).</td>
</tr>
<tr>
<td>8426.30.01</td>
<td>Portal cranes.</td>
</tr>
<tr>
<td>8426.41.01</td>
<td>Cranes with structural iron jib (lattice) with mechanical working, self-propelled, with unit weight up to 55 tons.</td>
</tr>
<tr>
<td>8426.41.02</td>
<td>Cranes with hydraulically actuated rigid jib, selfpropelled with maximum capacity above 9.9 tons and not exceeding 30 tons.</td>
</tr>
</tbody>
</table>
8426.41.99 Other (machinery and apparatus, self propelled, on tires.)
8426.49.01 Cranes with structural iron jib (lattice) with mechanical working, with unit weight up to 55 tons.
8426.49.02 Cranes with hydraulically actuated rigid jib, selfpropelled, with load capacity above 9.9 tons and not exceeding 30 tons.
8426.91.01 Cranes, other than those provided for in items 8426.91.02, 8426.91.03 and 8426.91.04.
8426.91.02 Cranes with hydraulic working, with articulated or rigid booms, with capacity up to 9.9 tons at 1 meter radius.
8426.91.03 Isolated elevating cranes, basket type, with carrying capacity equal to or less than 1 ton and up to 15 meters lift.
8426.91.99 Other (machinery and apparatus; designed for mounting on road vehicles).
8426.99.01 Cranes, other than those provided for in items 8426.91.02
8426.99.02 Swivel cranes.
8426.99.99 Other (cranes and air cables ("blondines"); overhead travelling cranes, handling or unloading frames, bridge cranes, straddle carriers and straddle cranes).
8427.10.01 With load capacity up to 3,500 kilograms, measured at 620 millimeters from the frontal surface of the forks, without battery or loader.
8427.20.01 With explosion or internal combustion engine, with carrying capacity up to 7,000 kilograms, measured at 620 millimeters from the frontal surface of the forks.
8428.40.99 Other (escalators and moving walkways).
8428.90.99 Other (machinery and apparatus for lifting, loading, unloading or handling).
8429.11.01 Caterpillar type.
8429.19.01 Other (bulldozers and angledozers).
8429.20.01 Graders.
8429.30.01 Scrapers.
8429.40.01 Tamping machines.
8429.51.02 Frontend loader with hydraulic working, wheelttype, with capacity equal or less than 335 HP.
8429.51.03  Mechanical shovels, other than those provided for in item 8429.51.01.

8429.51.99  Other (mechanical shovels, excavators, loaders and frontend shovel loaders).

8429.52.02  Draglines or excavators, other than those provided for in item 8429.52.01.

8429.52.99  Other (machinery with a 360 revolving superstructure).

8429.59.01  Trenchers.

8429.59.02  Draglines, with dragging load capacity up to 4,000 kilograms

8429.59.03  Draglines or excavators, other than those provided for in item 8429.59.04.

8429.59.99  Other (selfpropelled bulldozers, angledozers, graders, scrapers, mechanical shovels, excavators, loaders, shovel loaders, tamping machines and road rollers).

8430.31.01  Rotation and/or percussion perforators.

8430.31.99  Other (selfpropelled cutters, pullers or wrenchers and machines to open tunnels or galleries).

8430.39.01  Boring shields.

8430.39.99  Other (not selfpropelled cutters, pullers or wrenchers and machines to open tunnels or galleries).

8430.41.01  Boring or sinking machinery, other than those provided for in item 8430.41.02.

8430.41.99  Other (selfpropelled probing or boring machinery).

8430.49.99  Other (not selfpropelled probing or boring machinery).

8430.50.01  Excavators, frontal carriers with hydraulic mechanism, with capacity equal to or less than 335 h.p.

8430.50.02  Scrapers.

8430.50.99  Other (selfpropelled machinery and apparatus).

8430.61.01  Graders (pushers).

8430.61.02  Tamping or compacting rollers.

8430.61.99  Other (machinery and apparatus, not selfpropelled).

8430.62.01  Scarification machine (ripping machine).

8430.69.01  Scrapers, not selfpropelled.
<table>
<thead>
<tr>
<th>HS Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>8430.69.02</td>
<td>Trencher machine, other than those provided for in item 8430.69.03.</td>
</tr>
<tr>
<td>8430.69.99</td>
<td>Other (trenchers, other than those provided for in items 8430.69.01, 8430.69.02 and 8430.69.03).</td>
</tr>
<tr>
<td>8452.10.01</td>
<td>Sewing machines of the household type.</td>
</tr>
<tr>
<td>8452.21.04</td>
<td>Industrial machines, other than those provided for in items 8452.21.02, 8452.21.03 and 8452.21.05.</td>
</tr>
<tr>
<td>8452.21.99</td>
<td>Other (automatic sewing machines).</td>
</tr>
<tr>
<td>8452.29.05</td>
<td>Machines or heads for industrial use, with straight seams, straight needle and a rotating and oscillating thread linking device, double backstitching, flat bed and transportation only.</td>
</tr>
<tr>
<td>8452.29.06</td>
<td>Industrial machines, other than those provided for in items 8452.29.01, 8452.29.03 and 8452.29.05.</td>
</tr>
<tr>
<td>8452.29.99</td>
<td>Other (non-automatic sewing machines).</td>
</tr>
<tr>
<td>8452.90.99</td>
<td>Other (parts of sewing machines).</td>
</tr>
<tr>
<td>8471.10.01</td>
<td>Analogue or hybrid automatic data processing machines.</td>
</tr>
<tr>
<td>8471.20.01</td>
<td>Digital or numerical automatic data processing machines, containing in the same housing at least a central processing unit and an input and output unit.</td>
</tr>
<tr>
<td>8471.91.01</td>
<td>Numerical or digital processing units, even if presented with the rest of the system, including one or two of the following types of units contained in the same housing: storage units, input units, output unit.</td>
</tr>
<tr>
<td>8471.92.99</td>
<td>Other (input or output units whether or not entered with the rest of a system and whether or not containing storage units in the same housing).</td>
</tr>
<tr>
<td>8471.93.01</td>
<td>Storage units, including the rest of the system.</td>
</tr>
<tr>
<td>8471.99.01</td>
<td>Other (automatic data processing machines and units thereof).</td>
</tr>
<tr>
<td>8474.20.01</td>
<td>Crushing and grinding with two or more cylinders.</td>
</tr>
<tr>
<td>8474.20.02</td>
<td>Crushing jawbone and grinding millstone.</td>
</tr>
<tr>
<td>8474.20.03</td>
<td>Blade crushing machines.</td>
</tr>
<tr>
<td>8474.20.04</td>
<td>Crushing machines of balls or bars.</td>
</tr>
<tr>
<td>8474.20.05</td>
<td>Drawer cone crushing, with diameter no more than 1200 millimeters.</td>
</tr>
<tr>
<td>8474.20.06</td>
<td>Grinding hammer percussion.</td>
</tr>
<tr>
<td>8474.20.99</td>
<td>Other (machines and apparatus to break, crush or grind or pulverize dirt, stones and other solid mineral materials).</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
</tr>
<tr>
<td>----------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>8474.39.99</td>
<td>Other (mixing machines).</td>
</tr>
<tr>
<td>8474.80.99</td>
<td>Other (machines and apparatus to classify, sieve, separate, break, crush, grind, mix, or knead dirt, stones and other mineral materials).</td>
</tr>
<tr>
<td>8475.10.01</td>
<td>Machines for assembling lamps.</td>
</tr>
<tr>
<td>8477.10.01</td>
<td>Injectionmolding machines for thermoplastic materials, up to 5 kg capacity for one molding model.</td>
</tr>
<tr>
<td>8701.30.01</td>
<td>Caterpillar tractors with an engine power at the flywheel equal to or above 105 h.p., but less than 380 h.p. measured at 1,900 rpm, including pushing blade.</td>
</tr>
<tr>
<td>8701.90.02</td>
<td>Railroad tractors, on tires with mechanical mechanism for pavement.</td>
</tr>
<tr>
<td>8711.10.01</td>
<td>Motorcycles fitted with an auxiliary motor with reciprocating piston engine not exceeding 50 cm3.</td>
</tr>
<tr>
<td>8711.20.01</td>
<td>Motorcycles fitted with an auxiliary motor with reciprocating piston engine over 50 cm3 but not over 250 cm3.</td>
</tr>
<tr>
<td>8711.30.01</td>
<td>Motorcycles fitted with an auxiliary motor with reciprocating piston engine over 250 cm3 but not over 500 cm3.</td>
</tr>
<tr>
<td>8711.40.01</td>
<td>Motorcycles fitted with an auxiliary motor with reciprocating piston engine over 500 cm3 but less than 550 cm3.</td>
</tr>
<tr>
<td>8711.90.99</td>
<td>Other (motorcycles, cycles fitted with an auxiliary motor and sidecars without a reciprocating piston engine, and that are not sidecars for motorcycles and velocipedes of any kind presented separately).</td>
</tr>
<tr>
<td>8712.00.02</td>
<td>Bicycles, other than of the type for racing.</td>
</tr>
<tr>
<td>8712.00.99</td>
<td>Other (cycles, not motorized, except bicycles, and tricycles for the transport of merchandise).</td>
</tr>
<tr>
<td>8716.10.01</td>
<td>Trailers and semitrailers for housing and camping, of the caravan type.</td>
</tr>
<tr>
<td>8716.31.02</td>
<td>Steeltank type tankers, including cryogenic or hoppers.</td>
</tr>
<tr>
<td>8716.31.99</td>
<td>Other (tankers except of the steeltank type, and of the thermal type for the transportation of milk).</td>
</tr>
<tr>
<td>8716.39.01</td>
<td>Trailers or semitrailers of the platform type, with or without stakes, including those accepted for the transport of boxes or metal baskets for cans and bottles or container carriers, or low beds, except those with hydraulic or pneumatic suspension and collapsible gooseneck.</td>
</tr>
<tr>
<td>8716.39.02</td>
<td>Trailers or semitrailers for the transport of vehicles.</td>
</tr>
</tbody>
</table>
8716.39.04 Trailers of the modularplatform type with directional axis, including transporter bridge section, hydraulic couplings or gooseneck or motor for hydraulic conditioning of the equipment.

8716.39.05 Semitrailers of the lowbed type, with pneumatic or hydraulic suspension and collapsible gooseneck.

8716.39.06 Trailers and semitrailers of the closedbox type, including refrigerated.

8716.39.07 Trailers and semitrailers of the steeltank type, including cryogenic and hoppers.

8716.39.99 Other (trailers and semitrailers for the transportation of goods, other than those provided for in items 8716.39.01, 8716.39.02, 8716.39.04, 8716.39.05, 8716.39.06 and 8716.39.07, and that are not vehicles for the transport of goods, with solid rubber wheels, nor doubledecker trailers or semitrailers of the type recognized as used exclusively for hauling cattle.

8716.40.01 Other trailers and semitrailers not used for transporting goods.

8716.80.99 Other (non-automotive vehicles except trailers or semitrailers, wheel barrows and handcarts, or wheel barrows of hydraulic operation).

b) Notwithstanding subparagraph (a), Mexico shall not prohibit or restrict the importation, on a temporary basis, of used goods provided for in the items set out in subparagraph (c) for the provision of a crossborder service subject to Chapter Twelve (CrossBorder Trade in Services) or the performance of a contract subject to Chapter Ten (Government Procurement), provided that the imported goods

(i) are necessary to the provision of the cross border service or the performance of the contract awarded to a supplier of another Party,

(ii) are used solely by or under the supervision of the service provider or the supplier performing the contract,

(iii) are not sold, leased or loaned while in the territory of Mexico,

(iv) are imported in no greater quantity than is necessary for the provision of the service or the performance of the contract,

(v) are reexported promptly on completion of the service or the contract, and

(vi) comply with other applicable requirements on the importation of such goods to the extent they are not inconsistent with this Agreement.

c) Subparagraph (b) applies to used goods provided for in the following items:
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>8413.11.01</td>
<td>Distributors fitted with a measuring device even if it includes a totalizing</td>
</tr>
<tr>
<td></td>
<td>mechanism.</td>
</tr>
<tr>
<td>8413.40.01</td>
<td>Concrete pumps for liquids, not fitted with a measuring device from 36 up</td>
</tr>
<tr>
<td></td>
<td>to 60 m³/hr capacity.</td>
</tr>
<tr>
<td>8426.12.01</td>
<td>Mobile portals on tires and straddle carriers.</td>
</tr>
<tr>
<td>8426.19.01</td>
<td>Other (overhead travelling cranes, bridge cranes and straddle carriers).</td>
</tr>
<tr>
<td>8426.30.01</td>
<td>Portal cranes.</td>
</tr>
<tr>
<td>8426.41.01</td>
<td>Cranes with hydraulically actuated rigid jib, selfpropelled with maximum</td>
</tr>
<tr>
<td></td>
<td>capacity above 9.9 tons and not exceeding 30 tons.</td>
</tr>
<tr>
<td>8426.41.02</td>
<td>Cranes with structural iron jib (lattice) with mechanical working, self-</td>
</tr>
<tr>
<td></td>
<td>propelled, with unit weight up to 55 tons.</td>
</tr>
<tr>
<td>8426.41.99</td>
<td>Other (machinery and apparatus, self propelled, on tires.)</td>
</tr>
<tr>
<td>8426.49.01</td>
<td>Cranes with structural iron jib (lattice) with mechanical working, with</td>
</tr>
<tr>
<td></td>
<td>unit weight up to 55 tons.</td>
</tr>
<tr>
<td>8426.49.02</td>
<td>Cranes with hydraulically actuated rigid jib, selfpropelled, with load</td>
</tr>
<tr>
<td></td>
<td>capacity above 9.9 tons and not exceeding 30 tons.</td>
</tr>
<tr>
<td>8426.91.01</td>
<td>Cranes, other than those provided for in items 8426.91.02, 8426.91.03 and</td>
</tr>
<tr>
<td></td>
<td>8426.91.04.</td>
</tr>
<tr>
<td>8426.99.01</td>
<td>Cranes</td>
</tr>
<tr>
<td>8426.99.02</td>
<td>Swivel cranes.</td>
</tr>
<tr>
<td>8426.99.99</td>
<td>Other (cranes and air cables (&quot;blondines&quot;); overhead travelling cranes,</td>
</tr>
<tr>
<td></td>
<td>handling or unloading frames, bridge cranes, straddle carriers and straddle</td>
</tr>
<tr>
<td></td>
<td>cranes).</td>
</tr>
<tr>
<td>8427.10.01</td>
<td>With load capacity up to 3,500 kilograms, measured at 620 millimeters from</td>
</tr>
<tr>
<td></td>
<td>the frontal surface of the forks, without battery or loader.</td>
</tr>
<tr>
<td>8428.40.99</td>
<td>Other (escalators and moving walkways).</td>
</tr>
<tr>
<td>8428.90.99</td>
<td>Other (machinery and apparatus for lifting, loading, unloading or handling).</td>
</tr>
<tr>
<td>8429.11.01</td>
<td>Caterpillar type.</td>
</tr>
<tr>
<td>8429.19.01</td>
<td>Other (bulldozers and angledozers).</td>
</tr>
<tr>
<td>8429.30.01</td>
<td>Scrapers.</td>
</tr>
</tbody>
</table>
8429.40.01  Tamping machines.
8429.51.02  Frontend loader with hydraulic working, wheeltipe, with capacity equal or less than 335 HP.
8429.51.03  Mechanical shovels, other than those provided for in item 8429.51.01.
8429.51.99  Other (mechanical shovels, excavators, loaders and frontend shovel loaders).
8429.52.02  Draglines or excavators, other than those provided for in item 8429.52.01.
8429.52.99  Other (machinery with a 360 revolving superstructure).
8429.59.01  Trenchers.
8429.59.02  Draglines, with dragging load capacity up to 4,000 kilograms.
8429.59.03  Draglines or excavators, other than those provided for in item 8429.59.04.
8429.59.99  Other (selfpropelled bulldozers, angledozers, graders, scrapers, mechanical shovels, excavators, loaders, shovel loaders, tamping machines and road rollers).
8430.31.01  Rotation and/or percussion perforators.
8430.31.99  Other (selfpropelled cutters, pullers or wrenchers and machines to open tunnels or galleries).
8430.39.01  Boring shields.
8430.39.99  Other (not selfpropelled cutters, pullers or wrenchers and machines to open tunnels or galleries).
8430.41.01  Boring or sinking machinery, other than those provided for in item 8430.41.02.
8430.41.99  Other (selfpropelled probing or boring machinery).
8430.49.99  Other (not selfpropelled probing or boring machinery).
8430.50.01  Excavators, frontal loaders with hydraulic mechanism, with capacity equal to or less than 335 h.p.
8430.50.02  Scrapers.
8430.50.99  Other (selfpropelled machinery and apparatus).
8430.61.01  Graders (pushers).
8430.61.02  Tamping or compacting rollers.
8430.62.01  Scarification machine (ripping machine).
8430.69.01 Scrapers, not selfpropelled.
8430.69.02 Trencher machine, other than those provided for in item 8430.69.03.
8430.69.99 Other (trenchers, other than those provided for in items 8430.69.01, 8430.69.02 and 8430.69.03).
8452.10.01 Sewing machines of the household type.
8452.21.04 Industrial machines, other than those provided for in items 8452.21.02, 8452.21.03 and 8452.21.05.
8452.21.99 Other (automatic sewing machines).
8452.29.06 Industrial machines, other than those provided for in items 8452.29.01, 8452.29.03 and 8452.29.05.
8452.29.99 Other (non-automatic sewing machines).
8452.90.99 Other (parts of sewing machines).
8471.10.01 Analogue or hybrid automatic data processing machines.
8474.20.01 Crushing and grinding with two or more cylinders.
8474.20.03 Blade crushing machines.
8474.20.04 Crushing machines of balls or bars.
8474.20.99 Other (machines and apparatus to break, crush or grind or pulverize dirt, stones and other solid mineral materials).
8474.39.99 Other (mixing machines).
8474.80.99 Other (machines and apparatus to classify, sieve, separate, break, crush, grind, mix, or knead dirt, stones and other mineral materials).
8477.10.01 Injectionmolding machines for thermoplastic materials, up to 5 kg capacity for one molding model.
8701.30.01 Caterpillar tractors with an engine power at the flywheel equal to or above 105 h.p., but less than 380 h.p. measured at 1,900 rpm, including pushing blade.

Section C - U.S. Measures

1. Articles 301 and 309 shall not apply to controls by the United States on the export of logs of all species.

2. Articles 301 and 309 shall not apply to:

a) taxes on imported perfume containing distilled spirits under existing provisions of section 5001(a)(3) and 5007(b)(2) of the Internal Revenue Code of 1986, 26 U.S.C. 5001(a)(3), 5007(b)(2), and
b) measures under existing provisions of the Merchant Marine Act of 1920, 46 App. U.S.C. 883; the Passenger Vessel Act, 46 App. U.S.C. 289, 292, and 316; and 46 U.S.C. 12108, to the extent that such measures were mandatory legislation at the time of the United States' accession to the GATT and have not been amended so as to decrease their conformity with the GATT.

3. Articles 301 and 309 shall not apply to:

a) the continuation or prompt renewal of a non-conforming provision of any statute referred to in paragraph 2; and

b) the amendment to a non-conforming provision of any statute referred to in paragraph 2 to the extent that the amendment does not decrease the conformity of the provision with Articles 301 and 309.

Annex 302.2: Tariff Elimination

1. Except as otherwise provided in a Party's Schedule attached to this Annex, the following staging categories apply to the elimination of customs duties by each Party pursuant to Article 302(2):

   a) duties on goods provided for in the items in staging category A in a Party's Schedule shall be eliminated entirely and such goods shall be duty-free, effective January 1, 1994;

   b) duties on goods provided for in the items in staging category B in a Party's Schedule shall be removed in five equal annual stages beginning on January 1, 1994, and such goods shall be duty-free, effective January 1, 1998;

   c) duties on goods provided for in the items in staging category C in a Party's Schedule shall be removed in 10 equal annual stages beginning on January 1, 1994, and such goods shall be duty-free, effective January 1, 2003;

   d) duties on goods provided for in the items in staging category C+ in a Party's Schedule shall be removed in 15 equal annual stages beginning on January 1, 1994, and such goods shall be duty-free, effective January 1, 2008; and

   e) goods provided for in the items in staging category D in a Party's Schedule shall continue to receive duty-free treatment.

2. The base rate of customs duty and staging category for determining the interim rate of customs duty at each stage of the U.S. Generalized System of Preferences and the General Preferential Tariff of Canada.

3. For the purpose of the elimination of customs duties in accordance with Article 302, interim staged rates shall be rounded down, except as set out in each Party's Schedule attached to this Annex, at least to the nearest tenth of a percentage point or, if the rate of duty is expressed in monetary units, at least to the nearest .001 of the official monetary unit of the Party.

4. Canada shall apply a rate of customs duty no higher than the rate applicable under the staging category set out for an item in Annex 401.2, as amended, of the Canada-
Annex 315: Other Export Measures

Article 315 shall not apply as between Mexico and the other Parties.

Annex 300-A: Trade and Investment in the Automotive Sector

1. Each Party shall accord to all existing producers of vehicles in its territory treatment no less favorable than it accords to any new producer of vehicles in its territory under the measures referred to in this Annex, except that this obligation shall not be construed to apply to any differences in treatment specifically provided for in the Appendices to this Annex.

2. The Parties shall review, no later than December 31, 2003, the status of the North American automotive sector and the effectiveness of the measures referred to in this Annex to determine actions that could be taken to strengthen the integration and global competitiveness of the sector.

3. Appendices 300-A.1, 300-A.2 and 300-A.3 apply to the Parties specified therein respecting trade and investment in the automotive sector.

4. For purposes of this Annex, unless otherwise specified in the Appendices:

   existing producer of vehicles means a producer that was producing vehicles in the territory of the relevant Party prior to model year 1992;

   new producer of vehicles means a producer that began producing vehicles in the territory of the relevant Party after model year 1991;

   used vehicle means a vehicle that:

       (a) has been sold, leased or loaned;

       (b) has been driven for more than

           (i) 1,000 kilometers if the vehicle has a gross weight of less than five metric tons, or

           (ii) 5,000 kilometers if the vehicle has a gross weight of five metric tons or more; or

       (c) was manufactured prior to the current year and at least 90 days have elapsed since the date of manufacture; and
For purposes of this Chapter:

**commercial importation** means the importation of a good into the territory of any Party for the purpose of sale, or any commercial, industrial or other like use;

**customs administration** means the competent authority that is responsible under the law of a Party for the administration of customs laws and regulations;

**determination of origin** means a determination as to whether a good qualifies as an originating good in accordance with Chapter Four;

**exporter in the territory of a Party** means an exporter located in the territory of a Party and an exporter required under this Chapter to maintain records in the territory of that Party regarding exportations of a good;

**identical goods** means goods that are the same in all respects, including physical characteristics, quality and reputation, irrespective of minor differences in appearance that are not relevant to a determination of origin of those goods under Chapter Four;

**importer in the territory of a Party** means an importer located in the territory of a Party and an importer required under this Chapter to maintain records in the territory of that Party regarding importations of a good;

**intermediate material** means "intermediate material" as defined in Article 415; Marking Rules means "Marking Rules" established under Annex 311;

**material** means "material" as defined in Article 415;

**net cost of a good** means "net cost of a good" as defined in Article 415;

**preferential tariff treatment** means the duty rate applicable to an originating good;

**producer** means "producer" as defined in Article 415;

**production** means "production" as defined in Article 415;

**transaction value** means "transaction value" as defined in Article 415;

**Uniform Regulations** means "Uniform Regulations" established under Article 511;

**used** means "used" as defined in Article 415; and

**value** means value of a good or material for purposes of calculating customs duties or for purposes of applying Chapter Four.

**CHAPTER SIX: ENERGY AND BASIC PETROCHEMICALS**

**Article 601: Principles**

1. The Parties confirm their full respect for their Constitutions.
2. The Parties recognize that it is desirable to strengthen the important role that trade in
energy and basic petrochemical goods plays in the free trade area and to enhance this role
through sustained and gradual liberalization.

3. The Parties recognize the importance of having viable and internationally competitive
energy and petrochemical sectors to further their individual national interests.

**Article 602: Scope and Coverage**

1. This Chapter applies to measures relating to energy and basic petrochemical goods
originating in the territories of the Parties and to measures relating to investment and to the
cross-border trade in services associated with such goods, as set forth in this Chapter.

2. For purposes of this Chapter, energy and basic petrochemical goods refer to those
goods classified under the Harmonized System as:

   a) subheading 2612.10;
   b) headings 27.01 through 27.06;
   c) subheading 2707.50;
   d) subheading 2707.99 (only with respect to solvent naphtha, rubber extender
      oils and carbon black feedstocks);
   e) headings 27.08 and 27.09;
   f) heading 27.10 (except for normal paraffin mixtures in the range of C9 to
      C15);
   g) heading 27.11 (except for ethylene, propylene, butylene and butadiene in
      purities over 50 percent);
   h) headings 27.12 through 27.16;
   i) subheadings 2844.10 through 2844.50 (only with respect to uranium
      compounds classified under those subheadings);
   j) subheading 2845.10; and
   k) subheading 2901.10 (only with respect to ethane, butanes, pentanes, hexanes,
      and heptanes).

3. Except as specified in Annex 602.3, energy and petrochemical goods and activities
shall be governed by the provisions of this Agreement.

**Article 603: Import and Export Restrictions**

1. Subject to the further rights and obligations of this Agreement, the Parties incorporate
the provisions of the General Agreement on Tariffs and Trade (GATT), with respect to
prohibitions or restrictions on trade in energy and basic petrochemical goods. The Parties
agree that this language does not incorporate their respective protocols of provisional
application to the GATT.
2. The Parties understand that the provisions of the GATT incorporated in paragraph 1 prohibit, in any circumstances in which any other form of quantitative restriction is prohibited, minimum or maximum export-price requirements and, except as permitted in enforcement of countervailing and antidumping orders and undertakings, minimum or maximum import-price requirements.

3. In circumstances where a Party adopts or maintains a restriction on importation from or exportation to a non-Party of an energy or basic petrochemical good, nothing in this Agreement shall be construed to prevent the Party from:

   a) limiting or prohibiting the importation from the territory of any Party of such energy or basic petrochemical good of the non-Party;
   b) requiring as a condition of export of such energy or basic petrochemical good of the Party to the territory of any other Party that the good be consumed within the territory of the other Party.

4. In the event that a Party adopts or maintains a restriction on imports of an energy or basic petrochemical good from non-Party countries, the Parties, on request of any Party, shall consult with a view to avoiding undue interference with or distortion of pricing, marketing and distribution arrangements in another Party.

5. Each Party may administer a system of import and export licensing for energy or basic petrochemical goods provided that such system is operated in a manner consistent with the provisions of this Agreement, including paragraph 1 and Article 1502 (Monopolies and State Enterprises).

6. This Article is subject to the reservations set out in Annex 603.6.

Article 604: Export Taxes

No Party may adopt or maintain any duty, tax or other charge on the export of any energy or basic petrochemical good to the territory of another Party, unless such duty, tax or charge is adopted or maintained on:

   a) exports of any such good to the territory of all other Parties; and
   b) any such good when destined for domestic consumption.

Article 605: Other Export Measures

Subject to Annex 605, a Party may adopt or maintain a restriction otherwise justified under Articles XI:2(a) or XX(g), (i) or (j) of the GATT with respect to the export of an energy or basic petrochemical good to the territory of another Party, only if:

   a) the restriction does not reduce the proportion of the total export shipments of the specific energy or basic petrochemical good made available to that other Party relative to the total supply of that good of the Party maintaining the restriction as compared to the proportion prevailing in the most recent 36-month period for which data are available prior to the imposition of the measure, or in such other representative period on which the Parties may agree;
b) the Party does not impose a higher price for exports of an energy or basic petrochemical good to that other Party than the price charged for such good when consumed domestically, by means of any measure such as licenses, fees, taxation and minimum price requirements. The foregoing provision does not apply to a higher price that may result from a measure taken pursuant to subparagraph (a) that only restricts the volume of exports; and

c) the restriction does not require the disruption of normal channels of supply to that other Party or normal proportions among specific energy or basic petrochemical goods supplied to that other Party, such as, for example, between crude oil and refined products and among different categories of crude oil and of refined products.

Article 606: Energy Regulatory Measures

1. The Parties recognize that energy regulatory measures are subject to the disciplines of:

   a) national treatment, as provided in Article 301;

   b) import and export restrictions, as provided in Article 603; and

   c) export taxes, as provided in Article 604.

2. Each Party shall seek to ensure that in the application of any energy regulatory measure, energy regulatory bodies within its territory avoid disruption of contractual relationships to the maximum extent practicable, and provide for orderly and equitable implementation appropriate to such measures.

Article 607: National Security Measures

Subject to Annex 607, no Party may adopt or maintain a measure restricting imports of an energy or basic petrochemical good from, or exports of an energy or basic petrochemical good to, another Party under Article XXI of the GATT or under Article 2102 (National Security), except to the extent necessary to:

   a) supply a military establishment of a Party or enable fulfillment of a critical defense contract of a Party;

   b) respond to a situation of armed conflict involving the Party taking the measure;

   c) implement national policies or international agreements relating to the non-proliferation of nuclear weapons or other nuclear explosive devices; or

   d) respond to direct threats of disruption in the supply of nuclear materials for defense purposes.

Article 608: Miscellaneous Provisions

1. The Parties agree to allow existing or future incentives for oil and gas exploration, development and related activities in order to maintain the reserve base for these energy resources.
2. Annex 608.2 applies only to the Parties specified in that Annex with respect to other agreements relating to trade in energy goods.

**Article 609: Definitions**

For purposes of this Chapter:

- **consumed** means transformed so as to qualify under the rules of origin set out in Chapter Four (Rules of Origin), or actually consumed;

- **cross-border trade in services** means "crossborder trade in services" as defined in Article 1213 (Cross-Border Trade in Services Definitions);

- **energy regulatory measure** means any measure by federal or sub-federal entities that directly affects the transportation, transmission or distribution, purchase or sale, of an energy or basic petrochemical good;

- **enterprise** means "enterprise" as defined in Article 1139 (Investment-Definitions);

- **enterprise of a Party** means "enterprise of a Party" as defined in Article 1139;

- **facility for independent power production** means a facility that is used for the generation of electric energy exclusively for sale to an electric utility for further resale;

- **first hand sale** refers to the first commercial transaction affecting the good in question;

- **investment** means investment as defined in Article 1139;

- **restriction** means any limitation, whether made effective through quotas, licenses, permits, minimum or maximum price requirements or any other means;

- **total export shipments** means the total shipments from total supply to users located in the territory of the other Party; and

- **total supply** means shipments to domestic users and foreign users from:
  
  a) domestic production;

  b) domestic inventory; and

  c) other imports, as appropriate.

