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ENERGY SERVICES, DOMESTIC REGULATION AND THE WTO

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Introduction

1. International trade in energy services has become a growing part of the multilateral trade, but is not well represented in global trade agreements. Unlike telecommunications or financial services, there are no special sector commitments concluded among World Trade Organization (WTO) members that adequately cover the global trade in energy services. Given the importance of energy as a foundation of economic growth and prosperity and the benefits of competitively supplied energy services, a core group of WTO members have begun the process from bringing energy services more fully under the disciplines of the General Agreement on Trade in Services (GATS).¹ These negotiations have commenced with the recognition that domestic regulatory oversight and competition rules are necessary but not sufficient to achieve the full potential of free and non discriminatory trade in energy services across borders. As the energy industry evolves toward greater private ownership, competition, and cross border exchange, a growing number of WTO member states have come to recognize the need to better align international trade rules with the new commercial realities of how energy is produced and delivered.

2. Energy is heavily regulated in both developed and developing countries. This paper begins by examining the far reaching changes that have taken place in this regulatory regime as it has shifted in the last decade and a half away from government planning and control toward greater competition and private sector ownership and investment. These developments have been a major factor in stimulating rapid growth in the scope and cross border penetration of energy services. The countries with the most open markets have attracted the most innovative and competitive energy service providers. However, domestic regulations continue to create unnecessary and costly impediments to trade in energy services. The second part of this paper examines the domestic regulations that continue to hinder open and non discriminatory trade in energy services and measures that a GATS energy service agreement could offer to address these barriers. Particular attention is focused on the classification and definition of energy services, the need for developing additional commitments and the special role that emergency safeguards may have to play in achieving a meaningful energy services agreement.

Energy Market Liberalization

3. The regulatory regime governing energy markets throughout the developed and developing world has undergone fundamental change since the mid-1980s. Heavy market controls and government intervention have increasingly been replaced by regulatory frameworks which seek to encourage competition and private sector ownership and investment. Among industrial countries these changes were motivated by a fundamental shift in government attitudes toward regulation stemming from the poor performance of state owned energy companies, growing subsidy burdens, and regulatory incentive

¹ The energy services negotiations are part of the “built-in” agenda established under the Uruguay Round. By the end of 2001, initial negotiating papers had been submitted Canada, Chile, European Union, Japan, Norway, United States and Venezuela.

structures that stimulated costly over investment.² In the developing world, many of these factors were also present but were compounded by the pressures created by the debt crisis and severe capital shortages. Adjusting regulatory frameworks for energy has been widely embraced as a way to attract greater private sector investment, improve efficiency, and boost overall economic performance.

4. One of the most pervasive changes has taken place in ownership patterns. Major privatizations have taken place across energy sectors (oil, gas, power) and have involved firms in industrial as well as developing countries. Canada, France, Finland, Italy and the UK were among the first to privatize their state oil companies. Gas distribution companies have also been opened to the private sector not only in Europe and North America but also among developing countries. Between 1990 and 1997, twenty-six developing countries introduced private participation in the transmission and distribution of natural gas.³ In the case of electric power, privatizations through public share issues, management or employee buyouts, franchise concessions, and direct sales of an equity stake in a state-owned enterprise to private investors have taken place throughout the world, including Africa, Asia, Europe, Latin America and North America.⁴

5. In addition to shifting ownership patterns, the regulatory regime for energy has experienced a major reduction in price controls and import restrictions. The oil industry was among the first to benefit. With fewer price controls and other trading restrictions, both buyers and sellers found that they could gain by shopping around for the best deals on upstream supply. Spot markets grew in scope until they eventually established crude oil as a global commodity with trading centers emerging in New York, London, Antwerp-Rotterdam-Amsterdam and Singapore.⁵ Active spot and futures trading markets spawned the development of derivatives and other financial vehicles that helped to eliminate price differentials between regions, improve price transparency, and reduce price volatility and risk for different types of crude oil and downstream products such as naphtha, heating oil and gasoline. More recently trading has become prevalent in the natural gas and electric power industry (see Table 1).

² Mark Jaccard, "Oscillating Currents: The Changing Rationale for Government Intervention in the Electricity Industry," *Energy Policy*, Vol. 23, No. 7, pp. 579-592.

³ Ada Karina Izaguirre, "Private Participation in the Transmission and Distribution of Natural Gas— Recent Trends," *Public Policy for the Private Sector*, World Bank, No. 176, April 1999.

⁴ M. Pollitt, "The Impact of Liberalization on the Performance of the Electricity Supply Industry," *Journal of Energy Literature*, Vol. 3, 1997, pp. 3-31. And R. W. Bacon, "Privatization and Reform in the Global Electricity Supply Industry," *Annual Review of Energy and Environment*, Vol. 20, 1995, pp. 119-143.