**Annex 602.3: Reservations and Special Provisions**

**Reservations**

1. The Mexican State reserves to itself the following strategic activities, including investment in such activities and the provision of services in such activities:
a) exploration and exploitation of crude oil and natural gas; refining or processing of crude oil and natural gas; and production of artificial gas, basic petrochemicals and their feedstocks and pipelines;

b) foreign trade; transportation, storage and distribution, up to and including the first hand sales of the following goods:

(i) crude oil,

(ii) natural and artificial gas,

(iii) goods covered by this Chapter obtained from the refining or processing of crude oil and natural gas, and

(iv) basic petrochemicals;

c) the supply of electricity as a public service in Mexico, including, except as provided in paragraph 5, the generation, transmission, transformation, distribution and sale of electricity; and

d) exploration, exploitation and processing of radioactive minerals, the nuclear fuel cycle, the generation of nuclear energy, the transportation and storage of nuclear waste, the use and reprocessing of nuclear fuel and the regulation of their applications for other purposes and the production of heavy water.

In the event of an inconsistency between this paragraph and another provision of this Agreement, this paragraph shall prevail to the extent of that inconsistency.

2. Pursuant to Article 1101(2), (Investment-Scope and Coverage), private investment is not permitted in the activities listed in paragraph 1. Chapter Twelve (CrossBorder Trade in Services) shall only apply to activities involving the provision of services covered in paragraph 1 when Mexico permits a contract to be granted in respect of such activities and only to the extent of that contract.

Trade in Natural Gas and Basic Petrochemicals

3. Where end-users and suppliers of natural gas or basic petrochemical goods consider that cross-border trade in such goods may be in their interests, each Party shall permit such end-users and suppliers, and any state enterprise of that Party as may be required under its domestic law, to negotiate supply contracts.

Each Party shall leave the modalities of the implementation of any such contract to the endusers, suppliers, and any state enterprise of the Party as may be required under its domestic law, which may take the form of individual contracts between the state enterprise and each of the other entities. Such contracts may be subject to regulatory approval.

Performance Clauses

4. Each Party shall allow its state enterprises to negotiate performance clauses in their service contracts.

Activities and Investment in Electricity Generation Facilities
5.

a) Production for Own Use

An enterprise of another Party may acquire, establish, and/or operate an electrical generating facility in Mexico to meet the enterprise's own supply needs. Electricity generated in excess of such needs must be sold to the Federal Electricity Commission (Comisión Federal de Electricidad) (CFE) and CFE shall purchase such electricity under terms and conditions agreed to by CFE and the enterprise.

b) Co-generation

An enterprise of another Party may acquire, establish, and/or operate a co-generation facility in Mexico that generates electricity using heat, steam or other energy sources associated with an industrial process. Owners of the industrial facility need not be the owners of the co-generating facility. Electricity generated in excess of the industrial facility's supply requirements must be sold to CFE and CFE shall purchase such electricity under terms and conditions agreed to by CFE and the enterprise.

c) Independent Power Production

An enterprise of another Party may acquire, establish, and/or operate an electricity generating facility for independent power production (IPP) in Mexico. Electricity generated by such a facility for sale in Mexico shall be sold to CFE and CFE shall purchase such electricity under terms and conditions agreed to by CFE and the enterprise. Where an IPP located in Mexico and an electric utility of another Party consider that cross-border trade in electricity may be in their interests, each relevant Party shall permit these entities and CFE to negotiate terms and conditions of power purchase and power sale contracts. The modalities of implementing such supply contracts are left to the end users, suppliers and CFE and may take the form of individual contracts between CFE and each of the other entities. Each relevant Party shall determine whether such contracts are subject to regulatory approval.

Annex 603.6: Exception to Article 603

For only those goods listed below, Mexico may restrict the granting of import and export licenses for the sole purpose of reserving foreign trade in these goods to itself.

- 2707.50 Other aromatic hydrocarbon mixtures of which 65 percent or more by volume (including losses) distills at 250 C by the ASTM D 86 method.
- 2707.99 Rubber extender oils, solvent naphtha and carbon black feedstocks only.
- 2709 Petroleum oils and oils obtained from bituminous minerals, crude.
- 2710 Aviation gasoline; gasoline and motor fuel blending stocks (except aviation gasoline) and reformates when used as motor fuel lending stocks; kerosene; gas oil and diesel oil; petroleum ether; fuel oil; paraffinic oils other than for lubricating purposes; pentanes; carbon black feedstocks; hexanes; heptanes and naphthas.
- 2711 Petroleum gases and other gaseous hydrocarbons other than: ethylene, propylene, butylene and butadiene, in purities over 50 percent.
- 2712.90 Only paraffin wax containing by weight more than 0.75 percent of oil, in bulk (Mexico classifies these goods under HS 2712.90.02) and only when imported to be used for further refining.
- 2713.11 Petroleum coke not calcined.
- 2713.20 Petroleum bitumen (except when used for road surfacing purposes under HS 2713.20.01).
2713.90  Other residues of petroleum oils or of oils obtained from bituminous minerals.
2714  Bitumen and asphalt, natural; bituminous or oil shale and tar sands, asphaltites and asphalitic rocks (except when used for road surfacing purposes under HS 2714.90.01).
2901.10  Ethane, butanes, pentanes, hexanes, and heptanes only.

Annex 605: Exception to Article 605

Notwithstanding any other provision of this Chapter, the provisions of Article 605 shall not apply as between the other Parties and Mexico.

Annex 607: National Security

1. Article 607 shall impose no obligations and confer no rights on Mexico.
2. Article 2102 (National Security) shall apply as between Mexico and the other Parties.

Annex 608.2: Other Agreements

1. Canada and the United States shall act in accordance with the terms of Annexes 902.5 and 905.2 of the Canada United States Free Trade Agreement, which are hereby incorporated into and made a part of this Agreement for such purpose. This paragraph shall impose no obligations and confer no rights on Mexico.

2. Canada and the United States intend no inconsistency between this Chapter and the Agreement on an International Energy Program (IEP). In the event of any inconsistency between the IEP and this Chapter, the IEP shall prevail as between Canada and the United States to the extent of that inconsistency.

CHAPTER SEVEN: AGRICULTURE AND SANITARY AND PHYTOSANITARY MEASURES

Section A - Agriculture

Article 701: Scope and Coverage

1. This Section applies to measures adopted or maintained by a Party relating to agricultural trade.

2. In the event of any inconsistency between this Section and another provision of this Agreement, this Section shall prevail to the extent of the inconsistency.

Article 702: International Obligations

1. Annex 702.1 applies to the Parties specified in that Annex with respect to agricultural trade under certain agreements between them.

2. Prior to adopting pursuant to an intergovernmental commodity agreement, a measure that may affect trade in an agricultural good between the Parties, the Party proposing to adopt the measure shall consult with the other Parties with a view to avoiding nullification or impairment of a concession granted by that Party in its Schedule to Annex 302.2.
United States-Oman Free Trade Agreement
Entered into force on January 1, 2009
CHAPTER TWO
NATIONAL TREATMENT AND MARKET ACCESS FOR GOODS

ARTICLE 2.1: SCOPE AND COVERAGE

Except as otherwise provided, this Chapter applies to trade in goods of a Party.

Section A: National Treatment

ARTICLE 2.2: NATIONAL TREATMENT

1. Each Party shall accord national treatment to the goods of the other Party in accordance with Article III of GATT 1994, including its interpretive notes, and to this end Article III of GATT 1994 and its interpretative notes are incorporated into and made a part of this Agreement, mutatis mutandis.

2. The treatment to be accorded by a Party under paragraph 1 means, with respect to a regional level of government, treatment no less favorable than the most favorable treatment that regional level government accords to any like, directly competitive, or substitutable goods, as the case may be, of the Party of which it forms a part.

3. Paragraphs 1 and 2 shall not apply to the measures set out in Annex 2-A.

Section B: Tariff Elimination

ARTICLE 2.3: TARIFF ELIMINATION

1. Except as otherwise provided in this Agreement, neither Party may increase any existing customs duty, or adopt any new customs duty, on an originating good.

2. Except as otherwise provided in this Agreement, each Party shall progressively eliminate its customs duties on originating goods, in accordance with its Schedule to Annex 2-B.

3. On the request of either Party, the Parties shall consult to consider accelerating the elimination of customs duties set out in their Schedules to Annex 2-B. An agreement by the Parties to accelerate the elimination of a customs duty on a good shall supersede any duty rate or staging category determined pursuant to their Schedules to Annex 2-B for that good when approved by each Party in accordance with its applicable legal procedures.

4. For greater certainty, a Party may:

   (a) raise a customs duty back to the level established in its Schedule to Annex 2-B following a unilateral reduction; or

   (b) maintain or increase a customs duty as authorized by the Dispute Settlement Body of the WTO.

Section C: Special Regimes

ARTICLE 2.4: WAIVER OF CUSTOMS DUTIES

1. Neither Party may adopt any new waiver of customs duties, or expand with respect to existing recipients or extend to any new recipient the application of an existing waiver of customs duties, where the waiver is conditioned, explicitly or implicitly, on the fulfillment of a performance requirement.
Each Party shall grant duty-free entry to commercial samples of negligible value, and to printed advertising materials, imported from the territory of the other Party, regardless of their origin, but may require that:

(a) such samples be imported solely for the solicitation of orders for goods, or the solicitation of orders for services provided from the territory, of the other Party or a non-Party; or

(b) such advertising materials be imported in packets that each contain no more than one copy of each such material and that neither such materials nor packets form part of a larger consignment.

Section D: Non-Tariff Measures

ARTICLE 2.8: IMPORT AND EXPORT RESTRICTIONS

1. Except as otherwise provided in this Agreement, neither Party may adopt or maintain any prohibition or restriction on the importation of any good of the other Party or on the exportation or sale for export of any good destined for the territory of the other Party, except in accordance with Article XI of GATT 1994 and its interpretive notes, and to this end Article XI of GATT 1994 and its interpretive notes are incorporated into and made a part of this Agreement, mutatis mutandis.2

2. The Parties understand that GATT 1994 rights and obligations incorporated by paragraph 1 prohibit, in any circumstances in which any other form of restriction is prohibited, a Party from adopting or maintaining:

(a) export and import price requirements, except as permitted in enforcement of countervailing and antidumping duty orders and undertakings;

(b) measures conditioning the grant of an import license on the fulfillment of a performance requirement; or

(c) voluntary export restraints inconsistent with Article VI of GATT 1994, as implemented under Article 18 of the WTO Agreement on Subsidies and Countervailing Measures and Article 8.1 of the WTO Agreement on Implementation of Article VI of GATT 1994.

3. In the event that a Party adopts or maintains a prohibition or restriction on the importation from or exportation to a non-Party of a good, no provision of this Agreement shall be construed to prevent the Party from:

(a) limiting or prohibiting the importation of the good of the non-Party from the territory of the other Party; or

(b) requiring as a condition for exporting the good of the Party to the territory of the other Party, that the good not be re-exported to the non-Party, directly or indirectly, without being consumed in the territory of the other Party.

4. In the event that a Party adopts or maintains a prohibition or restriction on the importation of a good from a non-Party, the Parties, on the request of either Party, shall consult with a view to avoiding undue interference with or distortion of pricing, marketing, and distribution arrangements in the other Party.

2 For greater certainty, paragraph 1 applies to prohibitions or restrictions on the importation of remanufactured goods.
5. Paragraphs 1 through 4 shall not apply to the measures set out in Annex 2-A.

ARTICLE 2.9: ADMINISTRATIVE FEES AND FORMALITIES

1. Each Party shall ensure, in accordance with Article VIII:1 of GATT 1994 and its interpretive notes, that all fees and charges of whatever character (other than import and export duties, charges equivalent to an internal tax or other internal charges applied consistently with Article III:2 of GATT 1994, and antidumping and countervailing duties applied pursuant to a Party’s law) imposed on, or in connection with, importation or exportation are limited in amount to the approximate cost of services rendered and do not represent an indirect protection to domestic goods or a taxation of imports or exports for fiscal purposes.

2. Neither Party may require consular transactions, including related fees and charges, in connection with the importation of any good of the other Party.

3. Each Party shall make available on the Internet a current list of the fees and charges it imposes in connection with importation or exportation.

4. The United States shall eliminate its merchandise processing fee on originating goods.

ARTICLE 2.10: EXPORT TAXES

Neither Party may adopt or maintain any tax, duty, or other charge on the export of any good to the territory of the other Party, unless the tax, duty, or charge is also adopted or maintained on the good when destined for domestic consumption.

Section E: Agriculture

ARTICLE 2.11: AGRICULTURAL EXPORT SUBSIDIES

1. The Parties share the objective of the multilateral elimination of export subsidies for agricultural goods and shall work together toward an agreement in the WTO to eliminate those subsidies and prevent their reintroduction in any form.

2. Except as provided in paragraph 3, neither Party may introduce or maintain any export subsidy on any agricultural good destined for the territory of the other Party.

3. Where an exporting Party considers that a non-Party is exporting an agricultural good to the territory of the other Party with the benefit of export subsidies, the importing Party shall, on written request of the exporting Party, consult with the exporting Party with a view to agreeing on specific measures that the importing Party may adopt to counter the effect of such subsidized imports. If the importing Party adopts the agreed-on measures, the exporting Party shall refrain from applying any export subsidy to exports of such good to the territory of the importing Party.³

Section F: Definitions

ARTICLE 2.12: DEFINITIONS

For purposes of this Chapter:

³ For greater certainty, each Party confirms that any measure that it adopts pursuant to this paragraph shall be consistent with the WTO Agreement.
ANNEX 2-A
NATIONAL TREATMENT AND IMPORT AND EXPORT RESTRICTIONS

Section A: Measures of the United States

Paragraphs 1 and 2 of Article 2.2 and paragraphs 1 through 4 of Article 2.8 shall not apply to:

(a) controls on the export of logs of all species;

(b) (i) measures under existing provisions of the Merchant Marine Act of 1920, 46 App. U.S.C. § 883; the Passenger Vessel Act, 46 App. U.S.C. §§ 289, 292, and 316; and 46 U.S.C. § 12108, to the extent that such measures were mandatory legislation at the time the United States acceded to the General Agreement on Tariffs and Trade 1947 (“GATT 1947”) and have not been amended so as to decrease their conformity with Part II of GATT 1947;

(ii) the continuation or prompt renewal of a non-conforming provision of any statute referred to in clause (i); and

(iii) the amendment to a non-conforming provision of any statute referred to in clause (i) to the extent that the amendment does not decrease the conformity of the provision with Articles 2.2 and 2.8; and

(c) actions authorized by the Dispute Settlement Body of the WTO.

Section B: Measures of Oman

Paragraphs 1 and 2 of Article 2.2 and paragraphs 1 through 4 of Article 2.8 shall not apply to actions authorized by the Dispute Settlement Body of the WTO.
CHAPTER TWENTY-ONE
EXCEPTIONS

ARTICLE 21.1: GENERAL EXCEPTIONS

1. For purposes of Chapters Two through Seven (National Treatment and Market Access for Goods, Textiles and Apparel, Rules of Origin, Customs Administration, Sanitary and Phytosanitary Measures, and Technical Barriers to Trade), Article XX of GATT 1994 and its interpretive notes are incorporated into and made part of this Agreement, mutatis mutandis. The Parties understand that the measures referred to in Article XX(b) of GATT 1994 include environmental measures necessary to protect human, animal, or plant life or health, and that Article XX(g) of GATT 1994 applies to measures relating to the conservation of living and non-living exhaustible natural resources.

2. For purposes of Chapters Eleven (Cross-Border Trade in Services), Thirteen (Telecommunications), and Fourteen (Electronic Commerce), Article XIV of GATS (including its footnotes) is incorporated into and made part of this Agreement, mutatis mutandis. The Parties understand that the measures referred to in Article XIV(b) of GATS include environmental measures necessary to protect human, animal, or plant life or health.

ARTICLE 21.2: ESSENTIAL SECURITY

Nothing in this Agreement shall be construed:

(a) to require a Party to furnish or allow access to any information the disclosure of which it determines to be contrary to its essential security interests; or

(b) to preclude a Party from applying measures that it considers necessary for the fulfillment of its obligations with respect to the maintenance or restoration of international peace or security or the protection of its own essential security interests.

ARTICLE 21.3: TAXATION

1. Except as set out in this Article, nothing in this Agreement shall apply to taxation measures.

2. (a) Nothing in this Agreement shall affect the rights and obligations of either Party under any tax convention. In the event of any inconsistency between this Agreement and any such convention, that convention shall prevail to the extent of the inconsistency.

(b) In the case of a tax convention between the Parties, the competent authorities under that convention shall have sole responsibility for determining whether any inconsistency exists between this Agreement and that convention.

3. Notwithstanding paragraph 2:

(a) Article 2.2 (National Treatment and Market Access for Goods – National Treatment) and such other provisions of this Agreement as are necessary to give effect to that Article shall apply to taxation measures to the same extent as does Article III of GATT 1994; and

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1 This Article is without prejudice to whether digital products should be classified as goods or services.
(b) Article 2.10 (National Treatment and Market Access for Goods – Export Taxes) shall apply to taxation measures.

4. Subject to paragraph 2:

(a) Article 11.2 (Cross-Border Trade in Services – National Treatment), Article 12.2 (Financial Services – National Treatment), and Article 12.5 (Financial Services – Cross-Border Trade) shall apply to taxation measures on income, capital gains, or on the taxable capital of corporations that relate to the purchase or consumption of particular services, except that nothing in this subparagraph shall prevent a Party from conditioning the receipt or continued receipt of an advantage relating to the purchase or consumption of particular services on requirements to provide the service in its territory; and

(b) Articles 10.3 (Investment – National Treatment) and 10.4 (Investment – Most-Favored-Nation Treatment), Articles 11.2 (Cross-Border Trade in Services – National Treatment) and 11.3 (Cross – Border Trade in Services – Most-Favored-Nation Treatment), and Articles 12.2 (Financial Services – National Treatment) and 12.3 (Financial Services – Most-Favored-Nation Treatment) shall apply to all taxation measures, other than those on income, capital gains, or on the taxable capital of corporations, taxes on estates, inheritances, gifts, and generation-skipping transfers;

except that nothing in those Articles shall apply:

(c) any most-favored-nation obligation in this Agreement with respect to an advantage accorded by a Party pursuant to a tax convention;

(d) to a non-conforming provision of any existing taxation measure;

(e) to the continuation or prompt renewal of a non-conforming provision of any existing taxation measure;

(f) to an amendment to a non-conforming provision of any existing taxation measure to the extent that the amendment does not decrease its conformity, at the time of the amendment, with any of those Articles;

(g) to the adoption or enforcement of any taxation measure aimed at ensuring the equitable or effective imposition or collection of taxes (as permitted by Article XIV(d) of GATS; or

(h) to a provision that conditions the receipt, or continued receipt, of an advantage relating to the contributions to, or income of, a pension trust, fund, or other arrangement to provide pension or similar benefits on a requirement that the Party maintain continuous jurisdiction, regulation, or supervision over such trust, fund, or other arrangement.

5. Subject to paragraph 2 and without prejudice to the rights and obligations of the Parties under paragraph 3, paragraphs 2, 3, and 4 of Article 10.8 (Investment – Performance Requirements) shall apply to taxation measures.

6. (a) Article 10.15 (Investment – Submission of a Claim to Arbitration) shall apply to a taxation measure alleged to be an expropriation or a breach of an investment agreement or an investment authorization.

(b) Article 10.6 (Investment – Expropriation and Compensation) shall apply to taxation measures. However, no investor may invoke Article 10.6 (Investment – Expropriation and Compensation) as the basis for a claim.
where it has been determined pursuant to this subparagraph that the measure is not an expropriation. An investor that seeks to invoke Article 10.6 (Investment – Expropriation and Compensation) with respect to a taxation measure must first refer to the competent authorities, at the time that it gives its notice of intent under Article 10.15.4 (Investment – Submission of a Claim to Arbitration), the issue of whether that taxation measure is not an expropriation. If the competent authorities do not agree to consider the issue or, having agreed to consider it, fail to agree that the measure is not an expropriation within a period of 180 days of such referral, the investor may submit its claim to arbitration under Article 10.15 (Investment – Submission of a Claim to Arbitration).

(c) For purposes of this paragraph, **competent authorities** means:

(i) in the case of Oman, the Minister of National Economy; and

(ii) in the case of the United States, the Assistant Secretary of the Treasury (Tax Policy).

7. For purposes of this Article, **taxes** and **taxation measures** do not include:

(a) a customs duty; or

(b) the measures listed in exceptions (b) and (c) of the definition of customs duty.

**ARTICLE 21.4: DISCLOSURE OF INFORMATION**

Nothing in this Agreement shall be construed as requiring a Party to furnish or allow access to confidential information the disclosure of which would impede law enforcement or otherwise be contrary to the public interest or which would prejudice the legitimate commercial interests of particular enterprises, public or private.
United States-Peru Trade Promotion Agreement
Entered into force on February 1, 2009
Chapter Two

National Treatment and Market Access for Goods

Article 2.1: Scope and Coverage

Except as otherwise provided in this Agreement, this Chapter applies to trade in goods of a Party.

Section A: National Treatment

Article 2.2: National Treatment

1. Each Party shall accord national treatment to the goods of another Party in accordance with Article III of the GATT 1994, including its interpretive notes, and to this end Article III of the GATT 1994 and its interpretive notes are incorporated into and made part of this Agreement, mutatis mutandis.

2. The treatment to be accorded by a Party under paragraph 1 means, with respect to a regional level of government, treatment no less favorable than the most favorable treatment that regional level of government accords to any like, directly competitive, or substitutable goods, as the case may be, of the Party of which it forms a part.

3. Paragraphs 1 and 2 shall not apply to the measures set out in Annex 2.2.

Section B: Tariff Elimination

Article 2.3: Tariff Elimination

1. Except as otherwise provided in this Agreement, no Party may increase any existing customs duty, or adopt any new customs duty, on an originating good.

2. Except as otherwise provided in this Agreement, each Party shall progressively eliminate its customs duties on originating goods, in accordance with its Schedule to Annex 2.3.

3. For greater certainty, paragraph 2 shall not prevent Peru from granting identical or more favorable tariff treatment to a good as provided for under the legal instruments of the Andean integration, provided that the goods meet the rules of origin under those instruments.

4. On the request of any Party, the requesting Party and one or more other Parties shall consult to consider accelerating the elimination of customs duties set out in their Schedules to Annex 2.3. The consulting Parties shall notify the other Parties of the goods that will be subject to the consultations, and shall afford the other Parties an opportunity to participate in the
(a) such samples be imported solely for the solicitation of orders for goods, or services provided from the territory, of another Party or a non-Party; or

(b) such advertising materials be imported in packets that each contain no more than one copy of each such material and that neither such materials nor packets form part of a larger consignment.

Section D: Non-Tariff Measures

Article 2.8: Import and Export Restrictions

1. Except as otherwise provided in this Agreement, no Party may adopt or maintain any prohibition or restriction on the importation of any good of another Party or on the exportation or sale for export of any good destined for the territory of another Party, except in accordance with Article XI of the GATT 1994 and its interpretative notes, and to this end Article XI of the GATT 1994 and its interpretative notes are incorporated into and made a part of this Agreement, mutatis mutandis.¹

2. The Parties understand that the GATT 1994 rights and obligations incorporated by paragraph 1 prohibit, in any circumstances in which any other form of restriction is prohibited, a Party from adopting or maintaining:

   (a) export and import price requirements, except as permitted in enforcement of countervailing and antidumping duty orders and undertakings;

   (b) import licensing conditioned on the fulfillment of a performance requirement, except as provided in a Party’s Schedule to Annex 2.3; or

   (c) voluntary export restraints inconsistent with Article VI of the GATT 1994, as implemented under Article 18 of the SCM Agreement and Article 8.1 of the AD Agreement.

3. Paragraphs 1 and 2 shall not apply to the measures set out in Annex 2.2.

4. In the event that a Party adopts or maintains a prohibition or restriction on the importation from or exportation to a non-Party of a good, no provision of this Agreement shall be construed to prevent the Party from:

   (a) limiting or prohibiting the importation from the territory of another Party of such good of that non-Party; or

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¹ For greater certainty, this paragraph applies, inter alia, to prohibitions or restrictions on the importation of remanufactured goods.
requiring as a condition of export of such good of the Party to the territory of another Party, that the good not be re-exported to the non-Party, directly or indirectly, without being consumed in the territory of the other Party.

5. In the event that a Party adopts or maintains a prohibition or restriction on the importation of a good from a non-Party, the Parties, on the request of any Party, shall consult with a view to avoiding undue interference with or distortion of pricing, marketing, or distribution arrangements in another Party.

6. No Party may, as a condition for engaging in importation or for the import of a good, require a person of another Party to establish or maintain a contractual or other relationship with a distributor in its territory.

7. Nothing in paragraph 6 prevents a Party from requiring the designation of an agent for the purpose of facilitating communications between regulatory authorities of the Party and a person of another Party.

8. For purposes of paragraph 6:

**distributor** means a person of a Party who is responsible for the commercial distribution, agency, concession, or representation in the territory of that Party of goods of another Party;

**Article 2.9: Import Licensing**

1. No Party may adopt or maintain a measure that is inconsistent with the Import Licensing Agreement.

2. Promptly after entry into force of this Agreement, each Party shall notify the other Parties of any existing import licensing procedures, and thereafter shall notify the other Parties of any new import licensing procedure and any modification to its existing import licensing procedures, within 60 days before it takes effect. A notification provided under this Article shall:

   (a) include the information specified in Article 5 of the Import Licensing Agreement; and

   (b) be without prejudice as to whether the import licensing procedure is consistent with this Agreement.

3. No Party may apply an import licensing procedure to a good of another Party unless it has provided notification in accordance with paragraph 2.

**Article 2.10: Administrative Fees and Formalities**

1. Each Party shall ensure, in accordance with Article VIII:1 of the GATT 1994 and its interpretive notes, that all fees and charges of whatever character (other than customs duties, charges equivalent to an internal tax or other internal charge applied consistently with Article
Annex 2.2

National Treatment and Import and Export Restrictions

Section A: Measures of Peru

Articles 2.2 and 2.8 shall not apply to:

(a) measures of Peru governing the importation of used clothing and footwear, used vehicles and automotive motors, parts and replacements, and used goods, machinery, and equipment which utilize radioactive sources implementing Law No. 28514, Legislative Decree No. 843, Urgent Decree No. 079-2000, Supreme Decree No. 003-97-SA, and Law No. 27757 and any amendment to these laws or decrees, provided that the amendment does not decrease the conformity of the law or decree with the Agreement;\(^3\) and

(b) actions authorized by the Dispute Settlement Body of the WTO.

Section B: Measures of the United States

Articles 2.2 and 2.8 shall not apply to:

(a) controls on the export of logs of all species;

(b) (i) measures under existing provisions of the Merchant Marine Act of 1920, 46 App. U.S.C. § 883; the Passenger Vessel Act, 46 App. U.S.C. §§ 289, 292, and 316; and 46 U.S.C. § 12108, to the extent that such measures were mandatory legislation at the time of the accession of the United States to the General Agreement on Tariffs and Trade 1947 (GATT 1947) and have not been amended so as to decrease their conformity with Part II of the GATT 1947;

(ii) the continuation or prompt renewal of a non-conforming provision of any statute referred to in clause (i); and

(iii) the amendment to a non-conforming provision of any statute referred to in clause (i) to the extent that the amendment does not decrease the conformity of the provision with Articles 2.2 and 2.8; and

(c) actions authorized by the Dispute Settlement Body of the WTO.

\(^3\) The controls identified in this subparagraph do not apply to remanufactured goods.
Chapter Twenty-Two

Exceptions

Article 22.1: General Exceptions

1. For purposes of Chapters Two through Seven (National Treatment and Market Access for Goods, Textiles and Apparel, Rules of Origin and Origin Procedures, Customs Administration and Trade Facilitation, Sanitary and Phytosanitary Measures, and Technical Barriers to Trade), Article XX of the GATT 1994 and its interpretive notes are incorporated into and made part of this Agreement, mutatis mutandis. The Parties understand that the measures referred to in Article XX(b) of the GATT 1994 include environmental measures necessary to protect human, animal, or plant life or health, and that Article XX(g) of the GATT 1994 applies to measures relating to the conservation of living and non-living exhaustible natural resources.

2. For purposes of Chapters Eleven, Fourteen, and Fifteen1 (Cross-Border Trade in Services, Telecommunications, and Electronic Commerce), Article XIV of the GATS (including its footnotes) is incorporated into and made part of this Agreement, mutatis mutandis. The Parties understand that the measures referred to in Article XIV(b) of the GATS include environmental measures necessary to protect human, animal, or plant life or health.

Article 22.2: Essential Security

Nothing in this Agreement shall be construed:

(a) to require a Party to furnish or allow access to any information the disclosure of which it determines to be contrary to its essential security interests; or

(b) to preclude a Party from applying measures that it considers necessary for the fulfillment of its obligations with respect to the maintenance or restoration of international peace or security, or the protection of its own essential security interests.2

Article 22.3: Taxation

1. Except as set out in this Article, nothing in this Agreement shall apply to taxation measures.

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1 This Article is without prejudice to whether digital products should be classified as goods or services.

2 For greater certainty, if a Party invokes Article 22.2 in an arbitral proceeding initiated under Chapter Ten (Investment) or Chapter Twenty-One (Dispute Settlement), the tribunal or panel hearing the matter shall find that the exception applies.
2. Nothing in this Agreement shall affect the rights and obligations of any Party under any tax convention. In the event of any inconsistency between this Agreement and any such convention, that convention shall prevail to the extent of the inconsistency. In the case of a tax convention between two or more Parties, the competent authorities under that convention shall have sole responsibility for determining whether any inconsistency exists between this Agreement and that convention.

3. Notwithstanding paragraph 2:

(a) Article 2.2 (National Treatment) and such other provisions of this Agreement as are necessary to give effect to that Article shall apply to taxation measures to the same extent as does Article III of the GATT 1994; and

(b) Article 2.11 (Export Taxes) shall apply to taxation measures.

4. Subject to paragraph 2:

(a) Article 11.2 (National Treatment) and Article 12.2 (National Treatment) shall apply to taxation measures on income, capital gains, or on the taxable capital of corporations that relate to the purchase or consumption of particular services, except that nothing in this subparagraph shall prevent a Party from conditioning the receipt or continued receipt of an advantage relating to the purchase or consumption of particular services on requirements to provide the service in its territory; and

(b) Articles 10.3 (National Treatment) and 10.4 (Most-Favored-Nation Treatment), Articles 11.2 (National Treatment) and 11.3 (Most-Favored-Nation Treatment), and Articles 12.2 (National Treatment) and 12.3 (Most-Favored-Nation Treatment) shall apply to all taxation measures, other than those on income, capital gains, or on the taxable capital of corporations, taxes on estates, inheritances, gifts, and generation-skipping transfers,

except that nothing in the articles referred to in subparagraphs (a) and (b) shall apply:

(c) any most-favored-nation obligation with respect to an advantage accorded by a Party pursuant to any tax convention;

(d) to a non-conforming provision of any existing taxation measure;

(e) to the continuation or prompt renewal of a non-conforming provision of any existing taxation measure;

(f) to an amendment to a non-conforming provision of any existing taxation measure to the extent that the amendment does not decrease its conformity, at the time of the amendment, with any of those Articles;
(g) to the adoption or enforcement of any taxation measure aimed at ensuring the equitable or effective imposition or collection of taxes (as permitted by Article XIV(d) of the GATS); or

(h) to a provision that conditions the receipt, or continued receipt, of an advantage relating to the contributions to, or income of, pension trusts or pension plans on a requirement that the Party maintain continuous jurisdiction over the pension trust or pension plan.

5. Subject to paragraph 2 and without prejudice to the rights and obligations of the Parties under paragraph 3, Article 10.9 (Performance Requirements) shall apply to taxation measures.

6. Article 10.7 (Expropriation and Compensation) and Article 10.16 (Submission of a Claim to Arbitration) shall apply to a taxation measure alleged to be an expropriation or a breach of an investment agreement or investment authorization. However, no investor may invoke Article 10.7 (Expropriation and Compensation) as the basis of a claim where it has been determined pursuant to this paragraph that the measure is not an expropriation. An investor that seeks to invoke Article 10.7 (Expropriation and Compensation) with respect to a taxation measure must first refer to the competent authorities of the Parties of the claimant and the respondent set out in Annex 22.3 at the time that it gives its notice of intent under Article 10.16 (Submission of a Claim to Arbitration) the issue of whether that taxation measure involves an expropriation. If the competent authorities do not agree to consider the issue or, having agreed to consider it, fail to agree that the measure is not an expropriation within a period of six months of such referral, the investor may submit its claim to arbitration under Article 10.16 (Submission of a Claim to Arbitration).

Article 22.4: Disclosure of Information

Nothing in this Agreement shall be construed to require a Party to furnish or allow access to confidential information the disclosure of which would impede law enforcement, or otherwise be contrary to the public interest, or which would prejudice the legitimate commercial interests of particular enterprises, public or private.

Article 22.5: Definitions

For purposes of this Chapter:

tax convention means a convention for the avoidance of double taxation or other international taxation agreement or arrangement; and

taxes and taxation measures do not include:

(a) a customs duty; or

(b) the measures listed in exceptions (b) and (c) of the definition of customs duty.
Annex 22.3

Competent Authorities

For purposes of Article 22.3:

competent authorities means

(a) in the case of Peru, the Ministerio de Economía y Finanzas; and

(b) in the case of the United States, the Assistant Secretary of the Treasury (Tax Policy), Department of the Treasury,

or their successors.
United States-Singapore Free Trade Agreement
Entered into force on January 1, 2004
CHAPTER 2: NATIONAL TREATMENT AND MARKET ACCESS FOR GOODS

ARTICLE 2.1: NATIONAL TREATMENT

Each Party shall accord national treatment to the goods of the other Party in accordance with Article III of GATT 1994, including its interpretative notes. To this end, Article III of GATT 1994 and its interpretative notes are incorporated into and made a part of this Agreement, subject to Annex 2A.

ARTICLE 2.2: ELIMINATION OF DUTIES

1. Except as otherwise provided in this Agreement, each Party shall progressively eliminate its customs duties on originating goods of the other Party in accordance with Annexes 2B (U.S. Schedule) and 2C (Singapore Schedule).

2. A Party shall not increase an existing customs duty or introduce a new customs duty on imports of an originating good, other than as permitted by this Agreement, subject to Annex 2A.

3. Upon request by any Party, the Parties shall consult to consider accelerating the elimination of customs duties as set out in their respective schedules. An agreement by the Parties to accelerate the elimination of customs duties on an originating good shall be treated as an amendment to Annexes 2B and 2C, and shall enter into force after the Parties have exchanged written notification certifying that they have completed necessary internal legal procedures and on such date or dates as may be agreed between them.

ARTICLE 2.3: CUSTOMS VALUE

Each Party shall apply the provisions of the Customs Valuation Agreement for the purposes of determining the customs value of goods traded between the Parties.

ARTICLE 2.4: EXPORT TAX

A Party shall not adopt or maintain any duty, tax or other charge on the export of any good to the territory of the other Party.

ARTICLE 2.5: TEMPORARY ADMISSION

1. Each Party shall grant duty-free temporary admission for the following goods, imported by or for the use of a resident of the other Party:

   (a) professional equipment, including software and broadcasting and cinematographic equipment, necessary for carrying out the business activity, trade, or profession of a business person who qualifies for temporary entry pursuant to the laws of the importing country; and
7. Each Party shall relieve the importer of liability for failure to export a temporarily admitted good upon presentation of satisfactory proof to the Party’s Customs authorities that the good has been destroyed within the original time limit for temporary admission or any lawful extension. Prior approval will have to be sought from the Customs authorities of the importing Party before the good can be so destroyed.

ARTICLE 2.6 : GOODS RE-ENTERED AFTER REPAIR OR ALTERATION

1. A Party shall not apply a customs duty to a good, regardless of its origin, that re-enters its territory after that good has been exported temporarily from its territory to the territory of the other Party for repair or alteration, regardless of whether such repair or alteration could be performed in its territory.

2. A Party shall not apply a customs duty to a good, regardless of its origin, imported temporarily from the territory of the other Party for repair or alteration.

3. For purposes of this Article:
   
   (a) the repairs or alterations shall not destroy the essential characteristics of the good, or change it into a different commercial item;
   
   (b) operations carried out to transform unfinished goods into finished goods shall not be considered repairs or alterations; and
   
   (c) parts or pieces of the goods may be subject to repairs or alterations.

ARTICLE 2.7 : IMPORT AND EXPORT RESTRICTIONS

1. Except as otherwise provided in this Agreement, a Party shall not adopt or maintain any prohibition or restriction on the importation of any good of the other Party or on the exportation or sale for export of any good destined for the territory of the other Party, except in accordance with Article XI of GATT 1994, including its interpretative notes, and to this end Article XI of GATT 1994, including its interpretative notes, is incorporated into and made a part of this Agreement.

2. The Parties understand that the GATT 1994 rights and obligations incorporated by paragraph 1 prohibit, in any circumstances in which any other form of restriction is prohibited, export price requirements and, except as permitted in enforcement of countervailing and antidumping orders and undertakings, import price requirements.
3. In the event that a Party adopts or maintains a prohibition or restriction on the importation from or exportation to a non-Party of a good, nothing in this Agreement shall be construed to prevent the Party from:

   (a) limiting or prohibiting the importation from the territory of the other Party of such good of that non-Party; or

   (b) requiring as a condition of export of such good of the Party to the territory of the other Party, that the good not be re-exported to the non-Party, directly or indirectly, without being consumed in the territory of the other Party.

4. Paragraphs 1 through 3 shall not apply to the measures set out in Annex 2A.

5. Nothing in this Article shall be construed to affect a Party’s rights and obligations under the WTO Agreement on Textiles and Clothing.

ARTICLE 2.8 : MERCHANDISE PROCESSING FEE

A Party shall not adopt or maintain a merchandise processing fee for originating goods.

ARTICLE 2.9 : DISTILLED SPIRITS

Singapore shall harmonize its excise taxes on imported and domestic distilled spirits. Such harmonization of the aforesaid excise duties shall be carried out in stages and shall be completed by 2005.

ARTICLE 2.10 : BROADCASTING APPARATUS

A Party shall not maintain any import ban on broadcasting apparatus, including satellite dishes.

ARTICLE 2.11 : CHEWING GUM

Singapore shall allow the importation of chewing gum with therapeutic value for sale and supply, and may subject such products to laws and regulations relating to health products.

ARTICLE 2.12 : TARIFF TREATMENT OF NON-ORIGINATING COTTON AND MAN-MADE FIBER APPAREL GOODS (TARIFF PREFERENCE LEVELS)

1. Subject to paragraphs 3 and 4, the United States shall apply the applicable rate of duty under paragraph 2 to imports of cotton or man-made fiber apparel goods provided for in Chapters 61 and 62 of the Harmonized System and covered by the U.S. categories listed in Annex 2B that are both cut (or knit to shape) and sewn or otherwise assembled in Singapore from fabric or yarn produced or obtained outside the territory of a Party, and that meet the applicable conditions for preferential tariff treatment under this Agreement, other than the condition that they be originating goods.
ANNEX 2A

APPLICATION OF CHAPTER 2: NATIONAL TREATMENT AND MARKET ACCESS FOR GOODS

Articles 2.1, 2.2, and 2.7 shall not apply to:

(a) controls by the United States on the export of logs of all species;

(b) (i) measures under existing provisions of the Merchant Marine Act of 1920, 46 App. U.S.C. § 883; the Passenger Vessel Act, 46 App. U.S.C. §§ 289, 292 and 316; and 46 U.S.C. § 12108, to the extent that such measures were mandatory legislation at the time of the United States’ accession to the General Agreement on Tariffs and Trade 1947 and have not been amended so as to decrease their conformity with Part II of GATT 1947;

(ii) the continuation or prompt renewal of a non-conforming provision of any statute referred to in clause (i); and

(iii) the amendment to a non-conforming provision of any statute referred to in subparagraph (b)(i) to the extent that the amendment does not decrease the conformity of the provision with Articles 2.1 and 2.7;

(c) actions authorized by the Dispute Settlement Body of the WTO.
CHAPTER 21 : GENERAL AND FINAL PROVISIONS

ARTICLE 21.1 : GENERAL EXCEPTIONS

1. For purposes of Chapters 2 through 6 (National Treatment and Market Access for Goods, Rules of Origin, Customs Procedures, Textiles, Technical Barriers to Trade), GATT 1994 Article XX and its interpretive notes are incorporated into and made part of this Agreement, mutatis mutandis. The Parties understand that the measures referred to in GATT 1994 Article XX(b) include environmental measures necessary to protect human, animal, or plant life or health, and that GATT 1994 Article XX(g) applies to measures relating to the conservation of living and non-living exhaustible natural resources.

2. For purposes of Chapters 8, 9, and 14 (Cross Border Trade in Services, Telecommunications, and Electronic Commerce), GATS Article XIV (including its footnotes) is incorporated into and made part of this Agreement, mutatis mutandis. The Parties understand that the measures referred to in GATS Article XIV(b) include environmental measures necessary to protect human, animal, or plant life or health.

ARTICLE 21.2 : ESSENTIAL SECURITY

Nothing in this Agreement shall be construed:

(a) to require a Party to furnish or allow access to any information the disclosure of which it determines to be contrary to its essential security interests; or

(b) to preclude a Party from applying measures that it considers necessary for the fulfillment of its obligations with respect to the maintenance or restoration of international peace or security, or the protection of its own essential security interests.

ARTICLE 21.3 : TAXATION

1. Except as set out in this Article, nothing in this Agreement shall apply to taxation measures.

2. Nothing in this Agreement shall affect the rights and obligations of either Party under any tax convention. In the event of any inconsistency between this Agreement and any such convention, that convention shall prevail to the extent of the inconsistency. In the case of a tax convention between the Parties, the competent authorities under that convention shall have sole responsibility for determining whether any inconsistency exists between this Agreement and that convention.

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21-1 This is without prejudice to the classification of digital products as a good or a service.

21-2 If GATS Article XIV is amended, this Article shall be amended, as appropriate, after consultations between the Parties.
3. Notwithstanding paragraph 2:

(a) Article 2.1 (National Treatment) and such other provisions of this Agreement as are necessary to give effect to that Article shall apply to taxation measures to the same extent as does GATT 1994 Article III; and

(b) Article 2.4 (Export Tax) shall apply to taxation measures.

4. Subject to paragraph 2:

(a) Article 8.3 (National Treatment) and Article 10.2 (National Treatment) shall apply to taxation measures on income, capital gains or on the taxable capital of corporations that relate to the purchase or consumption of particular services, except that nothing in this subparagraph shall prevent a Party from conditioning the receipt or continued receipt of an advantage relating to the purchase or consumption of particular services on requirements to provide the service in its territory, and

(b) Article 15.4 (National and Most-Favored-Nation Treatment), Articles 8.4 (National Treatment) and 8.4 (Most-Favored-Nation Treatment) and Articles 10.2 (National Treatment) and 10.3 (Most-Favored-Nation Treatment) shall apply to all taxation measures, other than those on income, capital gains, or on the taxable capital of corporations, taxes on estates, inheritances, gifts and generation-skipping transfers,

except that nothing in those Articles shall apply:

(c) to any most-favored-nation obligation with respect to an advantage accorded by a Party pursuant to a tax convention;

(d) to a non-conforming provision of any existing taxation measure;

(e) to the continuation or prompt renewal of a non-conforming provision of any existing taxation measure;

(f) to an amendment to a non-conforming provision of any existing taxation measure to the extent that the amendment does not decrease its conformity, at the time of the amendment, with any of those Articles;

(g) to the adoption or enforcement of any taxation measure aimed at ensuring the equitable or effective imposition or collection of taxes (as permitted by GATS Article XIV(d)); or

(h) to a provision that conditions the receipt, or continued receipt of an advantage relating to the contributions to, or income of, a pension trust, fund, or other arrangement to provide pension or similar benefits on a requirement that the Party maintain continuous jurisdiction over such trust, fund, or other arrangement.
5. Subject to paragraph 2 and without prejudice to the rights and obligations of the Parties under paragraph 3, paragraphs 2, 3, and 4 of Article 15.8 (Performance Requirements) shall apply to taxation measures.

6. Article 15.15 (Submission of a Claim to Arbitration) shall apply to a taxation measure alleged to be a breach of an investment agreement or an investment authorization. Articles 15.6 (Expropriation) and 15.15 shall apply to a taxation measure alleged to be an expropriation. However, no investor may invoke Article 15.6 as the basis for a claim where it has been determined pursuant to this paragraph that the measure is not an expropriation. An investor that seeks to invoke Article 15.6 with respect to a taxation measure must first refer to the competent authorities described in paragraph 7, at the time that it gives notice under Article 15.15.2, the issue of whether that taxation measure involves an expropriation. If the competent authorities do not agree to consider the issue or, having agreed to consider it, fail to agree that the measure is not an expropriation within a period of six months of such referral, the investor may submit its claim to arbitration under Article 15.15.4.

7. For purposes of this Article,

(a) competent authorities means

(i) in the case of Singapore, Director (Taxation), Ministry of Finance; and

(ii) in the case of the United States, the Assistant Secretary of the Treasury (Tax Policy), Department of the Treasury; and

(b) investment agreement and investment authorization have the meanings ascribed to them in Chapter 15 (Investment).

ARTICLE 21.4: DISCLOSURE OF INFORMATION

Nothing in this Agreement shall be construed to require a Party to furnish or allow access to confidential information, the disclosure of which would impede law enforcement, or otherwise be contrary to the public interest, or which would prejudice the legitimate commercial interests of particular enterprises, public or private.

ARTICLE 21.5: ANTI-CORRUPTION

1. Each Party reaffirms its firm existing commitment to the adoption, maintenance, and enforcement of effective measures, including deterrent penalties, against bribery and corruption in international business transactions. The Parties further commit to undertake best efforts to associate themselves with appropriate international anti-corruption instruments and to encourage and support appropriate anti-corruption initiatives and activities in relevant international fora.

2. The Parties shall cooperate to strive to eliminate bribery and corruption and to promote transparency in international trade. They will look for avenues in relevant international fora to address these issues and build upon the potential anti-corruption efforts in these fora.
ARTICLE 21.6 : ACCESION

1. Any country or group of countries may accede to this Agreement subject to such terms and conditions as may be agreed between such country or countries and the Parties and following approval in accordance with the applicable legal procedures of each country.

2. This Agreement shall not apply as between any Party and any acceding country or group of countries if, at the time of the accession, either does not consent to such accession.

ARTICLE 21.7 : ANNEXES

The Annexes to this Agreement constitute an integral part of this Agreement.

ARTICLE 21.8 : AMENDMENTS

This Agreement may be amended by agreement in writing by the Parties and such amendment shall enter into force after the Parties have exchanged written notification certifying that they have completed necessary internal legal procedures and on such date or dates as may be agreed between them.

ARTICLE 21.9 : ENTRY INTO FORCE AND TERMINATION

1. This Agreement shall come into force 60 days after the date when the Parties have exchanged written notification that their respective internal requirements for the entry into force of this Agreement have been fulfilled, or such other date as the Parties may agree.

2. Either Party may terminate this Agreement by written notification to the other Party, and such termination shall take effect six months after the date of the notification.

3. Within 30 days of delivery of a notification under paragraph 2, either Party may request consultations regarding whether the termination of any provision of this Agreement should take effect at a later date than provided under paragraph 2. Such consultations shall commence within 30 days of a Party’s delivery of such request.

IN WITNESS WHEREOF, the undersigned, being duly authorized by their respective Governments, have signed this Agreement.

Done at Washington, in duplicate, this sixth day of May, 2003.

FOR THE GOVERNMENT OF THE UNITED STATES OF AMERICA: FOR THE GOVERNMENT OF THE REPUBLIC OF SINGAPURE:
ANNEX B

Containing a list of all countries with indications as to whether each country is a WTO Member or a WTO Observer, and whether the country has a free trade agreement with the U.S.
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<th>Country</th>
<th>WTO Member</th>
<th>U.S. FTA</th>
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Total countries listed (including EU)* 197
WTO members as % of total 77%
WTO members & observers as % of total 93%

*Source: U.S. Department of State
GENERAL AGREEMENT GATS/EL/90
ON TRADE IN SERVICES 15 April 1994 (94-1153)

UNITED STATES OF AMERICA

Final List of Article II (MFN) Exemptions

(This is authentic in English only)
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<th>Sector or subsector</th>
<th>Description of measure indicating its inconsistency with Article II</th>
<th>Countries to which the measure applies</th>
<th>Intended duration</th>
<th>Conditions creating the need for the exemption</th>
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<td>Movement of persons</td>
<td>Government issuance of treaty trader or treaty investor non-immigrant visas that extend a special visa category to nationals of treaty partners in executive and other personnel categories engaged</td>
<td>Countries with whom the United States has a Friendship, Commerce and Navigation Treaty (FCN), a Bilateral Investment Treaty (BIT), or certain countries as described in Section 204 of the Immigration Act of 1990</td>
<td>Indefinite</td>
<td>To facilitate trade under FCNs and BITs</td>
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- solely to carry on substantial trade, including trade in services or trade in technology, principally between the US and the foreign state of which a natural person is a national, or
- solely to develop and direct the operations of an enterprise in which a natural person has invested or is actively in the process of investing a substantial amount of capital
### United States of America (continued)

<table>
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<th>All Sectors: Taxation Measures</th>
<th>Restrictions on performance of longshore work when making US port calls by crews of foreign vessels owned and flagged in countries that similarly restrict US crews on US-flag vessels from longshore work</th>
<th>Countries that prohibit longshore work by crew members aboard US vessels</th>
<th>Indefinite</th>
<th>Reciprocal restrictions on countries that prohibit longshore work by crew members aboard US vessels</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Differential treatment under direct tax measures at the federal level. Such measures are: measures under the US Internal Revenue Code (IRC) permitting the residents of countries contiguous to the United States to receive more volume of movements across US borders between Canada and the United States and between Mexico and the United States; efficient administration of tax system.</td>
<td>All</td>
<td>Indefinite</td>
<td>Volume of movements across US borders between Canada and the United States and between Mexico and the United States; efficient administration of tax system.</td>
</tr>
</tbody>
</table>
UNITED STATES OF AMERICA (continued)

<table>
<thead>
<tr>
<th>favorable treatment and permitting certain US taxpayers to receive more favorable treatment as to their contiguous country operations, and providing any other benefits with respect to contiguous countries;</th>
<th>! benefits available under the US IRC with respect to US possessions;</th>
<th>Coordination of the United States and US possession income taxes; fiscal arrangements for US possessions; and facilitation of economic development in US possessions</th>
</tr>
</thead>
<tbody>
<tr>
<td>! benefits available under the US IRC with respect to Caribbean Basin Initiative (CBI) beneficiary countries;</td>
<td></td>
<td>Facilitation of economic development in certain developing countries</td>
</tr>
</tbody>
</table>
regarding activities covered by the scope of the General Agreement on Trade in Services, reciprocal reduction of taxation on income derived from the international operation of aircraft or of taxation of certain earnings derived from the use of railroad rolling stock; prevention of double taxation and proper tax administration
<p>| 1. <strong>tax exemption for earnings derived from the ownership or operation of a communications satellite system by a foreign entity designated by a foreign government to participate in such ownership if the United States, through its designated entity, participates in such system pursuant to the Communications Satellite Act of 1962;</strong> |  | 2. <strong>Facilitation of satellite communications and proper tax administration</strong> |</p>
<table>
<thead>
<tr>
<th>Foreign policy considerations</th>
<th>To foster efficient international taxation policies</th>
</tr>
</thead>
<tbody>
<tr>
<td>To deny statutory reduction of double taxation or deferral of US tax on income earned through controlled foreign corporations, because the country participates in or cooperates with an international boycott, or for similar foreign policy reasons;</td>
<td></td>
</tr>
<tr>
<td>To deny measures permitting less favorable taxation for citizens, corporations or products of a foreign country based on discriminatory or extraterritorial taxes, more burdensome taxation, or other discriminatory conduct;</td>
<td></td>
</tr>
<tr>
<td>allow the deduction for expenses of an advertisement carried by a foreign broadcast undertaking and directed primarily to a US market only where the broadcast undertaking is located in a foreign country that allows a similar deduction for an advertisement placed with a US broadcast undertaking;</td>
<td>To encourage the allowance of advertising expenses internationally</td>
</tr>
</tbody>
</table>
in connection with the exclusion of, or deduction relating to, certain foreign earned income from the gross income of individuals, the benefit of a waiver of the required period of stay in a foreign country as determined by the Secretary of the Treasury. The Secretary is empowered to determine that individuals were required to leave a foreign country because of war, civil unrest or similar adverse conditions in such foreign country which precluded the normal conduct of business by such individuals; and

To take into account problems created by adverse conditions within particular countries
<table>
<thead>
<tr>
<th>Sub-federal tax measures affording differential treatment to service suppliers or to services when the differential treatment is based on one of the following criteria:</th>
<th>All</th>
<th>Indefinite</th>
<th>To implement fiscal policies of sub-central governments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. are performed, consumed, or located within different sub-federal entities;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. differ based on the size or income of the service supplier or on the scale or methods (including environmental and health and safety measures) of performance;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. differ in the extent of ownership or participation by minority or other disadvantaged groups;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>differ as to the eligibility for non-profit status for pension, profit-sharing or other employee-benefit regimes;</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>---</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>differ based on federal immunity to taxation, for example, exemption from sub-federal tax on US government obligations or contracts; differ based on federal immunity to taxation, for example, exemption from sub-federal tax on US government obligations or contracts;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>are performed or located in countries contiguous to the United States; or</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>All Sectors: Land Use</strong></td>
<td>Sub-federal measures substantively incorporating provisions of federal law subject to an MFN exemption under this agreement</td>
<td>All Sectors: Land Use</td>
<td>Indefinite</td>
</tr>
<tr>
<td>--------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------</td>
<td>----------------------</td>
<td>------------</td>
</tr>
<tr>
<td>All Sectors: Land Use</td>
<td>Non-US citizens in Wyoming may not acquire or inherit land unless the country of which they are a citizen extends a reciprocal right to US citizens</td>
<td>All Sectors: Land Use</td>
<td>Indefinite</td>
</tr>
<tr>
<td>All Sectors: Land Use</td>
<td>Sub-federal measures substantively incorporating provisions of federal law subject to an MFN exemption under this agreement</td>
<td>All Sectors: Land Use</td>
<td>Indefinite</td>
</tr>
<tr>
<td>All Sectors</td>
<td>Canadian small businesses, but not small businesses of other countries, may use simplified registration and periodic reporting forms with respect to their securities</td>
<td>All Sectors: Land Use</td>
<td>Indefinite</td>
</tr>
<tr>
<td>Banking and Other Financial Services (excluding Insurance)</td>
<td>Differential treatment of countries due to application of reciprocity measures or through international agreements guaranteeing market access or national treatment</td>
<td>To be determined before the expiry of six months from the entry into force of the WTO Agreement</td>
<td>Pursuant to the Ministerial Decision on Financial Services, the measures described in this exemption will be suspended from the entry into force of the WTO Agreement until the end of a period six months after entry into force. No other measures are subject to this suspension</td>
</tr>
<tr>
<td>---</td>
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<td>---</td>
</tr>
<tr>
<td></td>
<td>A broker-dealer registered under US law that has its principal place of business in Canada may maintain its required reserves in a bank in Canada subject to the supervision of Canada</td>
<td>Canada</td>
<td>Indefinite</td>
</tr>
<tr>
<td>Banking and Other Financial Services (excluding Insurance)</td>
<td>Permission to establish state-licensed branches or agencies, or to own commercial bank subsidiaries, is based on a reciprocity test in the following states: California, Connecticut, Florida, Georgia, Hawaii, Illinois, Kentucky, Louisiana, Massachusetts, Michigan, Oregon, Pennsylvania, Texas, Washington.</td>
<td>All</td>
<td>Indefinite</td>
</tr>
<tr>
<td>Authority to act as a sole trustee of an indenture for a bond offering in the United States</td>
<td>All partners with which the United States has active aviation relations (approximately 100 countries) covered by bilateral or other air services agreements and comity and reciprocity regimes. Also concerned are the co-signatories of the Chicago Convention and various other international aviation agreements, undertakings, and understandings to which the United States is a party.</td>
<td>Indefinite</td>
<td>Indefinite</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Designation as a primary dealer in US government debt securities</td>
<td>All</td>
<td>Indefinite</td>
<td>Indefinite</td>
</tr>
</tbody>
</table>

Need to ensure US financial service suppliers are permitted to provide trustee services in foreign markets.

Need to ensure US financial service suppliers are afforded national treatment in foreign government debt markets.

The common policy and practice of exchanging rights, settling disputes, and applying laws and other measures pertaining to the operation of civil aircraft and air transportation differentially, with respect to the activities referred to above, on the basis of mutual agreement and balanced exchanges of rights and responsibilities.
undertakings and informal comity and reciprocity aviation regimes to which the United States is a party; US laws and regulations, including the International Air Transportation Fair Competitive Practices Act of 1974, as amended, the Federal Aviation Act of 1958, as amended, the International Air Transportation Competition Act of 1979, the International Aviation Facilities Act, as amended, and Title 14, Parts 1 - 399, of the Code of Federal Regulations; and measures of US states and territories and the District of Columbia, and of their agencies and subdivisions).
### Transport Services: Road Transport

The US government has discretion to limit the issuance of trucking licenses to persons from contiguous countries on the basis of reciprocity. The Bus Regulatory Reform Act of 1982 permits the President to remove or modify in whole or in part the moratorium on a finding that such removal or modification is in the national interest. Domestic and cross-border trucking operations are permitted within designated Interstate Commerce Commission commercial zones. The moratorium was lifted for Canada in October 1982.

### Transport Services: Pipeline Transport

Pursuant to the Mineral Lands Leasing Act of 1920, aliens and foreign corporations may not acquire rights-of-way for oil or gas pipelines, or pipelines carrying products refined from oil and gas, across on-shore federal lands or acquire leases or interests in certain minerals on on-shore federal lands, such as coal or oil.

<table>
<thead>
<tr>
<th>Country</th>
<th>Authority to Impose Moratorium</th>
<th>Indefinite</th>
<th>Lack of Reciprocity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mexico, Canada</td>
<td>Need to have authority to impose a moratorium on the issuance of new licenses for domestic operations within and cross-border operations into the United States on the basis of reciprocity</td>
<td>Indefinite</td>
<td>Lack of reciprocity</td>
</tr>
</tbody>
</table>
Non-US citizens may own a 100 per cent interest in a domestic corporation that acquires a right-of-way for oil or gas pipelines across on-shore federal lands, or that acquires a lease to develop mineral resources on on-shore federal lands, unless the foreign investors' home country denies similar or like privileges for the mineral or access in question to US citizens or corporations, as compared with the privileges it accords to its own citizens or corporations or to the citizens or corporations of other countries. Nationalization is not considered to be denial of similar or like privileges. Foreign citizens, or corporations controlled by them, are restricted from obtaining access to federal leases on Naval Petroleum Reserves if the laws, customs or regulations of their country deny the privilege of leasing public lands to US citizens or corporations.
| Transport Services: Space Transportation | Quantitative restrictions and price disciplines in certain bilateral agreements on the launch of satellites in the international commercial space launch market | All | Indefinite | Need to prevent disruption of competition in the international space launch market |
THE GENERAL AGREEMENT
ON TARIFFS AND TRADE

The Governments of the COMMONWEALTH OF AUSTRALIA, the
KINGDOM OF BELGIUM, the UNITED STATES OF BRAZIL, BURMA, CANADA,
CEYLON, the REPUBLIC OF CHILE, the REPUBLIC OF CHINA, the REPUBLIC OF
CUBA, the CZECHOSLOVAK REPUBLIC, the FRENCH REPUBLIC, INDIA,
LEBANON, the GRAND-DUCHY OF LUXEMBURG, the KINGDOM OF THE
NETHERLANDS, NEW ZEALAND, the KINGDOM OF NORWAY, PAKISTAN,
SOUTHERN RHODESIA, SYRIA, the UNION OF SOUTH AFRICA, the UNITED
KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND, and the UNITED
STATES OF AMERICA:

Recognizing that their relations in the field of trade and economic
endeavour should be conducted with a view to raising standards of living,
ensuring full employment and a large and steadily growing volume of
real income and effective demand, developing the full use of the resources
of the world and expanding the production and exchange of goods,

Being desirous of contributing to these objectives by entering into
reciprocal and mutually advantageous arrangements directed to the
substantial reduction of tariffs and other barriers to trade and to the
elimination of discriminatory treatment in international commerce,

Have through their Representatives agreed as follows:
PART I

Article I

General Most-Favoured-Nation Treatment

1. With respect to customs duties and charges of any kind imposed on or in connection with importation or exportation or imposed on the international transfer of payments for imports or exports, and with respect to the method of levying such duties and charges, and with respect to all rules and formalities in connection with importation and exportation, and with respect to all matters referred to in paragraphs 2 and 4 of Article III,* any advantage, favour, privilege or immunity granted by any contracting party to any product originating in or destined for any other country shall be accorded immediately and unconditionally to the like product originating in or destined for the territories of all other contracting parties.

2. The provisions of paragraph 1 of this Article shall not require the elimination of any preferences in respect of import duties or charges which do not exceed the levels provided for in paragraph 4 of this Article and which fall within the following descriptions:

(a) Preferences in force exclusively between two or more of the territories listed in Annex A, subject to the conditions set forth therein;

(b) Preferences in force exclusively between two or more territories which on July 1, 1939, were connected by common sovereignty or relations of protection or suzerainty and which are listed in Annexes B, C and D, subject to the conditions set forth therein;

(c) Preferences in force exclusively between the United States of America and the Republic of Cuba;

(d) Preferences in force exclusively between neighbouring countries listed in Annexes E and F.

3. The provisions of paragraph 1 shall not apply to preferences between the countries formerly a part of the Ottoman Empire and detached from it on July 24, 1923, provided such preferences are approved under paragraph 5† of Article XXV, which shall be applied in this respect in the light of paragraph 1 of Article XXIX.