⁵ Paul Horsnell and Robert Mabro, *Oil Markets and Prices: The Brent Market and the Formation of World Oil Prices* (New York: Oxford University Press, 1993), Chapter 6.

Table 1. Major Energy Trading Markets

Exchange	Location	Year Commenced
Oil		
New York Mercantile Exchange (NYMEX)	New York	1978
International Petroleum Exchange (IPE)	London	1983
Antwerp-Rotterdam-Amsterdam (ARA)	Amsterdam	1985
Singapore Monetary Exchange (Simex)	Singapore	1989
New York Commodity Exchange (Comex)	New York	1992
InterContinentalExchange (ICE)	Atlanta	2001
Natural Gas		
New York Mercantile Exchange (NYMEX)	New York	1996
International Petroleum Exchange (IPE)	London	1997
On-the-day Commodity Market (OCM)	London	1999
Electricity		
Argentina (CMMESA)	Buenos Aires	1992
NordPool (Norway, Sweden, Finland, Denmark)	Oslo	1996
New York Mercantile Exchange (NYMEX)	New York	1996
National Energy Market (NEM)	Australia	1996
New Zealand Energy Market (NZEM)	Auckland	1996
Penn., New Jersey, Maryland Interconnect (PJM)	Valley Forge	1997
Amsterdam Power Exchange (APX)	Amsterdam	1999
European Electricity Exchange (EEX)	Frankfurt/Leipzi g	2000
New Electricity Trading Arrangement (NETA)*	London	2001

* Formerly the Pool for England and Wales established by the UK Electricity Act of 1990.

Source: Author

6. Liberalization measures have also included reform in government procurement and tendering procedures. In the case of upstream oil and gas exploration, this often involved reforming procedures for awarding on-shore and off-shore oil and gas development concessions to permit greater foreign involvement. In the power sector, reforms opened opportunities for domestic and foreign firms to sell power to state or private utility monopolies, which acted as a "single buyer" monopsony purchaser of electricity for resale to end use customers. The utilities were required to establish bidding mechanisms for new capacity additions to ensure that it was procured at the lowest cost. These reforms led to a surge in power projects developed and financed by independent power producers. Independent power producers generally sold their output to the single buyer through long-term power purchase agreements that included take-or-pay conditions or fixed capacity charges to protect investors from market risk. The majority of these plants were large-scale coal-fired or gas-fired generators; however, opportunities for cogeneration and renewable energy projects also grew.

7. But regulators and industry participants discovered that lifting price controls, privatization and opening procurement were not sufficient to ensure competition and lower prices. Experience showed that incomplete liberalization often created policy contradictions and barriers to competition persisted. For example, the potential for conflict of interest that arises when the utility remains vertically integrated, a

competitor in electricity supply but also the sole buyer and distributor of the product. Incumbent uses position in the market to take advantage of its control over the network (be it pipelines or transmission grid) to favor more costly in-house provision whose costs can be recovered through the regulated business. Access to the grid did not guarantee access to customers without clearly defining eligibility criteria. Therefore, for competitive energy markets to emerge, particularly for network industries such as gas and power, deeper structural changes in domestic regulation were deemed necessary.

8. Table 2 identifies seven changes to domestic regulation that have been important to establishing competitive gas and power markets. The first condition is the basic legal right of third party access to the network. In the case of natural gas this has consisted of rules designed to establish the rights parties to access gas pipelines and other "essential" facilities such as storage facilities or liquefied natural gas (LNG) terminals. In the case of electricity, this has involved establishing the right to transmit or "wheel" power over utilities transmission lines at a reasonable cost. A second condition has been to institute vertically and horizontally unbundled existing utility monopolies. These structural remedies are designed to curb the incentives for self-dealing among incumbents and to reduce excessive market power where, for example, heavy concentration of generation assets permits gaming and other forms of price manipulation. The third measure has been to establish eligibility thresholds for choice among the different classes of customers. The degree of market opening determines whether industrial, commercial or residential users are guaranteed choice.

9. A fourth condition concerns the ability to enter and build new infrastructure in a reasonable timeframe. There must be an efficient and fair system for siting, permitting and constructing power plants, pipelines and other energy infrastructure. Physical constraints can create serious bottlenecks that protect the market power of producers in some areas.⁶ In addition, all market participants need access to timely information to compete. This includes information on prices, transmission capacity, congestion, scheduled volumes, and other data relevant to efficient and fair business transactions. Since market actors can gain unfair competitive advantage by withholding information, some regulators have taken proactive measures to ensure the free flow of information by requiring the establishment of electronic bulletin boards (now being replaced by websites) and establishing industry wide technical standards to reduce transaction costs and enhance market development.

⁶ David M. Newbery, *Privatization, Restructuring, and Regulation of Network Utilities* (Cambridge, Mass: The MIT Press, 1999, p. 363.