†The authentic text erroneously reads "sub-paragraph 5 (a)".
4. The margin of preference* on any product in respect of which a preference is permitted under paragraph 2 of this Article but is not specifically set forth as a maximum margin of preference in the appropriate Schedule annexed to this Agreement shall not exceed:

(a) in respect of duties or charges on any product described in such Schedule, the difference between the most-favoured-nation and preferential rates provided for therein; if no preferential rate is provided for, the preferential rate shall for the purposes of this paragraph be taken to be that in force on April 10, 1947, and, if no most-favoured-nation rate is provided for, the margin shall not exceed the difference between the most-favoured-nation and preferential rates existing on April 10, 1947;

(b) in respect of duties or charges on any product not described in the appropriate Schedule, the difference between the most-favoured-nation and preferential rates existing on April 10, 1947.

In the case of the contracting parties named in Annex G, the date of April 10, 1947, referred to in sub-paragraph (a) and (b) of this paragraph shall be replaced by the respective dates set forth in that Annex.

Article II
Schedules of Concessions

1. (a) Each contracting party shall accord to the commerce of the other contracting parties treatment no less favourable than that provided for in the appropriate Part of the appropriate Schedule annexed to this Agreement.

(b) The products described in Part I of the Schedule relating to any contracting party, which are the products of territories of other contracting parties, shall, on their importation into the territory to which the Schedule relates, and subject to the terms, conditions or qualifications set forth in that Schedule, be exempt from ordinary customs duties in excess of those set forth and provided therein. Such products shall also be exempt from all other duties or charges of any kind imposed on or in connection with the importation in excess of those imposed on the date of this Agreement or those directly and mandatorily required to be imposed thereafter by legislation in force in the importing territory on that date.

(c) The products described in Part II of the Schedule relating to any contracting party which are the products of territories entitled under Article I to receive preferential treatment upon importation into the territory to which the Schedule relates shall, on their importation into such territory, and subject to
CHAPTER ONE
ESTABLISHMENT OF A FREE TRADE AREA AND DEFINITIONS

ARTICLE 1.1 : GENERAL

1. The Parties to this Agreement, consistent with Article XXIV of GATT 1994 and Article V of GATS, hereby establish a free trade area in accordance with the provisions of this Agreement.

2. The Parties affirm their existing rights and obligations with respect to each other under existing bilateral and multilateral agreements to which both Parties are party, including the WTO Agreement.

3. This Agreement shall not be construed to derogate from any international legal obligation between the Parties that entitles goods or services, or suppliers of goods or services, to treatment more favourable than that accorded by this Agreement.

ARTICLE 1.2 : GENERAL DEFINITIONS

For the purposes of this Agreement, unless otherwise specified:

1. **Agreement on Textiles and Clothing** means the Agreement on Textiles and Clothing, contained in Annex 1A to the WTO Agreement;

2. **central government** or **central level of government** means:
   (a) for the United States, the federal government; and
   (b) for Australia, the Commonwealth government;

3. **covered investment** means, with respect to a Party, an investment in its territory of an investor of the other Party, in existence as of the date of entry into force of this Agreement or established, acquired, or expanded thereafter;

4. **customs duty** includes any customs or import duty and a charge of any kind imposed in connection with the importation of a good, including any form of surtax or surcharge in connection with such importation, but does not include any:
   (a) charge equivalent to an internal tax imposed consistently with Article III:2 of GATT 1994 in respect of the like domestic good or in respect of goods from which the imported good has been manufactured or produced in whole or in part;
   (b) antidumping or countervailing duty that is applied pursuant to a Party’s law; or
   (c) fee or other charge in connection with importation commensurate with the cost of services rendered;
CHAPTER ONE
INITIAL PROVISIONS AND DEFINITIONS

Section A: Initial Provisions

ARTICLE 1.1: ESTABLISHMENT OF A FREE TRADE AREA

Consistent with Article XXIV of GATT 1994 and Article V of GATS, the Parties hereby establish a free trade area in accordance with the provisions of this Agreement.

ARTICLE 1.2: RELATION TO OTHER AGREEMENTS

1. Each Party affirms its existing rights and obligations with respect to each other under existing bilateral and multilateral agreements to which both Parties are party, including the WTO Agreement.

2. This Agreement shall not be construed to derogate from any legal obligation between the Parties that entitles goods or services, or suppliers of goods or services, to treatment more favorable than that accorded by this Agreement.

Section B: General Definitions

ARTICLE 1.3: DEFINITIONS

For purposes of this Agreement, unless otherwise specified:

Agreement on Textiles and Clothing means the Agreement on Textiles and Clothing, contained in Annex 1A to the WTO Agreement;

Bahrain means the Kingdom of Bahrain;

BIT investment means “covered investment” as defined in Article 1(e) of the Treaty Between the Government of the United States of America and the Government of the State of Bahrain Concerning the Encouragement and Reciprocal Protection of Investment, signed at Washington on September 29, 1999;

central level of government means:

(a) for Bahrain, the government of Bahrain; and

(b) for the United States, the federal level of government;

customs duties includes any customs or import duty and a charge of any kind imposed in connection with the importation of a good, including any form of surtax or surcharge in connection with such importation, but does not include any:

(a) charge equivalent to an internal tax imposed consistently with Article III:2 of the GATT 1994, in respect of like, directly competitive or substitutable goods of the Party, or in respect of goods from which the imported good has been manufactured or produced in whole or in part;

(b) antidumping or countervailing duty that is applied pursuant to a Party’s domestic law; and

(c) fee or other charge in connection with importation commensurate with the cost of services rendered;
Chapter One

Initial Provisions

Article 1.1: Establishment of a Free Trade Area

The Parties to this Agreement, consistent with Article XXIV of the General Agreement on Tariffs and Trade 1994 and Article V of the General Agreement on Trade in Services, hereby establish a free trade area.

Article 1.2: Objectives

1. The objectives of this Agreement, as elaborated more specifically through its principles and rules, including national treatment, most-favored-nation treatment, and transparency, are to:

   (a) encourage expansion and diversification of trade between the Parties;

   (b) eliminate barriers to trade in, and facilitate the cross-border movement of, goods and services between the territories of the Parties;

   (c) promote conditions of fair competition in the free trade area;

   (d) substantially increase investment opportunities in the territories of the Parties;

   (e) provide adequate and effective protection and enforcement of intellectual property rights in each Party’s territory;

   (f) create effective procedures for the implementation and application of this Agreement, for its joint administration, and for the resolution of disputes; and

   (g) establish a framework for further bilateral, regional, and multilateral cooperation to expand and enhance the benefits of this Agreement.

2. The Parties shall interpret and apply the provisions of this Agreement in the light of its objectives set out in paragraph 1 and in accordance with applicable rules of international law.

Article 1.3: Relation to Other Agreements

1. The Parties affirm their existing rights and obligations with respect to each other under the WTO Agreement and other agreements to which such Parties are party.

2. For greater certainty, nothing in this Agreement shall prevent the Central American Parties from maintaining their existing legal instruments of Central American integration, adopting new legal instruments of integration, or adopting measures to strengthen and deepen
these instruments, provided that such instruments and measures are not inconsistent with this Agreement.

**Article 1.4: Extent of Obligations**

The Parties shall ensure that all necessary measures are taken in order to give effect to the provisions of this Agreement, including their observance, except as otherwise provided in this Agreement, by state governments.
Chapter One

Initial Provisions

Article 1.1: Establishment of a Free Trade Area

The Parties to this Agreement, consistent with Article XXIV of the General Agreement on Tariffs and Trade 1994 and Article V of the General Agreement on Trade in Services, hereby establish a free trade area.

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   (b) eliminate barriers to trade in, and facilitate the cross-border movement of, goods and services between the Parties;

   (c) promote conditions of fair competition in the free trade area;

   (d) substantially increase investment opportunities in the territories of the Parties;

   (e) provide adequate and effective protection and enforcement of intellectual property rights in each Party’s territory;

   (f) create effective procedures for the implementation and application of this Agreement, for its joint administration, and for the resolution of disputes; and

   (g) establish a framework for further bilateral, regional, and multilateral cooperation to expand and enhance the benefits of this Agreement.

2. The Parties shall interpret and apply the provisions of this Agreement in the light of its objectives set out in paragraph 1 and in accordance with applicable rules of international law.
Article 1.3: Relation to Other Agreements

The Parties affirm their existing rights and obligations with respect to each other under the WTO Agreement and other agreements to which both Parties are party.

Article 1.4: Extent of Obligations

The Parties shall ensure that all necessary measures are taken in order to give effect to the provisions of this Agreement, including their observance, except as otherwise provided in this Agreement, by state governments.
Israel Free Trade Agreement

Entered into Force August 19, 1985

Agreement on the Establishment of a Free Trade Area between the Government of Israel and the Government of the United States of America

[PREAMBLE]

The Government of Israel and the Government of the United States of America,
Desiring to promote mutual relations and further the historic friendship between them;
Determined to strengthen and develop the economic relations between them for their mutual benefit;
Recognizing that Israel's economy is still in a process of development, wishing to contribute to the harmonious development and expansion of world trade;
Wishing to establish bilateral free trade between the two nations through the removal of trade barriers;
Wishing to promote cooperation in areas which are of mutual interest;
Have decided to conclude this Agreement:

ARTICLE 1

[ESTABLISHMENT OF A FREE TRADE AREA]

The governments of Israel and the United States of America (the Parties), consistent with Article XXIV (8) (b) of the General Agreement on Tariffs and Trade (GATT), establish hereby between them a Free Trade Area and will in accordance with the provisions of this Agreement eliminate the duties and other restrictive regulations of commerce on trade between the two nations in products originating therein.

***

ARTICLE 3

[RELATIONSHIP TO OTHER AGREEMENTS]

The Parties affirm their respective rights and obligations with respect to each other under existing bilateral and multilateral agreements, including the Treaty of Friendship, Commerce and Navigation between the United States and Israel and the GATT. In the event of an inconsistency between provisions of this Agreement and such existing agreements, the provisions of this Agreement shall prevail.

ARTICLE 4

[NEW RESTRICTIONS ON TRADE]

New customs duties on imports or exports or any charge having equivalent effect and new quantitative restrictions on imports or exports or any measure having equivalent effect maybe introduced in the trade between the Parties only if permitted by this Agreement or by the GATT as in effect on the date of entry into force of this Agreement and as interpreted by the CONTRACTING PARTIES to the GATT and in so far as not inconsistent with this Agreement.

***
ARTICLE 1: ESTABLISHMENT OF A FREE TRADE AREA AND RELATIONSHIP TO OTHER AGREEMENTS

1. The Parties to this Agreement, consistent with Article XXIV of the General Agreement on Tariffs and Trade 1994 ("GATT 1994") and Article V of the General Agreement on Trade in Services ("GATS"), hereby establish a free trade area in accordance with the provisions of this Agreement.

2. The Parties reaffirm their respective rights and obligations with respect to each other under existing bilateral and multilateral agreements to which both Parties are party, including the Marrakesh Agreement Establishing the World Trade Organization ("WTO Agreement").

3. This Agreement shall not be construed to derogate from any international legal obligation between the Parties that entitles a good or service, or the supplier of a good or service, to treatment more favorable than that accorded by this Agreement.

4. Nothing in Article 17 shall be construed to authorize a Party to apply a measure that is inconsistent with the Party’s obligations under the WTO Agreement.

ARTICLE 2: TRADE IN GOODS

1. Except as otherwise provided in this Agreement, each Party shall progressively eliminate its customs duties on originating goods of the other Party in accordance with Annex 2.1 and its schedule1 to Annex 2.1.

2. For purposes of this Agreement, originating good means an article described in Annex 2.2.

3. Each Party shall accord national treatment to the goods of the other Party in accordance with Article III of the GATT 1994, including its interpretative notes. To this end, Article III of GATT 1994 and its interpretative notes are incorporated into and made a part of this Agreement, subject to Annex 2.3.

4. A Party may not introduce a new customs duty on imports or a new quantitative restriction on imports in the trade between the Parties, other than as permitted by this Agreement, subject to Annex 2.3.

5. In the event that this Agreement enters into force on a date other than January 1, "year one" for purposes of Annex 2.1 and each Party’s schedule to Annex 2.1 shall mean the period from the date of entry into force of this Agreement through the end of the calendar year, and the duty reductions in each Party’s schedule to Annex 2.1 shall take effect on such date of entry into force. In such event, the term "January 1 of year one” for purposes of Annex 2.1 and each Party’s schedule to Annex 2.1 shall mean the date of entry into force of this Agreement.

ARTICLE 3: TRADE IN SERVICES

1. This Article applies to measures by a Party affecting trade in services between the Parties.

1 For purposes of this Agreement, "schedule" shall include both the schedule and headnotes.
CHAPTER ONE
INITIAL PROVISIONS AND DEFINITIONS

Section A: Initial Provisions

ARTICLE 1.1: ESTABLISHMENT OF A FREE TRADE AREA

Consistent with Article XXIV of GATT 1994 and Article V of GATS, the Parties hereby establish a free trade area in accordance with the provisions of this Agreement.

ARTICLE 1.2: RELATION TO OTHER AGREEMENTS

1. Except as provided in paragraphs three through five, each Party affirms its existing rights and obligations with respect to each other under existing bilateral and multilateral agreements to which the Parties are party, including the WTO Agreement.

2. This Agreement shall not be construed to derogate from any legal obligation between the Parties that entitles goods or services, or suppliers of goods or services, to treatment more favorable than that accorded by this Agreement.

3. Articles VI and VII of the Treaty Between the United States of America and the Kingdom of Morocco Concerning the Encouragement and Reciprocal Protection of Investments, with Protocol, signed at Washington on July 22, 1985 (the “Treaty”) shall be suspended on the date of entry into force of this Agreement.

4. Notwithstanding paragraph 3, for a period of ten years beginning on the date of entry into force of this Agreement, Articles VI and VII of the Treaty shall not be suspended:

   (a) in the case of investments covered by the Treaty as of the date of entry into force of this Agreement; or

   (b) in the case of disputes that arose prior to the date of entry into force of this Agreement and that are otherwise eligible to be submitted for settlement under Article VI or VII.

5. In the event either Party terminates this Agreement in accordance with Article 22.6 (Entry into Force and Termination), Articles VI and VII of the Treaty, to the extent suspended, shall automatically resume operation and shall continue in full force and effect as provided therein.
PART ONE: NAFTA

GENERAL PART

CHAPTER ONE: OBJECTIVES

Article 101: Establishment of the Free Trade Area

The Parties to this Agreement, consistent with Article XXIV of the General Agreement on Tariffs and Trade, hereby establish a free trade area.

Article 102: Objectives

1. The objectives of this Agreement, as elaborated more specifically through its principles and rules, including national treatment, most-favored-nation treatment and transparency, are to:
   a) eliminate barriers to trade in, and facilitate the cross-border movement of, goods and services between the territories of the Parties;
   b) promote conditions of fair competition in the free trade area;
   c) increase substantially investment opportunities in the territories of the Parties;
   d) provide adequate and effective protection and enforcement of intellectual property rights in each Party's territory;
   e) create effective procedures for the implementation and application of this Agreement, for its joint administration and for the resolution of disputes; and
   f) establish a framework for further trilateral, regional and multilateral cooperation to expand and enhance the benefits of this Agreement.

2. The Parties shall interpret and apply the provisions of this Agreement in the light of its objectives set out in paragraph 1 and in accordance with applicable rules of international law.

Article 103: Relation to Other Agreements

1. The Parties affirm their existing rights and obligations with respect to each other under the General Agreement on Tariffs and Trade and other agreements to which such Parties are party.

2. In the event of any inconsistency between this Agreement and such other agreements, this Agreement shall prevail to the extent of the inconsistency, except as otherwise provided in this Agreement.

Article 104: Relation to Environmental and Conservation Agreements

1. In the event of any inconsistency between this Agreement and the specific trade obligations set out in:
CHAPTER ONE
INITIAL PROVISIONS AND DEFINITIONS

Section A: Initial Provisions

ARTICLE 1.1: ESTABLISHMENT OF A FREE TRADE AREA

Consistent with Article XXIV of GATT 1994 and Article V of GATS, the Parties hereby establish a free trade area in accordance with the provisions of this Agreement.

ARTICLE 1.2: RELATION TO OTHER AGREEMENTS

1. Each Party affirms its existing rights and obligations with respect to each other under existing bilateral and multilateral agreements to which both Parties are party, including the WTO Agreement.

2. This Agreement shall not be construed to derogate from any legal obligation between the Parties that entitles goods or services, or suppliers of goods or services, to treatment more favorable than that accorded by this Agreement.

Section B: General Definitions

ARTICLE 1.3: DEFINITIONS

For purposes of this Agreement, unless otherwise specified:

Agreement on Textiles and Clothing means the Agreement on Textiles and Clothing, contained in Annex 1A to the WTO Agreement;

central level of government means:
   (a) for Oman, the government of Oman; and
   (b) for the United States, the federal level of government;

covered investment means, with respect to a Party, an investment, as defined in Article 10.27 (Definitions), in its territory of an investor of the other Party in existence as of the date of entry into force of this Agreement or established, acquired, or expanded thereafter;

customs duties includes any customs or import duty and a charge of any kind imposed in connection with the importation of a good, including any form of surtax or surcharge in connection with such importation, but does not include any:
   (a) charge equivalent to an internal tax imposed consistently with Article III:2 of the GATT 1994, in respect of like, directly competitive, or substitutable goods of the Party, or in respect of goods from which the imported good has been manufactured or produced in whole or in part;
   (b) antidumping or countervailing duty that is applied pursuant to a Party’s domestic law; and
   (c) fee or other charge in connection with importation commensurate with the cost of services rendered;

Customs Valuation Agreement means the Agreement on Implementation of Article VII of the General Agreement on Tariffs and Trade 1994, contained in Annex 1A to the WTO Agreement;

days means calendar days as reckoned according to the Gregorian calendar;
Chapter One

Initial Provisions and General Definitions

Section A: Initial Provisions

Article 1.1: Establishment of a Free Trade Area

The Parties to this Agreement, consistent with Article XXIV of the GATT 1994 and Article V of the GATS, hereby establish a free trade area.

Article 1.2: Relation to Other Agreements

The Parties affirm their existing rights and obligations with respect to each other under the WTO Agreement and other agreements to which such Parties are party.

Section B: General Definitions

Article 1.3: Definitions of General Application

For purposes of this Agreement, unless otherwise specified:

central level of government means:

(a) for Peru, the national level of government;\(^1\) and

(b) for the United States, the federal level of government;

Commission means the Free Trade Commission established under Article 20.1 (The Free Trade Commission);

covered investment means, with respect to a Party, an investment, as defined in Article 10.28 (Definitions), in its territory of an investor of another Party in existence as of the date of entry into force of this Agreement or established, acquired, or expanded thereafter;

customs authority means the competent authority that is responsible under the law of a Party for the administration of customs laws and regulations;

---

\(^1\) For greater certainty, “regiones” are at the local level of government.
CHAPTER 1: ESTABLISHMENT OF A FREE TRADE AREA AND DEFINITIONS

ARTICLE 1.1: GENERAL

1. The Parties to this Agreement, consistent with Article XXIV of GATT 1994 and Article V of GATS, hereby establish a free trade area in accordance with the provisions of this Agreement.

2. The Parties reaffirm their existing rights and obligations with respect to each other under existing bilateral and multilateral agreements to which both Parties are party, including the WTO Agreement.

3. This Agreement shall not be construed to derogate from any international legal obligation between the Parties that entitles goods or services, or suppliers of goods or services, to treatment more favorable than that accorded by this Agreement.

ARTICLE 1.2: GENERAL DEFINITIONS

For purposes of this Agreement, unless otherwise specified:

1. **Customs Valuation Agreement** means the WTO Agreement on Implementation of Article VII of the General Agreement on Tariffs and Trade 1994;

2. **days** means calendar days;

3. **enterprise** means any entity constituted or organized under applicable law, whether or not for profit, and whether privately-owned or governmentally-owned, including any corporation, trust, partnership, sole proprietorship, joint venture or other association;

4. **enterprise of a Party** means an enterprise constituted or organized under the law of a Party;

5. **GATS** means the General Agreement on Trade in Services;

6. **GATT 1994** means the General Agreement on Tariffs and Trade 1994;

7. **goods of a Party** means domestic products as these are understood in GATT 1994 or such goods as the Parties may agree, and includes originating goods of that Party;

8. **government procurement** means the process by which a government obtains the use of or acquires goods or services, or any combination thereof, for governmental purposes and not with a view to commercial sale or resale, or use in the production or supply of goods or services for commercial sale or resale;

9. **measure** includes any law, regulation, procedure, requirement or practice;
June 29, 2010

Chairman Joe Wellinghoff  
FERC  
888 First Street NE  
Washington, DC 20426

Robert Corbin  
DOE  
1000 Independence Avenue Southwest  
Washington, DC 20585-0001

Gentlemen:

On behalf of the Cameron Parish Police Jury and the West Cameron Port Harbor & Terminal District, we take this opportunity to express our support of Cheniere's expansion facility in Cameron, La. Cheniere has been a long standing partner, ally, and major employer to the Cameron Parish area, the region and the State.

It is our understanding that this project includes the addition of liquefaction equipment and utilizes the existing 5 LNG tanks and marine berth. The project is located on industrial property that was previously reviewed and approved for siting by the Federal Energy Regulatory Commission.

This project is key to the parish because it would result in significant new employment and investment in an area that has a litany of generational recovery projects underway, not to mention the Housing initiative, which is projected to re-populate the Parish. It is also important to the State of Louisiana retaining jobs and potentially expanding employment in the exploration and production sectors.

The previous review of the site and the ongoing oversight by the federal agencies should shorten the required time for permitting. We have instructed state and local agencies to give this project high priority. Because of the importance and urgency of this project for the state, we implore the FERC (DOE) to begin the permitting process immediately and expedite all required permits so that construction can commence within a year.

We thank you for the consideration and we look forward to having Cheniere LNG continue to conduct business in Cameron Parish.

Sincerely submitted,

Kirk Burleigh, President  
Cameron Parish Police Jury

Cliff Cabell, President  
West Cameron Port Harbor & Terminal District

CC: Commissioner Marc Spitzer  
Commissioner John R. Norris  
Commissioner Philip D. Moeller
Department of Energy
1000 Independence Avenue Southwest
Washington, DC 20585-0001

Dear Commissioners:

Cheniere Energy is proposing an expansion at their liquefied natural gas (LNG) facility in Cameron Parish, LA, Sabine Pass LNG. The project includes the addition of liquefaction equipment and utilizes the existing 5 LNG tanks and marine berth. The project is located on industrial property that was previously reviewed and approved for siting by the Federal Energy Regulatory Commission. We fully support the proposed expansion.

This project is important to Calcasieu parish because it would result in new jobs and significant investment in an area that has yet to fully recover from hurricanes Rita and Ike. The State of Louisiana would greatly benefit by retaining jobs and potentially expanding employment in the exploration and production sectors.

Because of the importance and urgency of this project for the state, we implore the Department of Energy to begin the permitting process immediately and expedite all required permits so that construction can commence within a year.

As always, thank you for interest and consideration.

Yours very truly,

Willie L. Mount
State Senator

Dan W. Morrish
State Senator

Mike Danahay
State Representative

A.B. Franklin
State Representative

Brett Geymann
State Representative

John E. Guinn
State Representative

Chuck Kleckley
State Representative
Dear Sir:

I am writing today to express our support for the announced further expansion of the Cheniere Energy facility in Cameron Parish, Louisiana. Cheniere has been a long-standing partner to the Cameron Parish area, the larger region, and the state. I am grateful for the role your agency had in managing the regulatory process that allowed Cheniere’s initial $2.5 billion investment in local energy infrastructure to proceed.

As you likely are aware, Cheniere is proposing an expansion at their liquefied natural gas (LNG) facility in Cameron Parish, LA, Sabine Pass LNG. The project includes the addition of liquefaction equipment that utilizes the existing marine berth and five LNG tanks. The project is familiar to FERC staff as it is located on industrial property that was previously reviewed and approved for the import terminal project by the Commission.

Cameron Parish and the State of Louisiana are very excited about this project, which is important to the parish because it would result in significant new employment and investment in an area that has yet to recover from hurricanes Rita and Ike. It is also important to the State of Louisiana as it provides demand for the unconventional gas that is being explored and produced in the northern part of the state thus retaining jobs and sustaining employment and investment in the production sectors. I am hopeful that FERC’s familiarity with the project, Cheniere’s proven track record, and the ongoing oversight by FERC and other relevant federal agencies should allow for an expedited permitting process.
As a state elected office holder, I have requested our own state and local agencies to give this project high priority and be ready to work constructively with all federal agencies handling the expansion permits. Because of the importance and urgency of this project for the state, I am asking that the FERC and the Department of Energy understand the degree of local interest and support for this endeavor, and to expedite the process for all required permits so that this further investment and construction can commence in Cameron Parish.

As always, thank you for interest and consideration.

God Bless,

Jonathan Perry
State Representative
Cameron & Vermilion Parish

"Values that make south Louisiana, ours"
July 21, 2010

Mr. Jon Wellinghoff
Chairman
Federal Energy Regulatory Commission
888 First Street NE
Washington, DC 20426

Re: Cheniere Energy LNG Liquefaction expansion at Sabine Pass LNG

Dear Chairman Wellinghoff:

Cheniere Energy is proposing an expansion at its liquefied natural gas (LNG) facility in Cameron Parish, LA, Sabine Pass LNG. The project includes the addition of liquefaction equipment and utilizes the existing 5 LNG tanks and marine berth. It is my understanding that the project is located on industrial property that was previously reviewed and approved for siting by the Federal Energy Regulatory Commission. I write to express my support of the proposed expansion.

This project is important to Cameron Parish and the entire Southwest Louisiana region because it would result in significant employment and investment in an area that has yet to fully recover from hurricanes Rita (2005) and Ike (2008). Additionally, the expansion is also important to the State of Louisiana because it would retain jobs and potentially expand employment in the exploration and production sectors.

Because the project location site has previously been reviewed by your agency and because there has been ongoing oversight by federal agencies, I trust that you will give the permitting process every appropriate consideration and hope that FERC’s familiarity with the project would allow for an accelerated turnaround time. Because of the importance and urgency of this development for the state, I implore the FERC (DOE) to begin the permitting process immediately and expedite all required permits so that construction can commence within a year.

Very truly yours,

Scott A. Angelle
Lieutenant Governor

SAA:RJG:rgj

cc: Commissioner Philip Moeller
    Commissioner Marc Spitzer
    Commissioner John R. Norris
    Commissioner Cheryl LaFleur
July 26, 2010

The Honorable Dr. Steven Chu  
Secretary of Energy  
1000 Independence Ave., SW  
Washington, DC 20585

The Honorable Jon Wellinghoff  
Federal Energy Regulatory Commission  
888 First Street, NE  
Washington, DC 20426

Dear Secretary Chu and Chairman Wellinghoff:

President Barack Obama recently announced a much welcomed vision for doubling U.S. exports over the next five years. We support the President’s goal and the premise that exports create U.S. jobs across many sectors. The recent development of plentiful new natural gas finds here at home allows the U.S. the ability to be a partner in providing clean natural gas to nations in our Hemisphere and in Europe.

As such, we are writing today to express our support for the announced further expansion of the Cheniere Energy facility in Cameron Parish, Louisiana. Cheniere has been a long-standing partner in our state. We are grateful for the role both the Department of Energy (DOE) and the Federal Energy Regulatory Commission (FERC) played in allowing Cheniere’s initial $2.5 billion investment in local energy infrastructure to be built in Louisiana.

As you likely are aware, Cheniere is proposing an expansion at their Sabine Pass liquefied natural gas (LNG) facility to allow for the export of natural gas. The project includes the addition of liquefaction equipment that utilizes the existing marine berth and five LNG tanks. The project is familiar to technical staff at DOE and FERC as well other federal agencies involved in permitting, as it is located on industrial property that was previously reviewed and approved for the import terminal project.

We are excited about this project, which will result in significant new employment and investment in a region that has yet to fully recover from the 2005 hurricanes. It is also important to the state as it provides demand for the unconventional gas that is being explored and produced in Northern Louisiana - thus retaining jobs and sustaining employment and investment in the production sectors which are important to overall economic health and employment statewide.

We are hopeful that familiarity with the project across the relevant federal agencies, Cheniere’s proven track record, and ongoing oversight at the federal level will allow for an expedited permitting process. The Sabine Pass expansion enjoys broad local support and we encourage FERC and DOE to work with Cheniere to quickly acquire the needed permits to allow this important project to move forward.
We are excited for Louisiana to help lead the President’s export initiative, and not only provide new jobs in the production, manufacturing, and construction industries, but also to be a partner in promoting clean natural gas energy in this hemisphere and Europe.

Thank you for your consideration.

Sincerely,

Mary Landrieu
U.S. Senator

Rodney Alexander
Member of Congress

Charlie Melancon
Member of Congress

Bill Cassidy, MD
Member of Congress

David Vitter
U.S. Senator

Charles Boustany Jr., MD
Member of Congress

Steve Scalise
Member of Congress

John Fleming, MD
Member of Congress

Anh “Joseph” Cao
Member of Congress

Cc: FERC Commissioner Philip Moeller
FERC Commissioner Marc Spitzer
FERC Commissioner John Norris
FERC Commissioner Cheryl LaFleur
EXHIBIT D
U.S. NATURAL GAS RESOURCES
AND PRODUCTIVE CAPACITY

Prepared for:
CHENIERE ENERGY
Houston, Texas

Prepared by:
Vello A. Kuuskraa
Tyler Van Leeuwen
ADVANCED RESOURCES INTERNATIONAL, INC.
Arlington, VA USA

August 26, 2010
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INTRODUCTION

This report has been prepared by Advanced Resources, a geology, engineering and economics consulting firm formed in 1970. The firm has been at the forefront of unconventional gas appraisal and development since its formation. In 1978, the company (then called Lewin & Associates) published the three volume report entitled “Enhanced Recovery of Unconventional Gas”, which provided the foundation for the U.S. Department of Energy’s and Gas Research Institute’s (GRI) investments in unconventional gas research and technology. This report, prepared during a time when the “conventional wisdom” was that the nation was running out of natural gas supplies and curtailments existed on gas use for power generation, helped reverse both the outlook and policies for natural gas.

Advanced Resources was the support contractor on the GRI Team that changed coalbed methane from a scientific curiosity to a major source of gas supply. Advanced Resources’ basin studies and its COMET3 reservoir simulator are still the benchmark tools for optimizing CBM resources. Advanced Resources was the pioneer in bringing CBM expertise and technologies to countries such as Australia, China, and India among others.

The firm participated in the appraisal of Mitchell Energy’s Stella Young #1 well that lead to a revised view of the resource potential offered by the Barnett Shale. In the May 25, 1998, Oil and Gas Journal, Advanced Resources presented the rationale as to why the Barnett Shale resource was at least ten times larger than held by “conventional wisdom”. In the mid-1990s the U.S. DOE Energy Information Administration (EIA) asked Advanced Resources to build the unconventional gas supply module within the larger National Energy Modeling System (NEMS). EIA continues to use this modeling structure but in recent years has begun to incorporate its own resource assessments and development assumptions.

Advanced Resources assists a select group of domestic and international clients identify the highly productive “core areas” of emerging unconventional gas plays in the U.S. and worldwide. The firm incorporates its internal resource appraisal, well performance and economic data, assembled for 104 of the major U.S. unconventional gas plays, in its outlook and projections for unconventional gas productive capacity. Mr. Kuuskraa, a founder of the firm and the lead author of this report, is on the Boards of Southwestern Energy (SWN) and the Research Partnership to Secure Energy for America (RPSEA).
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EXECUTIVE SUMMARY

The introduction and aggressive development of unconventional gas, particularly gas shales, has dramatically changed the outlook for U.S. natural gas - - from “fears of impending shortages” at the beginning of this decade to “expectations of plenty” today.

- Instead of declining as predicted by many, domestic natural gas production increased during the past decade, from 53 Bcfd in 2000 to 59 Bcfd this year.

- Increased production of unconventional gas more than countered declines in onshore and offshore conventional gas. Today, unconventional gas, at 36 Bcfd, provides over 60% of domestic natural gas production, up from 16 Bcfd at the start of this decade.

- Gas shales provide 12 Bcfd today (20% of domestic natural gas production), up from 1 Bcfd in 2000 and account for much of the 20 Bcfd of unconventional gas production growth during this past decade.

The domestic natural gas resource is large, equal to nearly 2,600 Tcf. This resource number combines our firm’s internal assessments of unconventional gas resources with EIA’s assessments for conventional gas. The major deep gas shale basins, such as the Barnett, Haynesville and Marcellus, account for over a quarter of this resource base. Other studies, such as the recent work by the Potential Gas Committee, support our view that the domestic natural gas resource base is large and growing.

This report provides independent projections for natural gas productive capacity to the year 2035. We base our unconventional gas projections on our internal resource data base and supply model (MUGS). Our conventional gas projections are from EIA’s Annual Energy Outlook 2010 (AEO 2010). We use the AEO 2010 Reference Case for the natural gas price track in our report.
Based on this approach, we project significant increases in U.S. unconventional and total natural gas productive capacity in the coming years:

- We project near-term unconventional gas productive capacity to increase by 13 Bcfd, from 36 Bcfd today to 49 Bcfd by 2020, with gas shales accounting for essentially all of this growth.

- Given its large resource base, we project continuing growth in unconventional gas productive capacity, reaching 69 Bcfd by 2035 for a gain of 20 Bcfd for the 15 years from 2020 to 2035. Approximately half of the increase in unconventional gas productive capacity is expected to occur in the Mid-Continent/Gulf Coast Corridor, accessible to the LNG export facilities planned at Sabine Pass.

- Combining our projections for unconventional gas with EIA’s projections for conventional gas (in AEO 2010), the overall domestic natural gas productive capacity reaches 69 Bcfd in 2020 and nearly 93 Bcfd in 2035, up from about 59 Bcfd today.

When we compare U.S. natural gas productive capacity with projected net consumption (defined as total consumption less net imports and supplemental supplies), we foresee potential for a significant surplus of productive capacity, reaching 15 Bcfd in 2020 and increasing to 24 to 29 Bcfd in 2035 (depending on the availability of the Alaska natural gas pipeline).

Additional discussion and the details of our analysis are provided in the attached full report.
I. CHANGING OUTLOOK FOR U.S. NATURAL GAS SUPPLY

The outlook for U.S. natural gas supply has changed dramatically during the past decade, particularly in the past five years. Much of this change in outlook has been caused by the introduction of the large natural gas resources held in gas shales.

At the start of this decade, “fears of impending shortages” was the conventional wisdom for natural gas supplies. We were advised that only massive investments in LNG import facilities would avert a crisis and save the day. Natural gas reserves and production had been flat for the past decade, the large conventional gas fields were in decline, and notable analysts were skeptical about our ability to add new natural gas production.

Today, we realize that, instead of LNG, it was domestic unconventional gas that “saved the day”. Benefitting from science and technology investments in the 1980s and 1990s, increases in unconventional gas production more than counteracted the declines in conventional onshore and offshore natural gas.

- Instead of declining, domestic natural gas production (dry) actually increased - from 53 Bcfd in 2000 to 59 Bcfd in mid-2010. The 20 Bcfd increase in unconventional gas production more than overcame the 14 Bcfd decline in conventional (onshore and offshore) gas production, Figure I-1.

- After two decades of essentially no growth, proved reserves of natural gas (dry) began to increase steadily from 177 Tcf (end of 2000) to 245 Tcf (end of 2008), Figure I-2. Further increases in proved natural gas reserves are expected for 2009 and 2010, based on our review of annual reports and presentations by companies active in unconventional gas.

---

1 Numerous remarks by the Federal Reserve Chairman, Alan Greenspan, helped promote aggressive investments in LNG.
2 A series of CERA analytical reports including “Can We Drill Our Way Out of the Supply Shortage?” and “Diminishing Returns” provided the foundation for “fears of scarcity”.

Advanced Resources International, Inc.
JAF2010_143.DOC  August 26, 2010
Figure I-1. Unconventional Gas Has Become the Dominant Source of U.S. Natural Gas Supply

Year 2000

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<th>TOTAL</th>
<th>Conventional Onshore Gas*</th>
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Year 2010

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<th>Offshore Gas</th>
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<td></td>
<td>17 Bcfd</td>
<td>36 Bcfd</td>
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</table>

*Includes onshore associated, non-associated and Alaska.
Source: U.S. Energy Information Agency (2010); Advanced Resources Int'l (2010).

Figure I-2. A Decade of Increases in Domestic Natural Gas Proved Reserves

Year

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<td>2001</td>
<td>200</td>
<td>150</td>
<td>100</td>
<td>50</td>
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<td></td>
</tr>
<tr>
<td>2002</td>
<td>200</td>
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<td>2003</td>
<td>200</td>
<td>150</td>
<td>100</td>
<td>50</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>200</td>
<td>150</td>
<td>100</td>
<td>50</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>200</td>
<td>150</td>
<td>100</td>
<td>50</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>200</td>
<td>150</td>
<td>100</td>
<td>50</td>
<td>0</td>
<td></td>
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</tr>
<tr>
<td>2007</td>
<td>200</td>
<td>150</td>
<td>100</td>
<td>50</td>
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<td>2008</td>
<td>200</td>
<td>150</td>
<td>100</td>
<td>50</td>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A closer look at the data helps illustrate the contribution that unconventional gas has made during this decade:

- Unconventional gas is now the dominant source of proved reserves increasing from 56 Tcf (end of 2000) to 156 Tcf (end of 2008).

- Production of tight gas sands, coalbed methane and gas shales increased by 20 Bcf, from 16 Bcfd in 2000 to 36 Bcfd in 2010. **Figure I-3.**

**Figure I-3. Changes in Unconventional Gas Production by Resource Type**

- Gas shales, currently producing at 12 Bcfd, have provided more than half of the 20 Bcfd of growth in unconventional gas production during the past decade. Further increases are anticipated, particularly from the “magnificent seven” U.S. gas shale plays - - Barnett, Haynesville, Fayetteville, Marcellus, Woodford, Eagle Ford and Bossier, **Figure I-4.**
Clearly, the outlook for natural gas supplies and domestic production is radically different today than at the start of this decade. With the discovery and development of the major gas shale plays, we have moved from “fears of impending shortages” to “expectations of plenty” in our projections for natural gas supplies.

Today there is a surplus of natural gas supply, with available gas storage filled to the brim, thousands of shut-in gas wells, deferred completions of already drilled wells and depressed wellhead gas prices. Still the critical question that needs to be addressed is:

*What will be the status of U.S. natural gas supply and productive capacity in five, ten and twenty five years from now?*
Answering this challenging question will require that we first delve into a series of more fundamental topics that, to a large extent, will determine the level of future U.S. and North American natural gas supply:

- With the addition of the new gas shale basins, just how large is the domestic natural gas resource base?
- How much of this domestic natural gas resource base can be converted to productive capacity at currently projected natural gas prices?
- Will the economically viable natural gas productive capacity meet expected domestic demand for natural gas, as well as support LNG exports of domestic natural gas production?
- To what extent will continued progress in technology further increase the size of the natural gas resource base and the volume of economically feasible gas supply?

In the following chapters of this report, we will address these questions. We then conclude the report with a more in-depth look at the accessible gas resources and supplies in the Mid-Continent/Gulf Coast corridor available for LNG export from the Sabine Pass terminal.
II. THE DOMESTIC NATURAL GAS RESOURCE BASE

The domestic natural gas resource base is large, equal to 2,585 Tcf overall and 2,286 Tcf in the Lower-48, including undiscovered/inferred resources and proved natural gas reserves, for both conventional and unconventional gas. Our assessment of the U.S. natural gas resource base includes independent work by Advanced Resources\(^3\) on unconventional gas resources plus data from EIA (AEO 2010)\(^4\) on onshore and offshore conventional gas resources, as shown below in Table II-1.

Table II-1. Technically Recoverable U.S. Natural Gas Resources as of 1/1/2009 (Tcf)

<table>
<thead>
<tr>
<th></th>
<th>Proved Reserves</th>
<th>Undiscovered/ Inferred Resources</th>
<th>Total Recoverable Resources***</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LOWER-48</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conventional Gas</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>'Onshore Non-Associated</td>
<td>53</td>
<td>430</td>
<td>483</td>
</tr>
<tr>
<td>Offshore Non-Associated</td>
<td>8</td>
<td>284</td>
<td>292</td>
</tr>
<tr>
<td>Associated</td>
<td>21</td>
<td>117</td>
<td>138</td>
</tr>
<tr>
<td><strong>Subtotal Conventional Gas</strong></td>
<td><strong>82</strong></td>
<td><strong>831</strong></td>
<td><strong>913</strong></td>
</tr>
<tr>
<td>Unconventional Gas*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gas Shales**</td>
<td>39</td>
<td>660</td>
<td>700</td>
</tr>
<tr>
<td>Tight Gas Sands</td>
<td>96</td>
<td>471</td>
<td>567</td>
</tr>
<tr>
<td>Coalbed Methane</td>
<td>21</td>
<td>85</td>
<td>106</td>
</tr>
<tr>
<td><strong>Subtotal Unconventional Gas</strong></td>
<td><strong>156</strong></td>
<td><strong>1,216</strong></td>
<td><strong>1,373</strong></td>
</tr>
<tr>
<td><strong>TOTAL LOWER-48</strong></td>
<td>238</td>
<td>2,047</td>
<td>2,286</td>
</tr>
<tr>
<td><strong>ALASKA</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>291</td>
<td>299</td>
</tr>
<tr>
<td><strong>TOTAL US</strong></td>
<td>246</td>
<td>2,338</td>
<td>2,585</td>
</tr>
</tbody>
</table>

* A number of the smaller tight gas plays are not yet included in unconventional gas reserves and resources.

** Our proved reserves values for Appalachian gas shales are larger than tabulated by EIA for end of 2008.

*** Totals may differ slightly due to rounding.
Today, unconventional gas dominates the domestic natural gas resource base, for both proved reserves (156 Tcf) and for undiscovered/inferred recoverable resources (1,216 Tcf). Gas shales, with 700 Tcf of proved reserves plus recoverable resources, have become the largest of the unconventional gas resources. However, conventional onshore and offshore natural gas fields still hold large resources, accounting for 913 Tcf in the Lower-48 plus 299 Tcf in Alaska.

It is useful to recognize that the size of the unconventional gas resource base is not static (fixed for all time), but rather grows with progress in technology. (See discussion in Chapter IV on how technology progress influences the growth of the resource base.) For example, ultimate recoverable gas shale resources, which at the beginning of 2009 were assessed at 711 Tcf (including 11 Tcf of past production), increase steadily to 853 Tcf by year 2035 due to modest but steady improvements in well performance and other factors.

Other studies also support the view that the domestic natural gas resource base is large and increasing over time. For example, the Potential Gas Committee’s (PGC) most recent (end of 2008) estimate for the U.S. natural gas resource base is 1,836 Tcf for undeveloped resources. Of this, 616 Tcf is the PGC’s estimate for gas shales and 163 Tcf is the estimate for coalbed methane. Proved natural gas reserves of 245 Tcf (end of 2008) would bring the overall total to 2,081 Tcf. Compared to its prior (year-end 2006) report, the latest PGC natural gas resource estimate is 556 Tcf larger (including 41 Tcf produced during the intervening two year period).

---

II.1 GAS SHALES

II.1.1 Recoverable Resources

Based on our updated resource assessments, we estimate 39 Tcf of proved reserves and 660 Tcf of undeveloped technically recoverable resource (as of 1/1/2009) for gas shales in 35 established plays, Figure II-1.

- The Marcellus Shale, the Haynesville Shale and the Fayetteville Shale account for significant portions of the undeveloped gas shale resource.

- We recently added the emerging Cretaceous-age Eagle Ford liquids-rich shale play in South Texas and the Jurassic-age Bossier Shale in Louisiana and East Texas to our gas shale resource base.

Figure II-1. Production From Established U.S. Gas Shale Basins
The emerging and unproven gas shale basins and plays of the Rockies (Mancos, Baxter, Niobara, etc.) are not yet included in our gas shale resource data base, nor are the Utica or the other emerging gas shale plays in the east. As these unproven gas shale basins are explored and defined, we will incorporate these resources into our overall natural gas resource base.

II.1.2 Development

Gas shale drilling and development has increased many fold in recent years, from about 1,800 new wells placed on production in 2001 to over 6,000 new wells in 2008. Because a significant number of the wells drilled in 2008 were late to be completed and “tied in”, the number of new gas shale wells placed on production in 2009 was 7,400, including nearly 3,600 new Barnett Shale wells, Figure II-2. During this time, proved gas shale reserves increased from 4 Tcf to 39 Tcf (end of 2008) and further growth in proved gas shale reserves to an estimated 47 Tcf (end of 2009).

Figure II-2. Cumulative Number of Producing Barnett Shale (Newark East) Wells

While the number of gas shale wells placed on production is expected to decline
somewhat in 2010, these wells are being drilled in the more highly productive gas shale basins enabling gas shale reserves and productive capacity to continue to grow.

II.1.3 Production

In line with increases in well drilling and growth in proved reserves, production from gas shales has also increased - - from 1 Bcfd in 2000 to over 9 Bcfd in 2009. With continued active drilling and increased in wells placed on-line, gas shales production is expected to exceed 12 Bcfd in 2010, Table II-2.

Table II-2. U.S. Gas Shale Production

<table>
<thead>
<tr>
<th>Year</th>
<th>Bcfd</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>1.1</td>
</tr>
<tr>
<td>2008</td>
<td>6.1</td>
</tr>
<tr>
<td>2009</td>
<td>9.3</td>
</tr>
<tr>
<td>2010 (Preliminary)</td>
<td>12.2</td>
</tr>
</tbody>
</table>

Continued progress in well drilling and completion technology and the incorporation of additional gas shale plays support expectations for higher rates of production from gas shales in future years.
II.2. TIGHT GAS SANDS

II.2.1 Recoverable Resources

We estimate 96 Tcf of proved reserves and 471 Tcf of undeveloped technically recoverable resource (as of 1/1/2009) for tight gas sands in 54 established plays.

- The Piceance Basin, Bossier Sands, and Granite Wash/Atoka in the Anadarko Basin provide important portions of the undeveloped tight gas sand resource. Numerous other Gulf Coast, Permian and Rockies plays account for the rest.

- We recently updated our resource assessments, well performance and economics for the Piceance (Mesaverde), Uinta (Tertiary, Mesaverde), Green River (Lance) and East Texas (Bossier and Cotton Valley) basins and added the emerging Granite Wash/Atoka horizontal well play in Oklahoma and West Texas to MUGS.

Significant increases in recoverable resources for tight gas sand are possible by using closer well spacing, massive multiple completions and horizontal well drilling.

II.2.2 Development

Tight gas sand drilling and development have grown significantly in recent years, from about 5,000 new wells placed on production in 2001 to nearly 15,000 new wells in 2008. During this time, proved tight gas sand reserves increased from 48 Tcf to 96 Tcf (as of 1/1/2009). In 2009, tight gas drilling declined to about 8,000 new wells and is expected to decline further in 2010 as many of the available well drilling rigs have been moved to gas shale plays.

Despite the decline in well drilling, we anticipate that tight gas sand proved reserves will grow as industry continues to shift their focus to greater use of horizontal wells and higher productivity plays such as the Granite Wash.
II.2.3 Production

With the nearly two-fold increase in proved reserves, tight gas production increased from 11 Bcf/d in 2000 to nearly 18 Bcf/d in 2008. We expect tight gas sand production to increase in 2010, Table II-3.

<table>
<thead>
<tr>
<th>Year</th>
<th>Bcfd</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>10.9</td>
</tr>
<tr>
<td>2008</td>
<td>17.8</td>
</tr>
<tr>
<td>2009</td>
<td>17.8</td>
</tr>
<tr>
<td>2010 (Preliminary)</td>
<td>18.9</td>
</tr>
</tbody>
</table>

Improved Rockies basis differentials and new well drilling and production technologies (e.g., multi-stage stimulation and horizontal wells) provide the basis for a “bullish” outlook for future tight gas sand production.
II.3 COALBED METHANE RESOURCES

II.3.1 Recoverable Resources

We estimate 21 Tcf of proved reserves and 85 Tcf of undeveloped technically recoverable resource for coalbed methane in 29 established plays.

- The San Juan Basin and the Powder River Basin account for the bulk of the undeveloped CBM resource as well as much of the proved CBM reserves.

- We recently updated our resource assessments, well performance and economics for the San Juan (Fruitland) and Powder River (Ft. Union) CBM basins.

Much of the CBM resource in-place is in deep, low permeability formations in the Piceance (80 Tcf) and Greater Green River basins (300+Tcf) and thus these basins are not yet included in our estimates for recoverable resources. Significant advances in well completion technology will be required to enable these deep CBM resources to contribute to domestic natural gas supplies in future years.

II.3.2 Development

Coalbed methane drilling and development has been relatively steady from 2001 to 2008, at about 5,000 wells per year. During this time, proved CBM reserves increased from about 16 Tcf to 21 Tcf (as of 1/1/2009).

In 2009, the number of CBM wells placed on production declined to about 2,000 wells and is expected to drop further in 2010 as the rig count has plummeted. Furthermore, many of the CBM wells in the Powder River Basin are shut in. Based on the drop in well drilling, proved CBM reserves are expected to decline in 2010.
II.3.3 Production

CBM production has increased moderately, from 4 Bcfd in 2000 to above 5 Bcfd in 2009. Even with the recent decline in CBM well drilling, we expect CBM production to remain relatively stable at about 5 Bcfd in 2010, but to decline in future years, Table II-4. Breakthroughs in deep CBM well completions and enhanced coalbed methane technology could provide some “upside” to future projections of CBM production.

Table II-4. U.S. Coalbed Methane Production

<table>
<thead>
<tr>
<th>Year</th>
<th>Bcfd</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>4.0</td>
</tr>
<tr>
<td>2008</td>
<td>5.4</td>
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<tr>
<td>2009</td>
<td>5.2</td>
</tr>
<tr>
<td>2010 (Preliminary)</td>
<td>5.2</td>
</tr>
</tbody>
</table>

II.4 PRICE-SUPPLY CURVE FOR DOMESTIC NATURAL GAS

Our analysis shows that unconventional gas resources, particularly the higher quality gas shales, make up the low cost portion of the domestic natural gas price-supply curve. Figure II-3 captures the shift that has occurred in the relative economics of conventional and unconventional gas in the past decade.

Figure II-3. Today’s Domestic Natural Gas Price/Supply Curve
Several factors account for the radical shift that has taken place in the price-supply curve for domestic natural gas:

- First, the application of horizontal wells has enabled gas shales to deliver high rates of gas production, often in excess of 20 MMcf/d from gas shale plays such as the Haynesville and Bossier, enabling these resources to have low finding and development (F&D) costs per unit of production.

- Second, several of the gas shale and tight gas sand plays are liquids rich, such as the Eagle Ford gas shales and the Granite Wash tight gas sands. Extraction and sale of these liquids (oil, condensate and NGLs) provide considerable additional revenues given the relatively high current price for oil.

- Third, as presented earlier, the size of the unconventional gas resource base is large and exists in numerous basins. Each of these basins has a highly productive “core area” with much lower F&D costs than for the basin or play as a whole. Industry’s ability to identify and then preferentially develop these special “core areas” establish the low cost portion of the price-supply curve for domestic natural gas.
III. OUTLOOK FOR U.S. NATURAL GAS PRODUCTIVE CAPACITY

III.1 BACKGROUND

In this section of the report, we discuss the use of our unconventional gas resource base and economics model (MUGS) to provide independent projections for unconventional gas productive capacity. Then, we combine our estimates for unconventional gas productive capacity with projections of conventional gas production in EIA’s AEO 2010 to provide an overall outlook for U.S. natural gas productive capacity to year 2035.

It is important to note that the report presents natural gas productive capacity, not projected production.

- Available natural gas productive capacity is the volume of natural gas that could be economically produced at a particular gas price track, given a defined natural gas resource base, established costs of production and expected returns on investment.

- Projected natural gas production is the volume of natural gas that would be produced at market equilibrium between supply (plus changes in gas storage) and net demand. (Net demand is total demand less net imports.)

- If the available natural gas productive capacity, at a given gas price track, is less than projected demand, then either additional imports and/or higher gas prices are required to balance supply and demand.

- If available natural gas productive capacity, at a given gas price track, is more than projected demand, a variety of responses could occur. Producers could shut in wells or defer completing already drilled wells. There could be reductions in gas imports or increases in gas exports. Or, excess supply could drive down gas prices to reach market equilibrium.
III.2. OVERVIEW OF ADVANCED RESOURCES’ MUGS MODEL

The key components of Advanced Resources’ Technology Model of Unconventional Gas Supply, MUGS are illustrated in Figure III-1. Additional discussion of the model, as adopted into the Oil and Gas Module of EIA’s National Energy Modeling System, is available in the Methodology for AEO 2009.6

Figure III-1. The Advanced Resources’ Unconventional Gas Supply And Technology Model (MUGS)

MUGS contains a series of cost-price factors that relate costs to changes in natural gas prices. Some of these cost factors are directly related to price, such as production taxes and fuel use. Other cost factors, such as well completing and operations, are indirectly related to price through unit costs such as steel for well casing and salaries for operating staff.

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III.3 OVERVIEW OF INPUTS FOR PROJECTING PRODUCTIVE CAPACITY

III.3.1 Price Track

To ensure our projections of unconventional gas productive capacity are comparable with the EIA’s projections of natural gas production, we use the price track provided by the EIA in AEO 2010 for the Reference Case, (Henry Hub, 2008 dollars per million Btu), Figure III-2.

- In the near-term, from 2010 to 2020, natural gas prices rise from $4.50/MMBtu to $6.64/MMBtu.
- In the longer-term, from 2021 to 2035, natural gas prices rise from $6.74/MMBtu to $8.88/MMBtu.

III.3.2 Basis Differentials

In the past, we and others have used historical data to set basis differentials. The historical data approach is reasonable when pipeline transportation and regional supply remain relatively stable. With the massive completion of new natural gas pipelines in the past few years, we now expect much lower basis differentials than shown by historical data, Figure III-3.

- The historical data (for 2004-2008) show a basis differential of 24% between the Rockies Hub and NYMEX, compared to a basis differential of 5% for forward prices. Assuming a NYMEX price of $6 MMBtu, the Rockies basis differential would shrink from $1.44/MMBtu in the past to $0.30/MMBtu in the future, providing a potential gain of $1.13/MMBtu to producers.
- Similar, though smaller, reductions in basis differentials are also expected for the Mid-Continent, San Juan and the AECO Hub in Alberta, Canada.

We have incorporated these reduced basis differentials into MUGS (our unconventional gas model) to evaluate future available natural gas productive capacity.
Figure III-2. Reference Case Natural Gas Prices, AEO 2010

*Producers realised prices (before basis differentials) are higher in 2010 due to hedging.

Figure III-3. Increased Transportation Outlets Have Reduced Basis Differentials

Historical & Forward Relationship to NYMEX*

Source: EnCana, 2010

Source: EnCana, NYMEX Clearport, Platts Gas Daily
*Forward prices as of market close on March 1, 2010. Average prices from 2010-2012.

www.encana.com
III.3.3 Resource Base and Proved Reserves

For undeveloped resources, we use as input into MUGS our independently assessed unconventional gas resource base, discussed in Chapter II. In addition, we input our internal estimates of proved reserves (1/1/2010) into MUGS by updating EIA’s proved reserves for end of 2008 based on well drilling and well performance in 2009.

III.3.4 Cost and Well Performance Data

We have play-specific capital and operating costs and well performance data for 104 distinct unconventional gas plays in MUGS, including 29 gas shale plays, 46 tight gas sand plays and 29 coalbed methane plays. For example, we partition the large Marcellus Shale play of the Appalachian Basin into 6 distinct plays reflecting difference in geology, resource access and well performance.

III.3.5 Economic Considerations

In addition to basic Capex and Opex, MUGS incorporates a variety of economic factors, including accounting for the value of co-produced liquids and higher or lower than standard Btu content in the produced gas, for royalties and state production taxes, for lease costs, dry holes and seismic. The model specifically addresses oil and NGLs produced from the liquids-rich shales such as the Eagle Ford and Granite Wash, among others. The value of producing and selling liquids (oil/condensate) as well as the value (and costs) of producing NGLs are credited against overall costs, enabling produced natural gas from liquids-rich shales to have considerably lower break-even costs. The economic model incorporates a 15% return on investment, before tax, to establish the minimum required Henry Hub price for each play.

III.3.6 Other Considerations

As further discussed in Chapter IV, the model incorporates a variety of technology progress, environmental, infrastructure and development constraint levers that influence the timing and costs of unconventional gas production.
IV. PROJECTED TOTAL U.S. NATURAL GAS PRODUCTIVE CAPACITY

IV.1 SUMMARY OF RESULTS

We project total U.S. natural gas productive capacity to increase from 59 Bcfd in 2010 to 69 Bcfd in 2020 and further to nearly 93 Bcfd in 2035 under the EIA 2010 Reference Case natural gas price track, Table IV-1. Should the Alaska natural gas pipeline be delayed beyond 2035, the U.S. natural gas productive capacity in 2035 would be about 4.5 Bcfd less, at 88 Bcfd.

Table IV-1. Total U.S. Natural Gas Productive Capacity

<table>
<thead>
<tr>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>2009* (Actual)</td>
<td>9.3</td>
<td>11.8</td>
<td>21.5</td>
</tr>
<tr>
<td></td>
<td>25.4</td>
<td>32.3</td>
<td>57.7</td>
</tr>
<tr>
<td>2010* (Preliminary)</td>
<td>8.4</td>
<td>13.2</td>
<td>21.4</td>
</tr>
<tr>
<td></td>
<td>23.0</td>
<td>36.3</td>
<td>58.6</td>
</tr>
<tr>
<td>Near -Term</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>8.0</td>
<td>14.1</td>
<td>22.0</td>
</tr>
<tr>
<td></td>
<td>21.8</td>
<td>38.5</td>
<td>60.2</td>
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<td>2015</td>
<td>7.5</td>
<td>15.8</td>
<td>23.3</td>
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<td></td>
<td>20.5</td>
<td>43.4</td>
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<td>69.1</td>
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<td>Longer-Term</td>
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<td>20.2</td>
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<td></td>
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<td>84.1</td>
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</tr>
<tr>
<td></td>
<td>23.7</td>
<td>69.0</td>
<td>92.7</td>
</tr>
</tbody>
</table>

* Data for 2009 and 2010 is from Short Term Energy Outlook (July 2010) and from AEO 2010 for years 2012 through 2035 for total U.S. dry gas production.

**Conventional gas production is the difference between U.S. total dry natural gas production (from STEO (July 2010) and AEO 2010) and EIA’s projections for unconventional gas.
IV.2 U.S. NATURAL GAS PRODUCTIVE CAPACITY VERSUS NET DEMAND

Our analysis, using EIA data for conventional gas and Advanced Resources’ data for unconventional gas, shows a steady growth in U.S. natural gas productive capacity by year 2020, continuing to year 2035, Table IV-2.

When we compare total productive capacity with projected net consumption, we see a potential for a significant surplus of productive capacity of 14 Bcfd in 2020, increasing to 29 Bcfd in 2035. (Net consumption (demand) is defined as total consumption less gas supplies provided by supplemental natural gas and net pipeline and LNG imports.) Even after subtracting the 4.5 Bcfd expected from the Alaska natural gas pipeline (scheduled to come online in 2023 and reach capacity by 2024), surplus productive capacity would still exceed 24 Bcfd in 2035.

### Table IV-2. Projections of Surplus U.S. Dry Natural Gas Productive Capacity

<table>
<thead>
<tr>
<th></th>
<th>U.S. Dry Natural Gas Productive Capacity (AEO 2010 and ARI 2010) (Bcfd)</th>
<th>U.S. Natural Gas Consumption (AEO 2010)* (Bcfd)</th>
<th>Surplus U.S. Dry Natural Gas Productive Capacity (Bcfd)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Less: Other**</td>
<td>Net</td>
</tr>
<tr>
<td>2009 (Actual)</td>
<td>57.4</td>
<td>62.5</td>
<td>6.6</td>
</tr>
<tr>
<td>2010 (Preliminary)</td>
<td>58.6</td>
<td>64.7</td>
<td>7.4</td>
</tr>
<tr>
<td>Near-Term</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>60.2</td>
<td>59.6</td>
<td>7.3</td>
</tr>
<tr>
<td>2015</td>
<td>63.9</td>
<td>59.5</td>
<td>6.7</td>
</tr>
<tr>
<td>2020</td>
<td>69.1</td>
<td>61.8</td>
<td>7.2</td>
</tr>
<tr>
<td>Longer-Term</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2025</td>
<td>78.3</td>
<td></td>
<td>6.1</td>
</tr>
<tr>
<td>2030</td>
<td>84.1</td>
<td></td>
<td>5.2</td>
</tr>
<tr>
<td>2035</td>
<td>92.7</td>
<td></td>
<td>4.2</td>
</tr>
</tbody>
</table>

* U.S. natural gas production and consumption data are from EIA Short Term Energy Outlook (July 2010) for 2009 and 2010 and from AEO 2010 for 2012 and beyond.
**Other supplies include: (1) supplemented natural gas; (2) net imports; and (3) change in inventory (2009 & 2010).
***After subtracting projected production from the Alaskan Natural Gas Pipeline (4.5 Bcfd in 2025 and beyond) and supply/demand balance discrepancies reported in the STEO for 2009, 2010 and in AEO 2010 for year 2012.
### IV.3 CONVENTIONAL NATURAL GAS PRODUCTION

To estimate conventional natural gas production, we subtracted EIA’s projections of unconventional gas production from its projections for total U.S. natural gas production in the Reference Case of AEO 2010, **Table IV-3**.