Table 2. Key Structural Elements of Competitive Power and Gas Markets

Structural Element	Objective
Third Party Access	Guarantee non-discriminatory competitive access to pipelines, transmission lines, storage, terminals and other facilities deemed essential and not reasonably duplicated
Unbundling	Separate competitive from non competitive industry segments to check market power and incentives for self dealing by monopoly providers through vertical separation of production, transmission and distribution and/or horizontal divestiture
Consumer Choice	Establish which end-users (ranging from heavy industrials to households) are legally permitted to choose their preferred supplier of energy
Investment Entry/Exit	Ensure an efficient and fair system for siting, permitting and construction of new (or retirement of old/inefficient) power plants, pipelines and other energy related infrastructure
Transparency	Ensure the availability of timely information on prices, transmission capacity, congestion, scheduled volumes, and other data relevant to efficient and fair business transactions
System Operator*	Establish a non discriminatory mechanism for ensuring grid stability, balancing supply and demand in real time, and processing numerous spot transactions
Independent Regulator	Establish neutral and objective authority for fair and non discriminatory competition and dispute resolution among competing market actors, consumer and other relevant interests

* Relevant to electricity.

Source: Author

10. Another condition arises from the special features associated with electricity. Because it requires exacting reliability standards, can not be stored, and must balance supply and demand in real time, institutions needed to achieve these functions and manage the grid networks. It is widely recognized that there should be a single network operator, but less agreement concerning its level of independence, ownership structure, role in grid planning and investment, and how it should be regulated. Associated with defining the role of network operator has been the question of whether to limit physical power trading to bilateral markets, or to set up a power pool to channel the exchange of electricity trading, or some combination of both. These issues have been some of the more important and challenging issues facing the design of competitive market structures for electric power.⁷

11. A final condition does not involve market restructuring but rather adapting government institutions to better meet the oversight requirements of a competitive energy markets. This step involves establishing or strengthening the legal and institutional basis for independent regulation of the energy sector as a whole or sub components.⁸ This includes separating energy policy-making functions from tariff setting, dispute resolution and other regulatory functions and improving regulatory governance so that it is insulated from undue political influence. It may also require clarifying responsibilities. For example, the

⁷ Paul L. Joskow, "Restructuring, Competition and Regulatory Reform in the U.S. Electricity Sector," *Journal of Economic Perspectives*, Vol. 11, No. 3, Summer 1997, pp. 129-132. See also, *Competition in Electricity Markets*, International Energy Agency, OECD/IEA 2001, pp. 69-115.

⁸ For a discussion of these issues in the context of electricity regulation see Sanford Berg, "Developments in Best-Practice Regulation: Principles, Processes, and Performance," *Electricity Journal*, Vol. 13, No. 6, July 2000, pp. 11-18; and "Power and Gas Regulation- Issues and Experience," Draft Working Paper, World Bank, April 2001; and Warrick Smith, "Utility Regulators- The Independence Debate," Public Policy for the Private Sector, Private Sector and Infrastructure Network, No. 127, The World Bank, October 1997.

decision to rescind monopoly franchises for gas and power has raised the issue of competition policy safeguards. Liberalization opens the possibility for mergers and acquisitions, which may promote valuable rationalization but also can lead to excessive market concentration and anti-competitive behavior.⁹

12. Each of these elements can be implemented in a variety of different ways with varying degrees of effectiveness in encouraging competition. For example, the right of third party access can be established on a mandatory basis with tariffs and access terms established by the independent regulator or it can be established on a negotiated basis with tariff and terms negotiated between by the seller and the incumbent utility. Mandatory access is considered superior because it removes bargaining advantages held by the incumbent over the new entrant. Most countries have chosen the mandatory approach with transmission prices established by a neutral regulator, however, France, Germany and a number of other countries have adopted negotiated access rules.

13. Various approaches can also be taken with respect to unbundling. The strongest version consists of full ownership separation of transmission activities from generation, distribution and supply activities, however, some countries such as Japan and France only require this be done on an internal accounting basis. The degree of market opening has also varied with most countries adopting a gradualist approach. The EU Commission, for example, established a principle of "progressivity" under which Member States would be allowed to follow a step-by-step opening of the market.¹⁰ In the case of electric power, the initial minimum threshold of representing 23 percent market opening by 1999 follow by 33 percent in 2001 and 100 percent by 2003. The result has been varying degrees of openness across gas and power markets as different countries have adopted different levels of openness.

Barriers to Trade in Energy Services

14. The growth in energy services is closely correlated with the extent of energy market privatization and liberalization. Countries with the most open markets have generally developed the most innovative and cost competitive energy service providers. Privatization has encouraged outsourcing of a wide range of services that were once performed "in-house" by vertically integrated energy companies. In the case of upstream oil and gas, exploration and development projects are increasingly centered around an "operator," which subcontracts most activities beyond core management and technical decision making. These subcontract oil and gas field services include mapping services, seismic surveys, drilling, well testing, production services, and completion and environmental remediation services.