#### Table IV-3. U.S. Conventional Natural Gas Production

<table>
<thead>
<tr>
<th></th>
<th>EIA Reference Case Gas Supply (AEO 2010)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>U.S. Total Dry Natural Gas Production</td>
</tr>
<tr>
<td></td>
<td>(Tcf) (Bcfd)</td>
</tr>
<tr>
<td>Near-Term</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>19.3</td>
</tr>
<tr>
<td>2015</td>
<td>19.3</td>
</tr>
<tr>
<td>2020</td>
<td>20.0</td>
</tr>
<tr>
<td>Longer-Term</td>
<td></td>
</tr>
<tr>
<td>2025</td>
<td>21.3</td>
</tr>
<tr>
<td>2030</td>
<td>22.4</td>
</tr>
<tr>
<td>2035</td>
<td>23.3</td>
</tr>
</tbody>
</table>

While data were provided in AEO 2010 for gas shale and coalbed methane production, the volumes for tight gas sand production were not provided. As such, we used the tight gas sand production values reported in AEO 2009 for EIA’s tight gas production projections in AEO 2010.
IV.4  UNCONVENTIONAL GAS PRODUCTIVE CAPACITY

**IV.4.1 Summary Projection.** Advanced Resources projects unconventional gas productive capacity to increase from 36.3 Bcfd in 2010 to 49.3 Bcfd in 2020 and 69 Bcfd in 2035, Table IV-4. These projections use the EIA AEO 2010 natural gas price track for the Reference Case.

<table>
<thead>
<tr>
<th>Annual Production</th>
<th>Tcf</th>
<th>Bcfd</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009 (Actual)</td>
<td>11.8</td>
<td>32.3</td>
</tr>
<tr>
<td>2010 (Preliminary)</td>
<td>13.2</td>
<td>36.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Near-Term</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2012</td>
<td>14.1</td>
<td>38.5</td>
</tr>
<tr>
<td></td>
<td>2015</td>
<td>15.8</td>
<td>43.4</td>
</tr>
<tr>
<td></td>
<td>2020</td>
<td>18.0</td>
<td>49.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Longer-Term</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2025</td>
<td>20.2</td>
<td>55.4</td>
</tr>
<tr>
<td></td>
<td>2030</td>
<td>22.4</td>
<td>61.3</td>
</tr>
<tr>
<td></td>
<td>2035</td>
<td>25.2</td>
<td>69.0</td>
</tr>
</tbody>
</table>

While the projected growth of unconventional gas productive capacity of 13 Bcfd in the next ten years may seem aggressive, it is less than the 20 Bcfd of growth achieved by these resources in the past decade. Additional discussion of the feasibility of achieving these increases in unconventional gas productive capacity is provided in Section IV-7: Bechmarks and Comparisons of this report.
**IV.4.2 Detailed Projections.** In our unconventional gas model (MUGS), gas shales account for the great bulk (13 Bcfd) of near-term growth in unconventional gas productive capacity, from year 2010 to year 2020. Small increases in tight gas counter small losses in CBM in near-term productive capacity, *Table IV-5* and *Figure IV-1*. Gas shales also provide the great bulk of the longer-term growth in productive capacity, increasing by 14 Bcfd from year 2020 to 2035, *Table IV-5* and *Figure IV-2*.

<table>
<thead>
<tr>
<th></th>
<th>Annual Production</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gas Shales (Bcfd)</td>
<td>Tight Gas Sands (Bcfd)</td>
</tr>
<tr>
<td>2009 (Actual)</td>
<td>9.3</td>
<td>17.8</td>
</tr>
<tr>
<td>2010 (Preliminary)</td>
<td>12.2</td>
<td>18.9</td>
</tr>
<tr>
<td><strong>Near-Term</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>14.7</td>
<td>19.2</td>
</tr>
<tr>
<td>2015</td>
<td>19.1</td>
<td>19.5</td>
</tr>
<tr>
<td>2020</td>
<td>25.1</td>
<td>19.3</td>
</tr>
<tr>
<td><strong>Longer-Term</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2025</td>
<td>30.3</td>
<td>19.9</td>
</tr>
<tr>
<td>2030</td>
<td>34.6</td>
<td>21.2</td>
</tr>
<tr>
<td>2035</td>
<td>39.1</td>
<td>23.8</td>
</tr>
</tbody>
</table>
**Figure IV-1. Mid-Term Expectations for Unconventional Gas Productive Capacity**

- **Coalbed Methane**
- **Tight Gas Sands**
- **Gas Ghales**

Source: Advanced Resources International, Model of Unconventional Gas (MUGS; 2010)

**Figure IV-2. Longer-Term Expectations for Unconventional Gas Productive Capacity**

- **Coalbed Methane**
- **Tight Gas Sands**
- **Gas Ghales**

Source: Advanced Resources International, Model of Unconventional Gas (MUGS; 2010)
IV.5 COMPARISON OF ADVANCED RESOURCES’ AND EIA’S PROJECTIONS
FOR UNCONVENTIONAL GAS

Table IV-6 compares Advanced Resources’ (2010) and EIA’s (AEO 2010) Reference Case projections for unconventional gas.

- For the near-term, Advanced Resources projects unconventional gas productive capacity to increase from 36 Bcfd (in 2010) to 49 Bcfd (in 2020). In comparison, the EIA’s projections for unconventional gas production start at 31 Bcfd (in 2010) and reach only 35 Bcfd in 2020.

- For the longer-term, Advanced Resources projects unconventional gas productive capacity to reach 69 Bcfd in 2035 compared with 40 Bcfd by EIA. Shale gas production in our analysis reaches 39 Bcfd in 2035, compared to 16 Bcfd in the EIA AEO reference case.

It is useful to note that Advanced Resources’ projections are for productive capacity (at the EIA price track); EIA numbers are for actual production integrated with demand (at the EIA price track).
Table IV-6. Comparison of Advanced Resources’ and EIA’s Projections for Unconventional Gas

<table>
<thead>
<tr>
<th></th>
<th>Advanced Resources Int’l, Inc. (2010)</th>
<th>EIA AEO 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total (Bcfd)</td>
<td>Gas Shales (Bcfd)</td>
</tr>
<tr>
<td>2009 (Actual)</td>
<td>32.3</td>
<td>9.3</td>
</tr>
<tr>
<td>2010 (Preliminary)</td>
<td>36.3</td>
<td>12.2</td>
</tr>
<tr>
<td><strong>Near-Term</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>38.5</td>
<td>14.7</td>
</tr>
<tr>
<td>2015</td>
<td>43.4</td>
<td>19.1</td>
</tr>
<tr>
<td>2020</td>
<td>49.3</td>
<td>25.1</td>
</tr>
<tr>
<td><strong>Longer-Term</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2025</td>
<td>55.4</td>
<td>30.3</td>
</tr>
<tr>
<td>2030</td>
<td>61.3</td>
<td>34.6</td>
</tr>
<tr>
<td>2035</td>
<td>69.0</td>
<td>39.1</td>
</tr>
</tbody>
</table>

Differences in the size of the shale gas resource base underlie much the disparity in the two outlooks for unconventional gas. ARI calculates 700 Tcf of technically recoverable resources for gas shale plays which is 404 Tcf larger than used by EIA. A significant portion of this difference occurs in the Northeast region, the location of the Marcellus, Devonian-age Huron, and Antrim gas shales, Table IV-7.

Table IV-7. Comparison of Advanced Resources’ and EIA’s Gas Shale Resources

<table>
<thead>
<tr>
<th></th>
<th>Technically Recoverable Resources (Tcf)</th>
<th>ARI (Tcf)</th>
<th>EIA (Tcf)</th>
<th>Difference (Tcf)</th>
</tr>
</thead>
<tbody>
<tr>
<td>National*</td>
<td>700</td>
<td>296</td>
<td>404</td>
<td></td>
</tr>
<tr>
<td>Northeast Region</td>
<td>243</td>
<td>79</td>
<td>164</td>
<td></td>
</tr>
</tbody>
</table>

* Excludes gas shale resource in the Rocky Mountain and West Coast Regions, which are not yet included in ARI's gas shale resource base.
IV.6 A MORE DETAILED LOOK

This section of the report provides a more detailed look at the sources of our projected increases in unconventional gas productive capacity.

- **Gas Shales.** Gas shales account for 13 Bcfd of the increase in productive capacity by 2020 and 27 Bcfd by 2035. Three gas shale plays - - the Marcellus, the Haynesville/Bossier, and the Eagle Ford - - provide essentially all of this increase. These three gas shale plays also account for about half of today’s active natural gas rigs.

<table>
<thead>
<tr>
<th></th>
<th># of Natural Gas Rigs (Mid-2010)</th>
<th>Productive Capacity (Bcfd)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2010</td>
</tr>
<tr>
<td>Marcellus</td>
<td>127</td>
<td>1.0</td>
</tr>
<tr>
<td>Haynesville/Bossier</td>
<td>173</td>
<td>2.4</td>
</tr>
<tr>
<td>Eagle Ford</td>
<td>82</td>
<td>0.1</td>
</tr>
<tr>
<td><strong>Sum</strong></td>
<td><strong>382</strong></td>
<td><strong>3.5</strong></td>
</tr>
</tbody>
</table>

In contrast, we project gas production from the Barnett Shale to decline, after reaching a peak of 5.1 Bcfd in 2010, (includes associated gas production from Barnett oil wells).

- **Tight Gas Sands.** Tight gas sands provide little increase in productive capacity by 2020 but, with the higher EIA natural gas price track after 2020, contribute 5 Bcfd increased capacity by 2035. The three tight gas basins that account for much of the projected increase - - Anadarko, Green River and Uinta-Piceance - - have seen their natural gas rig count climb to 192 from 124 a year ago.
A number of the more mature tight gas sand plays, such as the Gulf Coast Wilcox/Lobo and the Arkoma Atoka, are projected to be in decline.

- **Coalbed Methane.** Coalbed methane productive capacity declines somewhat by 2020 but then increases moderately by 2035 as gas prices increase. Higher natural gas prices stimulate increased development of the lower productivity, extension areas of the maturing CBM basins and plays.

### IV.7 BENCHMARK AND COMPARISONS

**IV.7.1 Benchmark Questions.** It is useful to review natural gas production projections with a variety of “benchmark” questions. Because gas shales become the dominant source of unconventional gas production, we will target most of the benchmark questions to this resource base.

- **Is the Recoverable Resource Base Sufficient?** For the 25 year period (2010-2035), gas shale production equals 248 Tcf. With 700 Tcf of remaining recoverable gas shale resource (as of the beginning of 2009) and further growth of the resource base (as discussed in Chapter II), the gas shale resource base is far from being mature or depleted by 2035.

- **Will There Be Sufficient Rig Capacity?** The well drilling requirements in the years after 2010 do not exceed gas shale well drilling projected for 2010.

- **Will There Be Sufficient Investment Capital?** Given that the future well requirements for gas shale do not exceed projected 2010 drilling and that gas...
prices increase, we do not anticipate capital constraints for gas shale development. The entry of the majors (e.g., Shell, BP, ConocoPhillips and ExxonMobil) as well as global E&Ps (Reliance, Statoil, Mitsui) into gas shale development further argues that capital will likely be sufficient.

**Is There Precedent for Such a Large Increase in Unconventional Natural Gas Supply?** Our analysis shows that unconventional natural gas productive capacity is projected to increase by 13 Bcfd in the coming decade (from 36.3 Bcfd in 2010 to 49.3 Bcfd in 2020). While this is a large increase, it is considerably less than the actual results from the past decade (2000 to 2010), when unconventional gas production increased by 20 Bcfd, from 16 Bcfd in 2000 to 36 Bcfd today. Continued technological improvements (discussed below) and the pursuit of new unconventional gas plays, such as the Granite Wash tight gas sand and the Eagle Ford and Bossier gas shales, provide support that a 13 Bcfd production increase is realistic for the upcoming decade.

**IV. 7.2 Comparison Projections.** As a comparison projection, we have included the recent work provided by EnCana on the outlook for North American gas shale and total natural gas production.

- EnCana projects gas shale production of 43 Bcfd in year 2020 for North America, Figure IV-3. Taking out 8 Bcfd for the Canadian Horn River and Montney, EnCana’s projections for U.S. gas shale production is 35 Bcfd in year 2020. Our projections for year 2020 U.S. gas shale production from MUGS is less, at 25 Bcfd, indicating that our projection for gas shale productive capacity is more conservative than EnCana’s.

- EnCana projects total North American gas production to reach 85 Bcfd in 2020, up from 70 Bcfd in 2010, a growth of 15 Bcfd, Figure IV-4. Our combined conventional gas (from EIA) and unconventional gas projections for year 2020 are 69 Bcfd for the U.S., up from 59 Bcfd in 2010, for an overall U.S. growth of 10 Bcfd. Assuming EnCana has expectations of growth on the order of 5 Bcfd in
Canadian natural gas production, these two projections would be reasonably comparable.

**Figure IV-3. Shale Gas Production Forecast**

![Shale Gas Production Forecast](Image)

The relative low cost of shale gas leads to its preferential development over the next 10 years led by the Haynesville and Marcellus.

Source: Encana, IHS Energy

**Figure IV-4. North American Gas Production Forecast**

![North American Gas Production Forecast](Image)

The U.S. and Canada are expected to have significant growth from shale gas, driven by lower production costs. Total production grows from 70 Bcf/d in 2010F to 85 Bcf/d in 2020F - or 20%.

43 Bcf/d

52%

Source: Encana, IHS Energy
V. IMPORTANCE OF PROGRESS IN TECHNOLOGY FOR NATURAL GAS SUPPLY

The “conventional wisdom” a year ago was that lower natural gas prices would crater rig utilization. Low prices would, in turn, reduce productive capacity and lead to a strong price rebound - - the saying was, “low gas prices would cure low gas prices”:

- The initial decline in rig utilization appeared to support the “conventional wisdom”. Natural gas rig utilization declined from a peak of 1,585 in September, 2008 to a low of 675 in July, 2009.

- Since then, rig utilization has rebounded to 982 active natural gas rigs (July, 2009) with the majority of these being horizontal rigs with large gains in Texas, Oklahoma, Louisiana and Pennsylvania, states with active gas shale plays.

The “conventional wisdom” for natural gas supply turned out to be wrong because of three aspects of progress in technology - - increased use of horizontal well drilling in tight gas sands and gas shales; reductions in well costs from learning and increased rig efficiencies; and steady improvements in well productivity.

V.1 EXAMPLES OF PROGRESS IN TECHNOLOGY

V.1.1 Increased Use of Horizontal Rigs and Wells

The use of intensively stimulated horizontal wells with their high rates of gas production enabled the deep, ultra-low permeability gas shale formations to be economically developed, Figure V-1. As operators have gained experience with horizontal drilling and completions, the lengths of the horizontal laterals have increased as have the number of frac stages, Figure V-2.

Today, the utilization of horizontal rigs is at an all time high of 858. These rigs now make up more than half of the 1,557 active U.S. rigs and an estimated 80% of active natural gas rigs.
Natural gas production from shallow, fractured shale formations in the Appalachian and Michigan basins of the U.S. has been underway for decades. What “changed the game” was the recognition that one could “create a permeable reservoir” and high rates of gas production by using intensively stimulated horizontal wells.

This break-through in knowledge and technology enabled the numerous deep, low permeability gas shale formations to become productive and thus low cost.

Meanwhile, horizontal well lengths and intensity of stimulation continue to evolve.

- Lateral of 5,000+
- Frac stages of 12 to 20.
In spite of increased use of horizontal rigs to drill horizontal wells (which take longer to drill), natural gas rig efficiencies, measured in terms of wells drilled per rig year, have remained high, Table V-1.

**Table V-1. Natural Gas Rig Efficiencies**

<table>
<thead>
<tr>
<th>Year</th>
<th>Natural Gas Wells</th>
<th>Natural Gas Rig-Yrs.</th>
<th>Natural Gas Wells/Rig-Yr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>33,093</td>
<td>1,466</td>
<td>22.6</td>
</tr>
<tr>
<td>2008</td>
<td>33,544</td>
<td>1,491</td>
<td>22.5</td>
</tr>
<tr>
<td>2009</td>
<td>19,194</td>
<td>801</td>
<td>24.0</td>
</tr>
<tr>
<td>2010 (6 months)</td>
<td>10,739</td>
<td>460</td>
<td>23.3</td>
</tr>
</tbody>
</table>

**V.1.2 Reduced Well Costs and Improved Wells**

In response to lower natural gas prices, industry has worked hard to lower its costs and to improve well performance. The experience of EnCana (the second largest North American natural gas producer) in two of the high impact natural gas plays - - Deep Bossier tight gas and Haynesville Shale - - illustrates this trend, Figure V-3.

*Figure V-3. Changes in Well Costs and Performance for Two Major Unconventional Gas Plays*

- 15% to 30% Reduced Well Cost (DC&T)
  - Improved rig efficiencies
  - Lower service company prices
  - Multi-pad drilling.

- 100% to 150% Improvement in 30 Day Average IP
  - Increased frac stages
  - Higher water volumes
  - Enhanced pay selection

Source: EnCana, 2010

JAF028220.PPT
Use of multi-pad drilling, improved rig efficiencies and lower hydraulic fracturing costs have helped EnCana reduce well costs (drilling, completion and tie-in) in the East Texas tight gas play and in the Haynesville Shale play by 15% to 30%.

The use of higher volume hydraulic fractures, increased frac stages and more intensive pay selection in these two major natural gas plays have led to 100% to 150% improvements in initial (30 day) gas production rates.

Similar improvements in well performance are being achieved in other major gas shale plays. For example, Figure V-4 shows the progression of improvements in well performance achieved by Range Resources in the Marcellus Shale of the Appalachian Basin from 2006 through 2009.

**Figure V-4. Improvements in Shale Well Performance: Range Resources**
An even more striking example of the impact of progress in technology is provided by Southwestern’s Fayetteville Shale wells. Application of longer lateral horizontal wells, use of more frac stages/perforation clusters to contact the reservoir, and use of 3-D seismic to improve well locations have led to nearly three-fold improvements in initial well production rates since early 2007, Table V-2.

Table V-2. Improvements in Fayetteville Shale Well Performance: Southwestern Energy

<table>
<thead>
<tr>
<th>Time Frame</th>
<th>Wells on Production</th>
<th>Average IP Rate (Mcf/d)</th>
<th>30th Day Rate</th>
<th>60th Day Rate</th>
<th>Average Lateral Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Qtr 2007</td>
<td>58</td>
<td>1,260</td>
<td>1,070</td>
<td>960</td>
<td>2,100</td>
</tr>
<tr>
<td>2nd/3rd/4th Qtr 2007</td>
<td>197</td>
<td>1,770</td>
<td>1,490</td>
<td>1,290</td>
<td>2,500-3,190</td>
</tr>
<tr>
<td>1st Qtr 2008</td>
<td>75</td>
<td>2,340</td>
<td>2,150</td>
<td>1,940</td>
<td>3,300</td>
</tr>
<tr>
<td>2nd/3rd/4th Qtr 2008</td>
<td>254</td>
<td>2,920</td>
<td>2,480</td>
<td>2,200</td>
<td>3,560-3,850</td>
</tr>
<tr>
<td>1st Qtr 2009</td>
<td>120</td>
<td>3,000</td>
<td>2,370</td>
<td>1,880</td>
<td>3,870</td>
</tr>
<tr>
<td>2nd/3rd/4th Qtr 2009</td>
<td>326</td>
<td>3,650</td>
<td>2,710</td>
<td>2,400</td>
<td>4,180</td>
</tr>
<tr>
<td>2nd Qtr 2010</td>
<td>143</td>
<td>3,450</td>
<td>2,610</td>
<td>2,430</td>
<td>4,530</td>
</tr>
</tbody>
</table>

V.2 INCORPORATION OF TECHNOLOGY PROGRESS IN THE NATURAL GAS SUPPLY MODEL (MUGS)

A primary objective of Advanced Resources construction of their unconventional gas model (MUGS) in 1996 was to incorporate the impacts that progress in technology would have on future natural gas supply. We recognized that unconventional gas was a “technology play” and that significant advances in E&P technology would be essential for unlocking this vast resource.
As set forth in our documentation of the MUGS model in 1996, we anticipated the introduction of horizontal wells in gas shales, expected steady progress in the ability of geophysical methods to delineate the “sweet spots” (core area) of unconventional gas plays, and set forth other expectations for technology progress.*

V.2.1. Technology Levers

Within MUGS, certain “levers” allow the user to incorporate technology progress in well performance and influence the timing of a play’s development.

The Technology Performance levers in MUGS include:

- **Improved Well Performance.** This technology lever enables the model to increase unconventional gas well performance (estimated ultimate recovery (EUR)) over time, based on continuing advances in exploration and production technology. Currently, this technology lever improves well performance by 0.5% per year, equal to 10% over 20 years.

- **Improved Ability to Identify Higher Productivity “Sweetspots”.** This technology lever enables the model to improve its discrimination among the high, average and low productivity areas within an unconventional gas play.

- **Dry Hole Rate Improvement.** This technology lever enables the model to increase the well drilling success rate of a gas play now by 0.5% per year up to a maximum of 95% (unless actual performance is higher). After a play is mature (over 50% developed), the success rate begins to decline, as new wells seek to define the outer limits of the play.

* See methodology for AEO 2009.
The Technology Timing levers in MUGS include:

- **Pace of Development in Emerging Basins.** This technology lever captures the ability to use geologic characterization and seismic to lower the risks and accelerate the development pace in emerging basins.

- **Availability of Hypothetical Plays.** This technology lever schedules the time of development for plays classified as “hypothetical”.

- **Pipeline Constraints.** This technology lever limits the pace of development in basins with inadequate pipeline capacity.

- **Environmental Constraints.** This technology lever excludes areas of a play or basin designated as wilderness or precluded from development for other reasons. It also limits access and thus restricts the pace of development in environmentally sensitive basin areas.
VI. ACCESSIBLE NATURAL GAS RESOURCES AND SUPPLIES IN THE MID-CONTINENT/GULF COAST CORRIDOR

A likely area of LNG exports is the Gulf Coast. As such, it is useful to examine the unconventional gas resources and supplies that might be reasonably accessible and available to this area from the Mid-Continent/Gulf Coast corridor. Table VI-1 and Figure VI-1 show the unconventional gas plays that are located in this corridor.

![Image](https://via.placeholder.com/150)

**Table VI-1. Unconventional Gas Plays in the Mid-Continent/Gulf Coast Corridor**

<table>
<thead>
<tr>
<th>Gas Shale Plays</th>
<th>Tight Gas Sands Plays</th>
<th>Coalbed Methane Plays</th>
</tr>
</thead>
<tbody>
<tr>
<td>Woodford</td>
<td>East Texas</td>
<td>Mid-Continent</td>
</tr>
<tr>
<td>Fayetteville</td>
<td>Arkoma</td>
<td>Warrior</td>
</tr>
<tr>
<td>Barnett</td>
<td>Anadarko</td>
<td>Cahaba</td>
</tr>
<tr>
<td>Haynesville</td>
<td>Gulf Coast</td>
<td></td>
</tr>
<tr>
<td>Eagle Ford</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bossier</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Gulf Coast/Mid-Continent Corridor contains all the major shale plays except the Marcellus and three of the largest tight gas sands plays – the East Texas, Anadarko and Gulf Coast plays. As such, the unconventional gas productive capacity in this corridor represents a major portion of the U.S. total. Our analysis shows that, in 2010, about half of U.S. unconventional productive capacity (19 Bcf/d) is from this corridor, **Table VI-2.** This trend continues through our near and longer-term projections.
Figure VI-1: Location of Unconventional Gas Plays in the Gulf Coast/Mid-Continent Corridor

Table VI-2. Unconventional Gas Productive Capacity in the Mid-Continent/Gulf Coast Corridor and for Total U.S.

<table>
<thead>
<tr>
<th></th>
<th>Annual Productive Capacity</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gulf Coast Corridor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tight Gas Sands (Bcfd)</td>
<td>CBM (Bcfd)</td>
<td>Gas Shales (Bcfd)</td>
<td>Total (Bcfd)</td>
<td>Unconventional Gas Total U.S. (Bcfd)</td>
<td></td>
</tr>
<tr>
<td>2009 (Actual)</td>
<td>7.9</td>
<td>0.6</td>
<td>7.9</td>
<td>16.3</td>
<td>32.3</td>
<td></td>
</tr>
<tr>
<td>2010 (Preliminary)</td>
<td>8.3</td>
<td>0.6</td>
<td>10.4</td>
<td>19.4</td>
<td>36.3</td>
<td></td>
</tr>
<tr>
<td>Near-Term</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>8.0</td>
<td>0.5</td>
<td>11.8</td>
<td>20.3</td>
<td>38.5</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>7.8</td>
<td>0.5</td>
<td>15.0</td>
<td>23.3</td>
<td>43.4</td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>8.1</td>
<td>0.5</td>
<td>18.5</td>
<td>27.1</td>
<td>49.3</td>
<td></td>
</tr>
<tr>
<td>Longer-Term</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2025</td>
<td>8.7</td>
<td>0.4</td>
<td>21.6</td>
<td>30.7</td>
<td>55.4</td>
<td></td>
</tr>
<tr>
<td>2030</td>
<td>9.3</td>
<td>0.5</td>
<td>23.7</td>
<td>33.5</td>
<td>61.3</td>
<td></td>
</tr>
<tr>
<td>2035</td>
<td>10.3</td>
<td>0.6</td>
<td>25.9</td>
<td>36.8</td>
<td>69.0</td>
<td></td>
</tr>
</tbody>
</table>
The majority of the productive capacity in this corridor exists in the shale gas plays, Figure VI-2. In 2020, gas shales provide over 18 Bcfd of supply, 68% of the corridor total. In the short term, the Barnett shale provides the bulk of this supply. As the Barnett matures, its declining production is more than offset by growth in the Haynesville, Eagle Ford, Bossier and Fayetteville Shales. Shale gas’ resilience in the face of low natural gas prices suggests that supply in this region could remain robust even with continued low gas prices.

Tight gas sand plays provide most of the remaining supply in this corridor, over 8 Bcfd in 2020. The East Texas tight gas basin provides the majority of the gas from this resource type, and continues to grow robustly through 2035. Supported by associated condensate production, the Anadarko Basin Granite Wash plays can provide a significant amount of gas supply by 2020.

The Mid-Continent and Warrior CBM basins provide a moderate amount of gas supply, at 0.5 to 0.6 Bcfd through 2035.
APPENDIX – Case Studies

To provide some additional background and support for our assessment of U.S. natural gas resources and productive capacity, particularly for unconventional gas, we have prepared Case Studies for three firms that have been, and are expected to remain, at the forefront of unconventional gas development.

- **Chesapeake Energy**, the dominant lease holder in the Marcellus, Haynesville, Bossier and Eagle Ford gas shale plays and currently the most active natural gas driller in the U.S.

- **Devon Energy**, the dominant producer in the Barnett Shale, pioneering the use of horizontal wells for unlocking the deep gas shale resource.

- **Southwestern Energy**, the dominant producer in the Fayetteville Shale, demonstrating that other deep gas shale plays could be unlocked with proper well drilling and completion practices.
CASE STUDY #1: CHESAPEAKE ENERGY CORP.

**Background.** Chesapeake Energy (CHK) has been a leader in developing unconventional gas, particularly gas shales. A brief look at their recent activities and future plans provides valuable perspective on how the efforts of one company are changing the outlook for domestic natural gas supplies.

- CHK is currently the most active driller in the U.S., with 133 operated rigs and responsible for 1 out of 8 gas wells drilled in the U.S. It is also the second largest natural gas producer in the U.S., producing 2.5 Bcfd of natural gas (2.8 Bcfed natural gas and liquids) in mid-2010.

- Essentially all of CHK’s rigs are dedicated to unconventional resources, with 80% of the rigs active in natural gas shales and the bulk of the remainder in liquids-rich shale and tight gas plays.

- Chesapeake has been successful in attracting a number of major oil and gas companies, such as BP and Statoil, into joint ventures for financing the development of the major gas shale basins of the U.S.

**Resources and Development.** In a relatively short time, Chesapeake has built its unconventional gas resource base (defined as unrisked unproven resources plus proved reserves) for natural gas to 219 Tcfe (May 2010). Its risked resources are 96 Tcf including proved reserves of nearly 16 Tcf.

Chesapeake has a publically announced objective of adding 2.5 to 3.0 Tcfe per year of new proved reserves (after replacing production) for the next several years and has announced aggressive objectives for increasing unconventional gas production.
The table below provides a snapshot of Chesapeake’s unconventional gas resources, (unrisked and risked) its current level of gas production and its active operated rigs.

### Status of Chesapeake Energy’s Unconventional Gas Activities

<table>
<thead>
<tr>
<th></th>
<th>Unrisked Resource*</th>
<th>Risked Resource*</th>
<th>Current Production</th>
<th>Operated Rigs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Tcf)</td>
<td>(Tcf)</td>
<td>(MMcfd)</td>
<td></td>
</tr>
<tr>
<td><strong>1. Gas Shales</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Haynesville</td>
<td>32</td>
<td>23</td>
<td>615</td>
<td>36</td>
</tr>
<tr>
<td>Barnett</td>
<td>7</td>
<td>6</td>
<td>535</td>
<td>22</td>
</tr>
<tr>
<td>Fayetteville</td>
<td>12</td>
<td>9</td>
<td>370</td>
<td>8</td>
</tr>
<tr>
<td>Marcellus</td>
<td>67</td>
<td>27</td>
<td>130</td>
<td>26</td>
</tr>
<tr>
<td>Bossier</td>
<td>10</td>
<td>4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Eagle Ford</td>
<td>11</td>
<td>2</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td><strong>2. Other Unconventional</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Granite Wash</td>
<td>8</td>
<td>6</td>
<td>280</td>
<td>12</td>
</tr>
<tr>
<td>Other</td>
<td>72</td>
<td>19</td>
<td>860</td>
<td>24</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>219</strong></td>
<td><strong>96</strong></td>
<td><strong>2,790</strong></td>
<td><strong>133</strong></td>
</tr>
</tbody>
</table>

*Includes proved reserves
CASE STUDY #2: DEVON ENERGY

**Background.** Devon is the fourth largest natural gas producer in North America, producing 966 Bcf (2.65 Bcfd) of natural gas in 2009. It is the leading producer of natural gas from the Barnett Shale and the pioneer in applying horizontal well drilling in gas shales. Recently, Devon sold its domestic offshore and international oil and gas assets (proceeds of about $10 billion) to concentrate on North American onshore natural gas.

**Resources and Development.** Devon has accumulated a large resource and reserve base for natural gas, particularly in U.S. gas shales:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Barnett Shale</td>
<td>37</td>
<td>18.0</td>
<td>7,500</td>
</tr>
<tr>
<td>Haynesville Shale</td>
<td>27</td>
<td>7.4</td>
<td>1,600</td>
</tr>
<tr>
<td>Woodford Shale</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anadarko</td>
<td>12</td>
<td>7.0</td>
<td>3,500</td>
</tr>
<tr>
<td>Arkoma</td>
<td>3</td>
<td>1.6</td>
<td>2,150</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>79</strong></td>
<td><strong>34</strong></td>
<td><strong>14,750</strong></td>
</tr>
</tbody>
</table>

*Includes proved reserves

**Barnett Shale.** Devon severely restricted its activity in the Barnett Shale during 2009, reducing its operated rig count in this play by 75%. As a result, its Barnett Shale gas shale production declined from 1.2 Bcfd at the end of 2008 to 1.1 Bcfd at the end of 2009. In 2010, Devon has slowly increased its activity in this play, with plans for drilling 370 wells (up from 336 in 2009) and rebuilding its gas production to 1.2 Bcfd. Devon reports three notable achievements for the Barnett Shale:

- Reserve revisions, due to improving well performance, have added over a Tcf of proved reserves during the past five years.
- Well performance has remained constant, even as its acreage has become maturely developed.

- Stimulation costs per well have declined by a third during the past two years.

**Other Gas Shale Plays.** After an extended period of geological evaluation and delineation drilling, Devon is ramping up its activity in the Haynesville Shale, planning to drill 25 wells in 2010 up from 9 in 2009.

Devon is a “first mover” in the emerging Anadarko (Cana) Woodford Shale play and has plans to drill 81 wells in this play in 2010, up from 40 wells in 2009. During its first quarter of 2010, Devon’s net production in this play was 73 MMcfd. It also is increasing its activity in the Arkoma Woodford Shale play, planning to drill 85 wells in 2010, up from 61 in 2009. Its first quarter 2010 net production in this play was 88 MMcfd.

**Other Unconventional Gas.** Devon plans to increase the development pace of its Washakie (Green River Basin, Wyoming) tight gas sands by drilling 115 wells in 2010, up from 94 wells in 2009 and of its Powder River Coalbed Methane by drilling 35 wells in 2010, up from 15 wells in 2009. In contrast, it is slowing the pace of development in its East Texas tight gas plays (Carthage and Groesbeck) with plans to drill 40 wells in 2010, down from 49 wells in 2009.
CASE STUDY #3: SOUTHWESTERN ENERGY

**Background.** Southwestern Energy (SWN) is the leading developer of the second deep gas shale play to emerge in the U.S., the Fayetteville Shale.

**Investment, Reserves and Production.** Southwestern’s natural gas production has grown significantly in the past four years:

- Annual natural gas production has grown steadily from 0.03 Bcfd (12 Bcf) in 2006 to an expected 0.93 Bcfd net (340 Bcf) in 2010. Similarly, proved reserves have increased from 0.2 Tcf at the end of 2006 to 3.1 Tcf at the end of 2009 and are expected to further increase in 2010.

### SWN’s Investment and Results for Fayetteville Shale

<table>
<thead>
<tr>
<th>Year</th>
<th>Capital Investment (Billion)</th>
<th>Wells Drilled (Number)</th>
<th>Proved Reserves (Tcf)</th>
<th>Annual Production (Bcf)</th>
<th>Annual Production (Bcfd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>n/a</td>
<td>300</td>
<td>0.2</td>
<td>12</td>
<td>0.03</td>
</tr>
<tr>
<td>2007</td>
<td>$1.0</td>
<td>415</td>
<td>0.7</td>
<td>54</td>
<td>0.20</td>
</tr>
<tr>
<td>2008</td>
<td>$1.2</td>
<td>604</td>
<td>1.5</td>
<td>134</td>
<td>0.37</td>
</tr>
<tr>
<td>2009</td>
<td>$1.3</td>
<td>570</td>
<td>3.1*</td>
<td>244</td>
<td>0.67</td>
</tr>
<tr>
<td>Projected 2010</td>
<td>$1.2</td>
<td>~600</td>
<td>n/a</td>
<td>340</td>
<td>0.93</td>
</tr>
</tbody>
</table>

*Represents about 85% of SWN’s proved reserves.

- SWN reports encouraging initial results from placing over 400 wells on closer spacings of 10 to 12 wells per section. The data from the closer spaced wells indicate interference of only 5 to 8%. SWN is testing even closer well spacing of 40 acres (and less) per well as part of its 2010 drilling program. Should these closer well spacing tests be successful, the technically recoverable resources from this play would increase materially.
Well Performance and Costs. Southwestern’s Fayetteville Shale well performance has increased steadily, as measured by initial productivity (IP). The improvement, from 1.7 MMcfd in 2007 to 3.5 MMcfd in 2009, is due, in part, to using longer horizontal laterals and conducting more intensive well stimulations.

Despite drilling longer laterals, well costs have remained stable at $2.9 to $3.0 million per well. Improved well drilling efficiencies, from 17 rig-days per well in 2007 to 12 rig-days per well in 2009, have helped hold costs in line.

### SWN’s Well and Cost Performance for Fayetteville Shale

<table>
<thead>
<tr>
<th>Year</th>
<th>Cost/Hz Well (Million)</th>
<th>Lateral Length (Feet)</th>
<th>Drilling Time* (Days)</th>
<th>Initial Production (MMcfd)</th>
<th>F&amp;D Costs ($/Mcf)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>$2.9</td>
<td>2,657</td>
<td>17</td>
<td>1.7</td>
<td>$2.54</td>
</tr>
<tr>
<td>2008</td>
<td>$3.0</td>
<td>3,620</td>
<td>14</td>
<td>2.8</td>
<td>$1.53</td>
</tr>
<tr>
<td>2009</td>
<td>$2.9</td>
<td>4,100</td>
<td>12</td>
<td>3.5</td>
<td>$0.86</td>
</tr>
</tbody>
</table>

*Re-entry to re-entry.

Southwestern’s gross Fayetteville gas shale production is at 1.5 Bcfd, up from 1.0 Bcfd a year ago. It plans to drill about 600 shale wells this year using 24 rigs (16 Hz rigs).
EXHIBIT E
Introduction

The U.S. produces significant volumes of hydrocarbon liquids called condensate and natural gas liquids (NGLs). These lighter hydrocarbon liquids (such as propane and natural gasoline) are usually combined with crude oil and categorized under the term domestic “oil” production. Data from the U.S. DOE Energy Information Administration show that domestic condensate and natural gas liquids consistently account for 2.3 million barrels per day, equal to a third of the “oil” produced during the past three years, Table 1.

<table>
<thead>
<tr>
<th>Liquids Type</th>
<th>Annual Production (Million B/D)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2006</td>
</tr>
<tr>
<td>Crude Oil</td>
<td>4.53</td>
</tr>
<tr>
<td>Lease Condensate</td>
<td>0.50</td>
</tr>
<tr>
<td>Natural Gas Liquids (NGLs)</td>
<td>1.72</td>
</tr>
<tr>
<td>TOTAL</td>
<td>6.75</td>
</tr>
<tr>
<td>% Condensate/NGLs</td>
<td>33%</td>
</tr>
</tbody>
</table>

These lighter hydrocarbon liquids are produced from both oil and natural gas production wells.

- Condensate (usually called lease condensate) is primarily produced by natural gas wells. Often combined with oil production statistics, condensate is a liquid hydrocarbon at atmospheric pressure and is generally captured at the lease site.

* For example, in 2008 Texas produced 7,074 Bcf of natural gas and 52.5 million barrels of condensate from gas wells out of 19,066 Bcf of non-associated (wet) natural gas and 173 million barrels of condensate production for the total U.S.
- Natural gas liquids, produced from both gas and oil wells, are usually extracted cryogenically in a natural gas plant to provide ethane, propane, butane and other hydrocarbon products for the chemical industry and for residential fuel.

With the emergence of liquids-rich gas shales (such as the Eagle Ford Shale) and tight gas sands (such as the Granite Wash), the production of domestic hydrocarbon liquids ("oil") is becoming an increasingly important and valuable by-product of unconventional gas production.

Under today’s market conditions, the productive capacity of the liquids-rich gas shale and tight gas plays is projected to exceed market demand, constraining the potential for increasing domestic liquids production. This paper examines the volumes of domestic hydrocarbon liquids that would accompany increased production of U.S. unconventional gas, particularly as additional markets for gas production are created by increased exports of natural gas.

**Study Methodology and Perspective**

Advanced Resource’s unconventional gas model MUGS (Model of Unconventional Gas Supply) incorporates the volumes and value of co-produced liquids and higher than standard Btu content in the produced gas. The value of producing and selling (oil/condensate) and the net value (revenues less costs) of producing NGLs are credited against overall costs of producing natural gas, enabling natural gas from unconventional gas plays with associated liquids to have lower “break-even” costs.

Today, with domestic oil prices of $75 per barrel (equivalent to $12.50 per million Btu) and natural gas prices at $4.50 per million Btu, domestic unconventional gas producers are increasingly pursuing liquids-rich gas shale and tight gas plays. In addition, operators are sending more of their high Btu gas to gas plants to extract NGLs rather than sell the higher Btu gas production directly to a pipeline.
For example, a barrel of NGLs extracted from a high Btu gas stream (with a Btu content of 3,600 Btu per barrel) has a market price of about $7.50 per million Btus, compared to $4.50 per million Btus when sold as natural gas (at Henry Hub spot prices). While NGL extraction can add to plant operating costs, the differences in oil and natural gas prices in effect today make extraction of NGLs from even a moderately high Btu gas stream favorable.

**Productive Capacity of Liquids from Unconventional Gas**

1. **Growth of Liquids Production.** Two of the unconventional gas supply sources, gas shales and tight gas sands, often provide high Btu gas and sometimes lease condensate (oil). Coalbed methane in general does not contain significant volumes of higher Btu gas.

   - The Barnett Shale provides a notable example of the increasing volume of oil, lease condensate and NGL production provided by gas shales. Production data from the Texas Railroad Commission shows that the volume of oil/lease condensate produced from the Barnett Shale has increased steadily in the past three years, Table 2:

<table>
<thead>
<tr>
<th>Type of Well</th>
<th>Production Streams</th>
<th>Annual Production</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2007</td>
</tr>
<tr>
<td>Gas Wells</td>
<td>Natural Gas (Bcfd)</td>
<td>2.39</td>
</tr>
<tr>
<td></td>
<td>Oil/Lease Condensate (B/D)</td>
<td>2,860</td>
</tr>
<tr>
<td>Oil Wells</td>
<td>Casing Head Natural Gas (Bcfd)</td>
<td>0.02</td>
</tr>
<tr>
<td></td>
<td>Oil/Lease Condensate (B/D)</td>
<td>2,070</td>
</tr>
<tr>
<td>Total</td>
<td>Natural Gas (Bcfd)</td>
<td>2.41</td>
</tr>
<tr>
<td></td>
<td>Oil/Lease Condensate (B/D)</td>
<td>4,930</td>
</tr>
</tbody>
</table>

The Texas Railroad Commission does not publish data on NGLs produced from the Barnett Shale oil and gas production. (Our independent estimate of NGL production from the Barnett Shale in 2009 is 208,000 barrels per day.)
EOG, one of industry’s leaders in pursuing liquids-rich gas shales, expects to significantly increase its production of oil, lease condensate and NGLs from the Barnett Shale and particularly from its “Combo” sub-play, Table 3:

Table 3. EOG Resources: Net Production of Natural Gas, Lease Condensate and NGLs from the Barnett Shale

<table>
<thead>
<tr>
<th>Production Streams</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Gas (MMcfd)</td>
<td>400</td>
<td>407</td>
<td>412</td>
<td>417</td>
</tr>
<tr>
<td>Oil/Lease Condensate (B/D)</td>
<td>10,000</td>
<td>16,000</td>
<td>27,000</td>
<td>33,000</td>
</tr>
<tr>
<td>NGLs (B/D)</td>
<td>3,000</td>
<td>11,000</td>
<td>24,000</td>
<td>32,000</td>
</tr>
</tbody>
</table>

Chesapeake Energy, today’s most active natural gas driller, has set a goal of achieving, by year 2012, a 50/50 allocation of their capital investment to liquids-rich resource plays and unconventional gas plays, up from a 10/90 allocation (liquids/gas) in 2009.

2. Projected Volumes of Domestic Liquids Production Capacity from Liquids-Rich Gas Shales and Tight Gas Sands. Three low cost, liquids rich/high Btu unconventional gas plays in the Mid-West/Gulf Coast Corridor which would benefit from natural gas exports from the Gulf Coast are the Barnett Shale, Eagle Ford Shale and Granite Wash tight gas sands. These are some of the largest new gas shale and tight gas plays and constitute a significant portion of the undeveloped recoverable unconventional gas resource.

We anticipate significant growth of natural gas production from these three plays, particularly increased near-term liquids production from the Barnett Shale “Combo” sub-play along the northern portion of the Barnett Shale field area, being pursued by EOG Resources (discussed above), Table 4.
Table 4. Natural Gas Oil/Lease Condensate and NGL Productive Capacity from Barnett Shale, Eagle Ford Shale and Granite Wash Tight Gas Sand Plays

<table>
<thead>
<tr>
<th></th>
<th>Annual Productive Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Natural Gas (Bcfd)</td>
</tr>
<tr>
<td>2010 (Preliminary)</td>
<td>6.0</td>
</tr>
<tr>
<td>Near Term</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>6.2</td>
</tr>
<tr>
<td>2015</td>
<td>7.4</td>
</tr>
<tr>
<td>2020</td>
<td>8.8</td>
</tr>
<tr>
<td>Longer Term</td>
<td></td>
</tr>
<tr>
<td>2025</td>
<td>10.1</td>
</tr>
<tr>
<td>2030</td>
<td>11.1</td>
</tr>
<tr>
<td>2035</td>
<td>12.2</td>
</tr>
</tbody>
</table>

Removing Constraints on Increased Production of Domestic Liquids

If the full unconventional gas productive capacity in the above three unconventional gas plays could be produced and marketed, domestic liquids production would increased by about 552,000 barrels per day in 2020 and 778,000 barrels per day in 2035, Table 4. (As a point of reference the combined domestic production of condensate and NGLs in 2008 was 2.3 million barrels per day from both oil wells and natural gas wells.)

The primary constraint to increased production of domestic liquids from unconventional gas plays is lack of market for the produced natural gas. One approach to removing this constraint is to increase the size of the market for natural gas, particularly for liquids-rich unconventional gas, by exporting domestically produced natural gas using LNG. For this, we assume that exports of natural gas from the Gulf Coast would provide market outlets for the lowest cost, nearest to market liquids-rich unconventional gas plays, namely the Barnett and Eagle Ford shales and the Granite Wash tight gas sands, discussed above.
Projected Increases in Domestic Liquids Production

Based on the above, we would anticipate that LNG exports of 2 Bcfd from the Gulf Coast would increase domestic liquids (condensate and NGL) production by about 128,000 barrels per day in 2020 and 126,000 barrels per day in 2035.

However, because of continuing expectations of higher values for liquids than for natural gas (per MMBtu), operators may choose to “take a deeper cut of NGLs” from their gas stream by reducing the Btu content of the treated gas to 950 to 970 Btu/cf rather than the standard 1,000 Btu/cf used in our analysis. This would lead to somewhat higher volumes of liquids production estimated at about 150,000 barrels per day of condensate and NGLs. Doing so would slightly reduce (“shrink”) the volume of dry natural gas production when converted to a standard 1,000 Btu/cf basis.
EXHIBIT F
MARKET ANALYSIS
FOR
SABINE PASS LNG EXPORT PROJECT

Prepared for:
Sabine Pass LNG, L.P.

FERC Docket Nos. CP04-47, CP05-396, PF10-24

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August 23, 2010
Disclaimer: This report was prepared by Navigant Consulting, Inc. for the benefit of Cheniere Energy in its application to the Federal Energy Regulatory Commission for a license to manufacture and export liquefied natural gas at its Sabine Pass facility. This work product involves forecasts of future natural gas demand, supply, and prices. Navigant Consulting applied appropriate professional diligence in its preparation, using what it believes to be reasonable assumptions. However, since the report necessarily involves unknowns, no warranty is made, express or implied.
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Summary of Assignment

This report supports Sabine Pass Liquefaction, L.L.C.’s application to the Department of Energy and the Federal Energy Regulatory Commission for a proposed natural gas liquefaction and export project in Cameron Parish, Louisiana. The proposed liquefaction and export facility would be a modification of existing import, storage, and vaporization facilities which were constructed pursuant to authority granted under FERC Dockets No. CP04-47-000 (Sabine Pass LNG and Pipeline Project or Phase I facilities) and CP05-396-000 (Sabine Pass LNG Phase II Project or Phase II facilities), with further FERC processing under Docket No. PF10-24-000.

For the purposes of Sabine Pass Liquefaction, L.L.C.’s application, Navigant Consulting Inc. was asked to provide our independent assessment of the potential impact of the proposed liquefaction and export project on supply availability and natural gas prices in North America. This report draws from our experience and knowledge of the North American gas resource base, as well as our technical modeling and scenario analysis capabilities. In this report summarizing our analysis and modeling, Navigant Consulting provides a high-level forward-looking view of natural gas market dynamics in North America, covering supply, demand, price trends, and significant factors likely to affect the gas market from the year 2015 through 2035. Following that discussion, the heart of the report discusses the results of our gas market modeling and scenario analysis that we performed using the GPCM Natural Gas Market Forecasting System (licensed from RBAC, Inc.) to analyze the potential impacts of liquefying and exporting approximately 2.0 Bcf per day (730 Bcf per year, net of fuel used and inerts removed during liquefaction) of domestically-produced gas at the Sabine Pass facility from 2015 through 2035.

The analysis includes the development and analysis of five gas market scenarios, based on two reference cases. The particular scenarios were selected to bookend a reasonable range of supply/demand scenarios against which the addition of LNG exports could be tested. The first set of cases assumes the U.S. Energy Information Administration’s demand numbers (shown in blue, below). The EIA’s gas demand numbers account only for the influence of greenhouse gas (GHG) laws and regulations actually in force as of the present. The second set assumes Navigant Consulting’s higher demand (shown in yellow, below). Navigant Consulting’s gas demand numbers account for the increased role of natural gas particularly as an electric generation fuel in a carbon-constrained future. Descriptions follow.
<table>
<thead>
<tr>
<th>Case Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHG As-Is</td>
<td>The <strong>GHG As-Is Case</strong> is based on NCI’s Spring 2010 Forecast of June 2010. The Spring 2010 Forecast incorporates NCI’s extensive work done on North American gas shale supply resources. The GHG As-Is Case modifies the Spring 2010 Forecast by substituting the gas demand from the Energy Information Agency’s 2010 AEO Reference Case for the higher NCI Spring 2010 Forecast demand. The EIA’s demand numbers were developed by the EIA by assuming that only existing GHG-related laws and regulations will be in place throughout the study timeframe.</td>
</tr>
<tr>
<td>Moderate Export</td>
<td>The <strong>GHG As-Is, Moderate Export Case</strong> ‘forces’ exports from Sabine Pass LNG of <strong>1.0 Bcfd</strong> beginning 2015. Otherwise the case is the same as the GHG As-Is Case. The effects on prices are the specific focus.</td>
</tr>
<tr>
<td>High Export</td>
<td>The <strong>GHG As-Is, High Export Case</strong> ‘forces’ exports from Sabine Pass LNG of <strong>2.0 Bcfd</strong> beginning 2015. Otherwise the case is the same as the GHG As-Is Case. The effects on prices are the specific focus.</td>
</tr>
<tr>
<td>GHG Plus</td>
<td>The <strong>GHG Plus Case</strong> uses the same infrastructure assumptions as the GHG As-Is Case, but demand is increased in two ways. First, demand is taken straight from the NCI Spring 2010 Forecast, which incorporates the demand- and supply-increasing effects of U.S. carbon policy at the state and federal level. Second, it incorporates demand for natural gas as a vehicle fuel from the U.S. EIA’s Annual Energy Outlook 2010, 2027 Phaseout With Expanded Market Potential, which is almost ten times higher than vehicle demand in the EIA’s Reference Case. (The “phaseout” refers to the timing of terminating government incentives for NGV development.)</td>
</tr>
<tr>
<td>High Export</td>
<td>The <strong>GHG Plus, High Export Case</strong> is based on the same assumptions as the GHG Plus case but in addition ‘forces’ exports from Sabine Pass LNG of LNG to <strong>2.0 Bcfd</strong> beginning 2015. The effects on prices are the specific focus.</td>
</tr>
</tbody>
</table>
Executive Summary / Key Takeaways

Navigant Consulting (NCI) modeled five scenarios to examine the possible price effects of manufacturing and exporting approximately 2.0 billion cubic feet per day (Bcfd) of liquefied natural gas from the Sabine Pass LNG facility in Cameron Parish, Louisiana. All dollar figures are average annual monthly prices in “real” (2009) dollars per MMBtu.

Based on the U.S. Energy Information Agency’s demand forecast for natural gas, which includes growth in natural gas vehicle fuel to 0.5 Bcfd by 2035 (the GHG As-Is Cases), NCI modeling showed the forward price curve for the period 2015-2035 to rise from $3.29 per MMBtu to $6.97 per MMBtu, assuming no exports of LNG at Sabine Pass. The addition of 1.0 Bcfd of LNG exports at Sabine Pass increases Henry Hub forward prices by only $0.20 per MMBtu (6.1%) in 2015, and by only slightly more, $0.23 per MMBtu (3.3%), in 2035, compared to the no-export GHG As-Is Case. The addition of 2.0 Bcfd of liquefaction demand increases Henry Hub prices by $0.35 per MMBtu (10.6%) in 2015 and $0.49 per MMBtu (7.0%) in 2035, compared to the no-export GHG As-Is Case, a fairly moderate impact on prices in the market.

Using Navigant Consulting’s demand assumptions, which assume higher natural gas demand in response to greenhouse gas reduction goals, plus a client-specified increase in natural gas vehicle fuel demand that reaches 4.7 Bcfd by 2035 (the GHG Plus Cases), the forward price curve starts in 2015 at $4.50 per MMBtu and moves up to $11.43 per MMBtu by 2035, assuming no LNG exports. The addition of 2.0 Bcfd of LNG exports at Sabine Pass moves Henry Hub forward prices by $0.52 per MMBtu (4.0%) in 2015, and $0.90 per MMBtu (7.9%) in 2035, compared to the no-export GHG Plus Case.

Significantly, the analysis shows that, on a percentage basis, the increases in price associated with the addition of liquefaction demand are similar across all cases. In other words, in the lower demand GHG As-Is Case, the percentage increases in prices were very similar to the price increases in the high demand cases. All test cases in both demand scenarios produced single-digit percentage increases except Year 2015 in the GHG As-Is, High Export Case, which yielded a 10.6 percent move.

<table>
<thead>
<tr>
<th>Year</th>
<th>Metric</th>
<th>GHG As-Is Base</th>
<th>GHG As-Is Moderate</th>
<th>GHG As-Is High</th>
<th>GHG Plus Base</th>
<th>GHG Plus High</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>Price (MMBtu)</td>
<td>$3.29</td>
<td>$3.49</td>
<td>$3.64</td>
<td>$4.50</td>
<td>$5.02</td>
</tr>
<tr>
<td></td>
<td>Diff. from Base</td>
<td></td>
<td>$0.20</td>
<td>$0.35</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>% Increase</td>
<td>6.1%</td>
<td>10.6%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2035</td>
<td>Price (MMBtu)</td>
<td>$6.97</td>
<td>$7.20</td>
<td>$7.46</td>
<td>$11.43</td>
<td>$12.33</td>
</tr>
<tr>
<td></td>
<td>Diff. from Base</td>
<td></td>
<td>$0.23</td>
<td>$0.49</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>% Increase</td>
<td>3.3%</td>
<td>7.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1: Summary of Prices from Test Cases
We also examined whether any price effects in the Sabine Pass region translated into price effects in the capacity-constrained Northeast markets, represented by Transco Zone 6-New York, Dominion South Point in Ohio/West Virginia, and Texas Eastern M-3 in Pennsylvania. Our findings were that none of the export scenarios have a significant impact on Northeast market prices relative to prices in the Gulf Coast region. The largest difference in basis caused by an export scenario occurs at Dominion South Point in 2035 for the GHG Plus Case. The addition of 2.0 Bcf/d of export gas (plus 0.2 Bcf/d for plant fuel consumption) yields a basis at that time and location that is 6.6 cents per MMBtu weaker than in the GHG Plus Case. All other changes in basis values are smaller. We view the effects on regional Northeast prices from the export of up to 2.0 Bcf/d of LNG from Sabine Pass as negligible.

In all of the scenarios in the analysis, the model draws from existing gas fields and production curves identified in NCI’s Spring 2010 base model of North America. The model also is based upon existing North American pipeline and LNG terminal infrastructure, augmented by planned expansions that have been publicly announced and that are likely to be built based upon the best publicly available information. Some projects, notably the proposed Mackenzie Pipeline in northern Canada, were excluded from the model because they were judged to be too uncertain at this time for inclusion in the model. No unannounced infrastructure projects were introduced into the model.

In developing the gas supply assumptions, Navigant Consulting has attempted to be conservative in its estimates of supply growth potential. In focusing upon only existing gas shale resource developments, we have not accounted for any additional plays that are yet to be identified and

1 “Basis” is the difference between the cash price at a given physical trading location and the price of the Henry Hub NYMEX contract. Basis plus NYMEX equals the price at the physical location.
developed. The recent history of resource discovery and the sharp growth in estimated reserves of shale gas indicate that additional new shale resources will in all likelihood be developed in the forecast timeframe to 2035.

The likelihood of shale gas development is further reinforced by the fact that many shale formations also contain natural gas liquids (NGLs), which strengthens the economic prospects of shale. For example, several energy companies including Enbridge, Enterprise Products Partners, Buckeye Partners, Kinder Morgan, and Dominion have recently announced plans to build or enhance NGL gathering and transmission systems in the Marcellus shale formation; the Eagle Ford formation in Texas is being developed as an NGL play as much as a natural gas play. The additional economic value of NGLs from these plays was not considered in NCI’s modeling, which further reinforces the conservative nature of future shale growth estimates used in this study.

The continued strong development of shale gas appears to be a logical assumption, given the existing mapped resources that possess the geologic structure to contain gas shale, and other information available concerning gas shale. Additional supply from resources beyond what has been modeled would only tend to dampen the upward price response modeled by the addition of 2.0 Bcf/d of exports at Sabine Pass. In light of this, we view the price outcomes of our modeled analysis at the two different demand levels as establishing the upper range of impacts that exports from the Sabine Pass LNG project might have on natural gas prices.

We furthermore are of the view that, based upon our knowledge of the North American resource base, the size of the gas resource in North America is more than adequate to serve all forecast domestic demand through the study period to 2035 as well as the demand added by Cheniere’s proposed liquefaction facility.
Overview of Proposed Export Operations at Sabine Pass LNG

Existing Regasification Facility

Cheniere Energy’s Sabine Pass LNG facility is located in Cameron Parish, Louisiana, on the Sabine River, which separates Texas from Louisiana.

![Figure 2: Sabine Pass LNG Location Map](image)

Source: Ventyx

The facility was initially constructed to import LNG. It sits on the Sabine River Navigation Channel, 3.7 nautical miles from the Gulf of Mexico. The channel is maintained at a depth of 40 feet and is not subject to tidal limitations. The terminal’s two docks are recessed so that no part of an LNG vessel protrudes into the open waterway while docked.

Phase 1 of Sabine Pass LNG began service in 2008. The first stage of the Phase 2 expansion was completed in 2009. With a total send-out capacity of 4.0 Bcfd and 16.8 Bcf of on-site storage capacity, the Sabine Pass terminal is the largest LNG receiving terminal in the world, as measured by regasification capacity. It is capable of receiving and unloading approximately 400 LNG vessels each year.

In June 2010, Cheniere received approval from the U.S. Department of Energy to re-export foreign-sourced liquefied natural gas from the Sabine Pass terminal. With the Federal Energy Regulatory Commission’s earlier approval, the facility is now fully authorized to re-export imported LNG.
Proposed Liquefaction Facility

Subsequent to the approval to re-export imported LNG, Cheniere announced on June 3, 2010, its intent to build the first LNG liquefaction plant in the United States in 40 years, based on the projected growth of domestic gas resources, driven by the dramatic increase in the accessibility of shale gas. (The only other natural gas liquefaction plant in the U.S. is the Kenai plant, in Alaska, owned by ConocoPhillips and Marathon Oil.)

Cheniere’s preliminary plans call for up to four LNG production trains, each with the capacity to produce approximately 3.5 million tonnes (183 Bcf) per year of LNG. Two trains would be built by 2015, for an annual liquefaction and export capacity of 366 Bcf (about 1.0 Bcfd), with further expansion based on customer interest. The liquefaction project has received initial interest from LNG buyers as well as from domestic gas producers who are potentially interested in committing supply.

The proposed liquefaction facilities would be located on approximately 120 acres of the existing 853-acre Sabine Pass LNG site, and utilize the existing Sabine Pass LNG marine facilities. The liquefaction facilities would be designed to process a peak daily intake of approximately 2.4 Bcfd of domestically-produced natural gas (including fuel and inerts) delivered from the Cheniere Creole Trail Pipeline and, potentially, the Kinder Morgan Louisiana Pipeline. LNG would be exported by LNG carriers via marine transit through the Sabine Pass Channel. The facility would be operated as a bidirectional facility and have the simultaneous capability to liquefy for export and to import and regasify.

Rationale for Exporting Domestically Produced LNG

As we understand, the Sabine Pass import facility was designed when supply-demand projections indicated that domestically produced natural gas would be inadequate to meet future demand growth. In 2008, Navigant Consulting and other industry observers identified the rapidly expanding development of natural gas from shale. While geologists and natural gas production companies had always been aware of shale-based gas resources, such resources were regarded as uneconomic to recover in most instances.

Natural gas prices increased substantially in the first decade of this century compared to the previous decade, and culminated in significantly higher prices in 2007-2008. These higher prices supported the development of new techniques in shale gas recovery. Most notably, horizontal drilling and hydraulic fracturing techniques were refined and systematized in ways that dramatically increased efficiencies and reduced costs.

In the few short years since 2007 or 2008, the outlook for natural gas production in North America has reversed from an expectation of supply deficit, in which LNG would have to be imported to meet demand, to an expectation of supply surpluses, in which domestic gas resources are more than adequate to satisfy projected demand. To a less dramatic extent, demand projections have also been increased as new markets are seen to be developing for natural gas as a result of its inherent qualities of supply abundance and sustainability, and its low carbon content, which positions it as a key

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Note: The liquefaction trains will be capable of producing more LNG for export at times since the liquefaction process uses gas fired turbines and air cooled heat exchangers, both more effective in colder weather.
contributor to the low-carbon economy of the future. This demand potential has been muted at present due to the lingering effects of one of the most significant recessions in modern history.

**Size of the Shale Gas Resource**

To illustrate the size of the shale gas resource and its rapid development, consider the following. U.S. natural gas production increased from about 51.3 Bcfd in April 2005 to about 59.4 Bcfd in April 2010, even as overall rig counts fell from 1,163 to 959. (See Figure 3: U.S. Gas Production.) This is an increase of 16 percent in five years. The increase in production has been driven by shale, as evidenced by the increase in horizontal drill rig counts and the decrease in vertical (conventional) rig counts. (See Figure 4: U.S. Gas Rig Type Shift and Figure 5: Five-Year Rig Count and Gas Production.)

![Figure 3: U.S. Gas Production History](image-url)
Figure 4: U.S. Gas Rig Type Shift

Figure 5: Five-Year Rig Count and Gas Production
The growth in shale gas production in just the past three years has been phenomenal, as shown in the graph in Figure 6: Shale Production 2007-2010. Shale output from six major basins under development grew from 2.6 Bcf/d in January 2007 to 13.1 Bcf/d in June 2010, an increase of more than 400 percent in a period of less than three and a half years.

Figure 6: Shale Production 2007-2010

In Navigant Consulting’s estimation, the size of the shale gas resource in North America is more than adequate to serve all forecast domestic demand through the study period to 2035 as well as the demand added by Cheniere’s proposed liquefaction facility, likely without significantly affecting North American and regional prices. But this conjecture was what was to be tested through our scenario modeling exercise for the Cheniere LNG project.

The geographic scope of the U.S.’s shale gas resource can be seen in the following map from the Energy Information Administration. In Navigant Consulting’s groundbreaking study on the subject of emerging shale gas resources, we estimated the maximum recoverable reserves from shale to be 842 trillion cubic feet (Tcf), boosting the maximum recoverable reserves for all of the U.S. to 2,247 Tcf.3

Several of these shale formations have yet to be exploited in any meaningful way. Additionally, North America is in an early phase of discovery for this resource. For example, the Marcellus Shale formation was virtually unheard of in 2007. Recently, Dr. Terry Engelder of Penn State University

estimated that the Marcellus has a 50 percent chance of containing 489 Tcf of recoverable gas.\(^4\) Currently, the entire United States uses about 23 Tcf per year, or less than 5 percent of the Marcellus’s potential production.\(^5\) Another recent study by Penn State estimates that production from the Marcellus will grow from 327 million cubic feet per day during 2009 to 13.5 billion cubic feet per day by 2020.\(^6\)

**Figure 7: EIA Lower-48 Shale Play Map**

In its recently published study, *The Future of Natural Gas*, the Massachusetts Institute of Technology stated that “The current mean projection of the recoverable shale gas resource [in the U.S., excluding Canada] is approximately 650 Tcf … approximately 400 Tcf [of which] could be economically developed with a gas price at or below $6/MMBtu at the well-head.”\(^7\) The Potential Gas Committee of

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\(^7\) MIT, *The Future of Natural Gas*, Executive Summary, pg xii.
the Colorado School of Mines estimates that the recoverable shale gas resource in North America is 2,074 Tcf—enough to supply domestic needs at 2009 usage rates (62.6 Bcfd) for 90 years. Of this total, 616 Tcf is shale gas.

**Character of the Shale Gas Resource**

The character of the shale gas resource reinforces its future growth potential. Finding economically producible amounts of conventional gas has historically been expensive due largely to geologic risk. Dry or quickly depleted wells are not uncommon in the conventional gas world. Conventional gas is trapped in porous rock formations, typically sandstone, under an impermeable layer of cap rock. It is produced by drilling through the cap into the porous formation, liberating the gas. Despite advances in technology, finding and producing conventional gas still has a large component of exploration risk, with the possibility that a well will be a dry hole or “duster” with no deliverability or production following drilling.

In unconventional shale gas, geologic risk is significantly reduced. Many large shale resource plays in the U.S. and Canada have been identified, and with new technology have become much more certain to be produced in commercial quantities. The reliability of discovery and production has led shale gas development to be likened more to a manufacturing process rather than an exploration process with its attendant risk.

Gas in a shale formation is entrained in the shale itself. It does not accumulate in pockets under cap rock. It tends to be distributed in consistent quantities over great volumes of the shale. Often, drilling techniques allow a single drill rig to drill multiple horizontal wells up to two miles in length into a given formation. Each bore has the potential to produce gas. Since the shale plays can be dozens or even hundreds of miles long and often several hundred feet thick, the risk of not finding a producible formation is low.

The horizontal well, once it is properly located in the targeted formation, is then enabled to produce volumes large enough to be economic through the use of hydraulic fracturing (“fracking”). Water, sand, and a small amount of chemicals are injected at high pressure to fracture the shale so that it releases the gas. As is the case with most shale wells, initial production (IP) rates are high, but drop off steeply within the first two years. However, once a well has declined to 10-20 percent of initial production, the expectation of many scientists in the industry are that it should produce at that lower rate with a very slow decline for many years. The graph below typifies a shale well decline curve.  

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The certainty of production allows shale gas production to be managed in response to demand. If demand is growing, additional shale wells can be drilled to meet it and mitigate the IP decline from the initial well. If demand however subsides, drilling rates can also be reduced or drilling discontinued completely in response.

The likelihood of shale gas development is further reinforced by the fact that many shale formations also contain natural gas liquids (NGLs), which strengthens the economic prospects of shale. For example, several energy companies including Enbridge, Enterprise Products Partners, Buckeye Partners, Kinder Morgan, and Dominion have recently announced plans to build or enhance NGL gathering and transmission systems in the Marcellus shale formation; the Eagle Ford formation in Texas is being developed as an NGL play as much as a natural gas play.

**Assumed LNG Production for Sabine Pass LNG Exports**

For purposes of this study, the Sabine Pass LNG export facility is assumed to have an export capacity of 2.0 Bcfd net of fuels and inerts removed during liquefaction (i.e., all four trains constructed and operating at maximum capacity) starting in January, 2015. This level of export would require 2.2 Bcfd of supply, assuming that the liquefaction process consumes natural gas as a fuel at the rate of 10 percent.

Gas would be brought to the plant via the Creole Trail Pipeline and the Kinder Morgan Louisiana Pipeline. These two pipelines would in turn access domestic shale gas supplies from the Barnett Shale and Haynesville Shale Basins as well as other gas sources.
Specific export destinations and pricing were not modeled. The design intent of this analysis is to assess the supply, demand, and price effects on domestic supply of exporting as much as 2.0 Bcf d of supply (plus fuel) regardless of overseas market economics.
Basic Modeling Assumptions

About Navigant Consulting’s Spring 2010 Forecast

Twice a year, Navigant Consulting issues a forecast of gas prices, demand, and supply. The forecast incorporates NCI’s extensive work done on North American unconventional gas supply including the rapidly growing gas shale supply resources. It projects natural gas forward prices and monthly basis differentials at 92 market points, and pipeline flows throughout the entire North American grid, through 2035. Price projections for purposes of this report focus on Henry Hub, which is the underlying physical location of the natural gas NYMEX futures contract, and is in Louisiana, not far from Sabine Pass LNG. Additional price points in the Northeast are included to demonstrate the effect of supply and demand on key markets that have exhibited very volatile prices.

The forecast models supply by state or region, imports and exports (including LNG by terminal), storage, and sectoral demand on a monthly basis.

The NCI forecast accounts for changes in gas demand driven by government policy regarding greenhouse gas (GHG) reductions. NCI believes that such policies are inevitable, and that they will favor growth in natural gas usage because of gas’s lower GHG content relative to other fossil fuels, particularly coal. This is evidenced by ongoing public policy steps being taken and programs already in existence such as California’s AB 32 (the Global Warming Solutions Act of 2006) and the Regional Greenhouse Gas Initiative (RGGI) in the Northeast, and various renewable performance standards (RPS) and other initiatives.

To reflect these GHG reductions in the forecast, we assume a reduction of coal-fired generation output of 1.0 percent per year starting in 2015, continuing through 2035. This coal-fired capacity is replaced by an equivalent amount of gas generation that is translated into gas volumes using an average heat rate of 7,079 Btu per kilowatt-hour. Additionally, we assume a carbon tax adder starting in 2015 at $20.10 per ton ($1.26 per MMBtu), increasing to $54.40 per ton ($3.41 per MMBtu) in 2035, based on recent analysis from the EPA of the proposed American Power Act of 2010. We assume this adder will impact the electric generation sector starting in 2015, the industrial sector starting in 2017, and the residential and commercial sectors starting in 2019.

The level of reduction in coal generation assumed as a result of carbon emission limits and the coincident increase in gas demand are somewhat arbitrary. However, we believe they are conservative in light of the generally discussed goal of reducing carbon dioxide emissions by 80% of 2005 levels by 2050, and that our assumptions reflect the likely effect that such initiatives are apt to have.

Using these assumptions, electric generation gas consumption in the Spring 2010 Forecast grows at an average rate of 2.4 percent from 2010 through 2035.

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9 Assumes 125 lbs per MMBtu
10 EPA’s analysis can be found at [http://www.epa.gov/climatechange/economics/economicanalyses.html](http://www.epa.gov/climatechange/economics/economicanalyses.html)
Industrial gas demand continues to decline at a modest average rate of -0.3% for the entire forecast period due to effects of higher gas prices and an ongoing structural shift of certain industries offshore.

Residential/Commercial demand is relatively flat.

All scenarios in this report are ultimately derived from NCI’s Spring 2010 Forecast. Each scenario is described separately, and the modifications from the Spring 2010 Forecast are made clear.

The following assumptions remain constant for all cases.

**Infrastructure**

Modeling used existing pipeline and LNG terminal infrastructure, augmented by planned expansions that have been publicly announced and that are likely to be built. Pipelines are assumed to have sufficient capacity to move gas from supply sources to demand centers. Some local expansions have been assumed and built into the model in future years to relieve expected bottlenecks. In these cases, supply availability has been vetted to provide reasonable comfort that it will be available.

Some proposed projects have been excluded from the model, most notably the Mackenzie Pipeline in northern Canada, which we believe to be uneconomic and facing significant environmental challenges. No unannounced infrastructure projects were introduced into the model. The Alaska Gas Pipeline project is assumed to be online in 2025 at 4.5 Bcf/d, with available supply phased in up to 2029. Other notable regional pipelines assumed to be operational by 2015 include Bison, Golden Pass, Fayetteville Express, Ruby, and Tiger. See Appendix A for a list of future pipelines and projected capacity levels that are included in the model.

LNG import capacity is assumed to be 18.5 Bcf/d from 2015 onward. The load factor of each facility is solved by the model as a function of domestic supply and demand.

**Supply Basins**

All supply in NCI’s model comes from currently established basins. The forecasts assume no new resource discoveries beyond gas fields already identified as of Spring 2010 in North America. Estimates of production capacity are based on empirical production data. Assumptions for production capacity are the same for all cases; no production adjustments are made on a forecast -by-forecast basis. No additional basins are assumed to come online in the study period timeframe. This should be regarded as a conservative assumption, given the rate at which new shale resources have been identified over the past few years and existing estimates of the North American natural gas resource base.
GHG As-Is Case

The GHG As-Is Case is derived from NCI’s Spring 2010 Forecast of June 2010, modified as described below.

The GHG As-Is Case substitutes the gas demand from the EIA’s 2010 Annual Energy Outlook Reference Case for the higher Spring 2010 Forecast demand. The EIA’s Reference Case assumes that only existing GHG-related laws and regulations will be in place throughout the study timeframe. (Thus the name “As-Is.”) Most significantly, electric generation demand in the GHG As-Is Case is substantially lower than in NCI’s Spring 2010 Forecast, as shown in the graph below.

![Electric Power Gas Demand: GHG As-Is Reductions](image)

**Figure 9: GHG As-Is Case, Reductions in Gas Demand for Electric Power**

All other inputs and assumptions, including supply sources and infrastructure, remain the same as in the Spring 2010 Forecast.
Demand

In the EIA’s AEO 2010 demand scenario, rapid installation of renewables between 2010 and 2015 displaces some natural gas baseload electric generation; hence, a decline in demand. The EIA assumes that gas-fired electric generation will be the marginal supply, and that coal will be cheaper and thus tend to have a greater share of baseload generation. Electric generation demand resumes its growth trajectory after 2015.

Figure 10: GHG As-Is Demand
In the GHG As-Is Case, shale supply grows from 18.9 Bcf/d in 2015 to 29.4 Bcf/d in 2035. Overall demand growth moves from 60.2 Bcf/d in 2015 to 68.9 Bcf/d in 2035. Pipeline imports from Canada decline as conventional supply in that country continues to decline and, to a lesser extent, supply in general is absorbed increasingly by increasing domestic demand in Canada including demand from the oil sands in Alberta. LNG imports rise slightly, to 3.7 Bcf/d by 2035, as it is able to compete on price at the margin with domestic production.
Resultant Gas Prices

Figure 12: GHG As-Is Resultant Gas Prices

Prices remain weak through 2020, due to aggressive shale gas growth outstripping the assumed low EIA demand, which does not anticipate GHG reductions and coal displacement. The dip in prices shown from 2010 to 2015 is a result of the demand numbers from the EIA’s Reference Case. The forecast in 2015 reflects an oversupply relative to demand.
The **GHG As-Is, Moderate Export Case** tests the effects of liquefying and exporting 1.0 Bcf/d of domestically-sourced gas from the Sabine Pass facility beginning 2015. All other inputs and assumptions remain the same as in the GHG As-Is Case.

Demand (in the form of feedstock to the liquefaction facility) and supply (in the form of export LNG) both increase by 1.1 Bcf/d over the study period, reflecting 1.0 Bcf/d average LNG exports plus facility fuel consumption. Numbers below are net of these offsetting increases.

**Demand**

![US Gas Demand by Sector: GHG As-Is, Moderate Export](image)

**Figure 13: GHG As-Is, Moderate Export Demand**

Adding 1.0 Bcf/d at Sabine Pass for export does not alter the demand mix appreciably from the GHG As-Is Case. Fuel usage increases slightly, reflecting an increase in domestic production and fuel usage at the Sabine Pass facility.
Supply

**Figure 14: GHG As-Is, Moderate Export Supply**

Adding 1.0 Bcfd at Sabine Pass for export causes net LNG imports to back off by 0.9 Bcfd compared to the GHG As-Is Case. To balance, domestic production increases by 0.7 Bcfd and pipeline imports increase by 0.2 Bcfd.
Resultant Gas Prices

Figure 15: GHG As-Is, Moderate Export Prices

Prices rise slightly in the As-Is, Moderate Export Case, due to the additional demand created by export of 1.0 Bcfd of LNG.

<table>
<thead>
<tr>
<th>Year</th>
<th>Base As-Is Price</th>
<th>As-Is, Moderate Price</th>
<th>Moderate less Base As-Is</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>$4.68</td>
<td>$4.68</td>
<td>$0.00</td>
</tr>
<tr>
<td>2015</td>
<td>$3.29</td>
<td>$3.49</td>
<td>$0.20</td>
</tr>
<tr>
<td>2020</td>
<td>$3.85</td>
<td>$3.98</td>
<td>$0.13</td>
</tr>
<tr>
<td>2025</td>
<td>$4.69</td>
<td>$4.72</td>
<td>$0.13</td>
</tr>
<tr>
<td>2030</td>
<td>$5.55</td>
<td>$5.74</td>
<td>$0.19</td>
</tr>
<tr>
<td>2035</td>
<td>$6.97</td>
<td>$7.20</td>
<td>$0.23</td>
</tr>
</tbody>
</table>

Table 2: Henry Hub Price Difference, GHG As-Is Moderate Export Case

The maximum change in Northeast basis values for the GHG As-Is Moderate Export Case is $0.011 per MMBtu in 2035, at Dominion South Point. See Export Effect on Northeast Market Prices on page 34 for a table of basis price effects.
GHG As-Is, High Export Case

The **GHG As-Is, High Export Case** tests the effects of liquefying and exporting 2.0 Bcfd (rather than 1.0 Bcfd) of domestically-sourced gas from the Sabine Pass facility beginning 2015. All other inputs and assumptions remain the same as in the GHG As-Is Case.

Demand (in the form of feedstock to the liquefaction facility) and supply (in the form of export LNG) both increase by 2.2 Bcfd over the study period, reflecting 2.0 Bcfd average LNG exports plus facility fuel consumption. Numbers below are net of these offsetting increases.

**Demand**

![US Gas Demand by Sector: GHG As-Is, High Export](image)

**Figure 16: GHG As-Is, High Export Demand**

Adding 2.0 Bcfd of exports slightly changes the distribution of demand in each year beyond 2010. Fuel usage increase slightly, reflecting an increase in domestic production and fuel usage at the Sabine Pass facility. Other demand is reduced.
Supply

Figure 17: GHG As-Is, High Export Supply

Adding 2.0 Bcf/d of exports at Sabine Pass increases domestic production by 1.4 Bcf/d, net pipeline imports by 0.3 Bcf/d, and 0.3 Bcf/d of LNG imports in 2035.

Resultant Gas Prices

Figure 18: GHG As-Is, High Export Prices
The table below shows that the highest price differential compared to the GHG As-Is Case is $0.49 per MMBtu, which occurs in 2035. The 2035 price for the As-Is High Export Case is $0.26 per MMBtu above the price for the As-Is Moderate Export Case.

<table>
<thead>
<tr>
<th>Year</th>
<th>Base As-Is Price</th>
<th>As-Is, Moderate Price</th>
<th>As-Is, High Price</th>
<th>High less Base As-Is</th>
<th>High less Moderate As-Is</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>4.68</td>
<td>4.68</td>
<td>4.68</td>
<td>0.00</td>
<td>0.00</td>
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<tr>
<td>2015</td>
<td>3.29</td>
<td>3.49</td>
<td>3.64</td>
<td>0.35</td>
<td>0.15</td>
</tr>
<tr>
<td>2020</td>
<td>3.85</td>
<td>3.98</td>
<td>4.10</td>
<td>0.25</td>
<td>0.12</td>
</tr>
<tr>
<td>2025</td>
<td>4.69</td>
<td>4.72</td>
<td>4.87</td>
<td>0.27</td>
<td>0.14</td>
</tr>
<tr>
<td>2030</td>
<td>5.55</td>
<td>5.74</td>
<td>5.94</td>
<td>0.39</td>
<td>0.20</td>
</tr>
<tr>
<td>2035</td>
<td>6.97</td>
<td>7.20</td>
<td>7.46</td>
<td>0.49</td>
<td>0.26</td>
</tr>
</tbody>
</table>

Table 3: Henry Hub Price Difference, GHG As-Is High Export Case

The maximum change in Northeast basis values for the GHG As-Is High Export Case is $0.042 per MMBtu in 2035, at Dominion South Point. See Export Effect on Northeast Market Prices on page 34 for a table of basis price effects.
GHG Plus Case

The **GHG Plus Case** is based upon NCI’s Spring 2010 Forecast, which was prepared in June 2010 using the GPCM gas pipeline network modeling software. The NCI Spring 2010 forecast has been modified as described below.

**Demand**

**Figure 19: GHG Plus U.S. Natural Gas Demand**

The GHG Plus Case projects overall U.S. natural gas demand to grow from 64.8 Bcf/d in 2015 to approximately 83.1 Bcf/d by 2035, an increase of 28% over the 20-year period. This growth will be driven primarily by the electric generation sector, which is likely to be impacted by mandated reductions in energy-related GHG emissions.

**Natural Gas Vehicle Demand: High Case**

The GHG Plus Case includes additional demand assumptions that were used to develop a maximalist outlook for any price sensitivities caused by demand for liquefaction and export. This additional demand comes from the EIA’s 2027 Phaseout and Expanded Market Heavy-Duty Vehicle Fuel Use Case, which puts forward a scenario in which natural gas becomes a preferred vehicle fuel. While NCI’s

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Spring 2010 Forecast assumes an average national consumption of 0.5 Bcfd by 2035 for natural gas vehicles, the EIA 2027 Phaseout Case assumes a much larger volume, 4.7 Bcfd.

![Transportation Sector Natural Gas Consumption](image)

**Figure 20: Natural Gas Vehicle Demand, GHG Plus Case Compared to GHG As-Is**

**The Effect of Carbon Reduction Policies on Natural Gas Demand**

In recognition of the high probability that legislation, programs, and policies at both the state and federal level in the U.S. will continue to be enacted to reduce GHGs, our forecast assumes that measures will be adopted to substantially reduce GHG emissions in the future.

Coal demand is expected to be increasingly impacted by concerns over GHG emissions, RPS and other possible GHG and climate change public policy initiatives. These initiatives will tend to favor gas, because gas produces about half the GHGs per kilowatt hour as coal. The introduction of a carbon price, either through a tax or a cap-and-trade system, will further shift electric generation fuel demand from coal to gas.

As a result, the GHG Plus Case retains the projected electric generation demand for natural gas from our Spring 2010 Forecast. Electric generation demand is projected to grow at an average annual rate of 2.4% from 2010 through 2035, based upon coal-to-gas substitution.

**Electric Generation Demand in the Southeast under the GHG Plus Case**

The following table illustrates the natural gas demand for electric generation fuel projected in the GHG Plus Case in the Southeastern U.S. The Southeast includes the West South Central, East South Central, and South Atlantic census regions.
Table 4: GHG Plus Case, Southeast Electric Power Demand

<table>
<thead>
<tr>
<th>Year</th>
<th>Southeast (Bcfd)</th>
<th>U.S. (Bcfd)</th>
<th>SE % of U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>10.2</td>
<td>18.8</td>
<td>54%</td>
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<tr>
<td>2015</td>
<td>11.1</td>
<td>20.5</td>
<td>54%</td>
</tr>
<tr>
<td>2020</td>
<td>12.7</td>
<td>23.6</td>
<td>54%</td>
</tr>
<tr>
<td>2025</td>
<td>14.4</td>
<td>27.0</td>
<td>53%</td>
</tr>
<tr>
<td>2030</td>
<td>16.1</td>
<td>30.5</td>
<td>53%</td>
</tr>
<tr>
<td>2035</td>
<td>17.7</td>
<td>33.5</td>
<td>53%</td>
</tr>
</tbody>
</table>

Supply

US Natural Gas Supply: GHG Plus

Figure 21: GHG Plus U.S. Natural Gas Supply

The GHG Plus Case shows a significant increase in supply relative to the GHG As-Is Case. This increase responds to increased demand caused by the preference for lower-carbon natural gas over coal as electric generation fuel, and for increased NGV fuel. By 2035, supply is 83.1 Bcfd, compared to the supply in the GHG As-Is Case of 68.9 Bcfd.
Resultant Gas Prices

Even with the addition of 8.4 Bcfd in 2020 to the supply/demand balance in the GHG As-Is Case, prices in the GHG Plus Case remain under $5.00 per MMBtu through that year. After 2020, prices increase steadily, reaching $11.43 per MMBtu in 2035, when 14.2 Bcfd in additional demand is added.
GHG Plus, High Export Case

The GHG Plus, High Export Case tests the effects of liquefying and exporting 2.0 Bcfd of domestically-sourced gas from the Sabine Pass facility beginning 2015. All other inputs and assumptions remain the same as in the GHG Plus Case.

Demand (in the form of feedstock to the liquefaction facility) and supply (in the form of export LNG) both increase by 2.2 Bcfd over the study period, reflecting 2.0 Bcfd average LNG exports plus facility fuel consumption. Numbers below are net of these offsetting increases.

Demand

![US Gas Demand by Sector: GHG Plus, High Export](image)

**Figure 23: GHG Plus, High Export Demand**

Adding 2.0 Bcfd of exports (plus 0.2 Bcfd for plant fuel consumption) slightly changes the distribution of demand in the study timeframe of 2015-2035. In 2035, overall demand (net of the 2.0 Bcfd exports) is reduced by 0.4 Bcfd due to the modest price increases at the margin caused by the additional 2.0 Bcfd. Electric power, industrial, and residential demand all come off slightly, while fuel use rises in response to increased domestic production and export facility fuel. Reduced net LNG imports account for the overall supply reduction.
Adding 2.0 Bcf/d of exports at Sabine Pass (plus 0.2 Bcf/d for plant fuel consumption) increases domestic production by 0.4 Bcf/d in 2035 compared to the GHG Plus base case. Net pipeline imports increase by 0.9 Bcf/d. Net LNG imports decrease by 1.6 Bcf/d. Overall, total supply decreases by 0.4 Bcf/d compared to the GHG Plus Case.
Resultant Gas Prices

Figure 25: GHG Plus, High Export Prices

The addition of 2.2 Bcfd to the GHG Plus Case causes prices to rise moderately. The increase averages $0.55 per MMBtu (9.0%) from 2015 through 2030, and $0.62 per MMBtu (8.6%) from 2015 through 2035. Prices remain under $6.00 per MMBtu through 2020. After 2020, prices increase steadily, reaching $12.33 per MMBtu in 2035.

The table below shows that the highest price differential for the GHG Plus, High Export Case compared to the GHG Plus base case is $0.90 per MMBtu, which occurs in 2035.

<table>
<thead>
<tr>
<th>Year</th>
<th>GHG-Plus Base Price</th>
<th>GHG-Plus High Price</th>
<th>Plus High less Plus Base</th>
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</thead>
<tbody>
<tr>
<td>2010</td>
<td>4.68</td>
<td>4.68</td>
<td>0.00</td>
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<td>4.50</td>
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<tr>
<td>2020</td>
<td>4.99</td>
<td>5.44</td>
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</tr>
<tr>
<td>2025</td>
<td>6.59</td>
<td>7.09</td>
<td>0.50</td>
</tr>
<tr>
<td>2030</td>
<td>8.50</td>
<td>9.24</td>
<td>0.73</td>
</tr>
<tr>
<td>2035</td>
<td>11.43</td>
<td>12.33</td>
<td>0.90</td>
</tr>
</tbody>
</table>

Table 5: Henry Hub Price Difference, GHG Plus High Export Case

The maximum change in Northeast basis values for the GHG Plus High Export Case is $0.066 per MMBtu in 2035, at Dominion South Point. See Export Effect on Northeast Market Prices on page 34 for a table of basis price effects.
Export Effect on Northeast Market Prices

In addition to assessing the impact of exports from the Sabine Pass facility on prices in the Henry Hub region, Navigant Consulting assessed the impact on basis in the key Northeast market region.

Our findings were that none of the export scenarios have a significant impact on Northeast market prices relative to Gulf Coast prices. As can be seen from the table below, the largest difference in basis\(^{12}\) caused by an export scenario occurs at Dominion South Point in 2035 for the GHG Plus Case. The addition of 2.0 Bcfd of export gas (plus 0.2 Bcfd for plant fuel consumption) yields a basis at that time and location that is 6.6 cents per MMBtu weaker than in the GHG Plus Case. This is likely due primarily to increased domestic production in the Marcellus shale play in response to increased domestic demand. Also, it may be a response to higher absolute Henry Hub prices in the GHG Plus, High Export Case. In any event, the vast majority of data points for basis in the Northeast show no significant impact. See the following table for detail.

![Table 6: Changes in Basis Values in the Northeast](image)

\(^{12}\) “Basis” is the difference between the cash price at a given physical trading location and the price of the Henry Hub NYMEX contract. Basis plus NYMEX equals the price at the physical location.
### Appendix A: Future Pipelines in Spring 2010 Forecast Model

<table>
<thead>
<tr>
<th>Pipeline</th>
<th>Year</th>
<th>New Capacity</th>
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<tbody>
<tr>
<td>LNG Neptune Header</td>
<td>Mar-10</td>
<td>400</td>
</tr>
<tr>
<td>Elba Express</td>
<td>Jun-10</td>
<td>1500</td>
</tr>
<tr>
<td>Golden Pass Pipe Line</td>
<td>Jul-10</td>
<td>2000</td>
</tr>
<tr>
<td>LNG Golden Pass Header</td>
<td>Jul-10</td>
<td>2000</td>
</tr>
<tr>
<td>Bison Pipeline</td>
<td>Nov-10</td>
<td>477</td>
</tr>
<tr>
<td>Fayetteville Express</td>
<td>Jan-11</td>
<td>2000</td>
</tr>
<tr>
<td>LNG Manzanillo Header 1</td>
<td>Apr-11</td>
<td>500</td>
</tr>
<tr>
<td>Ruby</td>
<td>Apr-11</td>
<td>1250</td>
</tr>
<tr>
<td>Tiger</td>
<td>Jun-11</td>
<td>2000</td>
</tr>
<tr>
<td>LNG Gulf Clean Energy Header</td>
<td>Oct-11</td>
<td>1500</td>
</tr>
<tr>
<td>Rockies Connector</td>
<td>Nov-13</td>
<td>870</td>
</tr>
<tr>
<td>CrossTex North Texas</td>
<td>Jan-15</td>
<td>750</td>
</tr>
<tr>
<td>El Paso (Samalayuca)</td>
<td>Jan-15</td>
<td>312</td>
</tr>
<tr>
<td>Florida Gas (Market Panhandle)</td>
<td>Jan-15</td>
<td>500</td>
</tr>
<tr>
<td>Florida Gas (Zone 3)</td>
<td>Jan-15</td>
<td>500</td>
</tr>
<tr>
<td>Florida Gas (Zone 3 Rept)</td>
<td>Jan-15</td>
<td>500</td>
</tr>
<tr>
<td>Grasslands Pipeline</td>
<td>Jan-15</td>
<td>200</td>
</tr>
<tr>
<td>Gulf Crossing (Delivery)</td>
<td>Jan-15</td>
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</tr>
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<td>Gulf Crossing (Throughput)</td>
<td>Jan-15</td>
<td>1000</td>
</tr>
<tr>
<td>Gulf Crossing (TX/OK Rept)</td>
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<tr>
<td>Teppco OPAL/Pioneer (NY)</td>
<td>Jan-15</td>
<td>600</td>
</tr>
<tr>
<td>Texas Gas (Fayetteville)</td>
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<td>409</td>
</tr>
<tr>
<td>Texas Gas (Fayetteville Rept)</td>
<td>Jan-15</td>
<td>409</td>
</tr>
<tr>
<td>Wyoming Interstate (Mainline)</td>
<td>Jan-15</td>
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</tr>
<tr>
<td>LNG Manzanillo Header</td>
<td>Apr-15</td>
<td>100</td>
</tr>
<tr>
<td>Questar (Fidlar to KRGT)</td>
<td>Jan-18</td>
<td>400</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pipeline</th>
<th>Year</th>
<th>New Capacity</th>
</tr>
</thead>
<tbody>
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<td>Rockies Express (Z1: Mkr-Wam)</td>
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<td>500</td>
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<tr>
<td>Rockies Express (Z1: Opal-Wam)</td>
<td>Jan-18</td>
<td>500</td>
</tr>
<tr>
<td>Rockies Express (Z1: Wam Sup)</td>
<td>Jan-18</td>
<td>332</td>
</tr>
<tr>
<td>Rockies Express (Z1: Wam-Chey)</td>
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<tr>
<td>Rockies Express (Z2 West)</td>
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</tr>
<tr>
<td>Rockies Express (Z3 to Lebanon)</td>
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<td>500</td>
</tr>
<tr>
<td>White River Hub</td>
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<td>500</td>
</tr>
<tr>
<td>Wyoming Interstate (Kanda Lat)</td>
<td>Jan-18</td>
<td>400</td>
</tr>
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<td>Kern River (CA)</td>
<td>Jan-20</td>
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</tr>
<tr>
<td>Kern River (Mainline)</td>
<td>Jan-20</td>
<td>500</td>
</tr>
<tr>
<td>KM Border Pipeline</td>
<td>Jan-20</td>
<td>300</td>
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<tr>
<td>KM Mexico</td>
<td>Jan-20</td>
<td>425</td>
</tr>
<tr>
<td>KM Texas Pipeline (AguaDulce)</td>
<td>Jan-20</td>
<td>250</td>
</tr>
<tr>
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1 Ramps from 90 to 500 from April 2011 to April 2015

*Capacity units in MMcfld*
### Appendix B: Natural Gas Consumption Tables

#### U.S. Natural Gas Consumption by End Use (Bcfd) – *GHG As-Is Case*<sup>13</sup>

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<sup>13</sup> In the GHG As-Is Case, the sectoral demand in Navigant Consulting’s Spring 2010 Forecast was backed out and a demand based on the EIA’s Annual Energy Outlook was substituted. Due to technical reasons, the EIA-based figures above do not tie-out exactly to the EIA source numbers due to model calibration tolerances.
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U.S. SupplyDisposition (Bcfd) – GHG Plus, High Export Case

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18 In EIA tables, this column is labeled “Consumption.”
## Appendix D: Henry Hub Price Forecast Comparison Table

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