15. Barriers remain throughout the energy industry in each of the GATS modalities relevant to energy including cross-border supply (Mode 1); commercial presence (Mode 3); and temporary movement of natural persons (Mode 4). For example, Mode 4 restrictions on the entry of stay of energy service managers, professionals and exports hamper all sector of the industry ranging from oil to electric power. Restrictions may also hamper the entry of equipment and tools needed to provide production or maintenance services. This has raised costs or created unfair competitive advantages in the oil field services industry, which depends on the ability to move testing equipment, oil rigs and other specialized equipment from country to country.

⁹ *Electricity Market Reform*, International Energy Agency, OECD/IEA, 1999, pp. 67-69.

¹⁰ Fereidoon P. Sioshansi, "Competition in Liberalized European Electricity Markets," *The Electricity Journal*, Vol. 14, No. 2, March 2001, pp. 73-83.

16. In countries that have opened energy networks to competition, competitors continue to face problems in gaining timely and non discriminatory access to grid networks.¹¹ In some cases, this is simply the case of a monopoly supplier attempting to retain its privileged position in the market. This could be addressed with greater vigilance on the part of regulators aimed at more adequately protecting the rights of new entrants. However, other situations are more complex, particularly when they are intertwined with public service obligations. Take the example of universal service, which seeks to provide energy to all members of society including the poorest households at a reasonable cost. Faced with the need to cut costs quickly to remain competitive, utilities are likely to identify groups of customers that are very costly to serve. They might ask that rates for these customers be increased, or that they be allowed to abandon or transfer service for these customers. If alternative programs for needy customers have not been devised or are politically costly, there may be a temptation for regulators to favor incumbents to fulfil universal service obligations. Other examples can be cited. The point is that competitors may not only face incumbents seeking to protect their turf, but they may be aided— wittingly or unwittingly— by regulators that see traditional incumbents as the primary means through which public service obligations can be met.

17. By far the largest barrier facing international trade in energy services arises from the lack of progress in achieving the structural reforms noted above. In the case of natural gas, brokers negotiate with transmission companies for transportation based on their ability to switch their gas from pipeline to pipeline through market hubs to destination.¹² They can only provide this service if third party access is guaranteed, monopoly suppliers have been unbundled, and consumer choice has been established. Energy marketers go a step further by taking physical positions in the market, usually by building a portfolio of assets, which may include oil fields, gas reserves, gas storage, pipeline capacity and power plants, or by purchasing and reselling energy products from others. They can only provide these services competitively if they have the restructuring required for supporting brokers in addition to reasonable terms for buying or investing in power plants, pipelines and other physical assets.

18. Restructuring is generally required before the full advantage of the potential of information technologies and online energy trading platforms can be realized. Online retail energy commodity exchanges are attractive because they are able to pull diffuse players and markets together across a common platform faster and more cost effectively than traditional energy sales models. Like other exchanges, online energy trading platforms are characterized by large positive network externalities where the power and value of the network grows as the number of participants grows due to increased liquidity and additional options available to users. However, their ability to reach sufficient scale is closely tied to the extent of liberalization. Exchanges only work when barriers to energy trading are eliminated and buyers and sellers are granted the right to choose.

19. Structural reform is also required before integrated energy service companies can emerge. Energy users, be they large industrial, commercial or residential users, are primarily interested in price and quality of energy for the functions that energy performs such heating, lighting, locomotion and not in the mix or source of that energy. Open competitive energy markets offer energy service companies (sometimes called BTU vendors) the ability to meet customer price and quality demands by developing a portfolio of assets, management skills, contractual instruments, logistics, transportation and billing. To this there may be added various value added services such as auditing and consulting.

¹¹ For detailed explanations of these barriers in selected markets see *Report to the European Commission Directorate General for Transport and Energy to Determine Changes after Opening of the Gas Market in August 2000, Volume 1: European Overview*, DRI-WEFA, July 2001; and U.S. International Trade Commission, *Electric Power Services: Recent Reforms in Selected Foreign Markets*, Investigation No. 332-441, USITC Publication 3370, November 2000.

¹² Paul W. MacAvoy, *The Natural Gas Market: Sixty Years of Regulation and Deregulation* (New Haven: Yale University Press, 2000), p. 17.

20. The cost to energy services of barriers to trade and discriminatory practices is difficult to judge. Comprehensive trade data on energy services is currently limited. Statistical reporting among domestic and international energy and trade bodies continues to reflect the legacy of the vertically integrated energy industry and an emphasis on physical flows. Since services were generally bundled within integrated firms—and continue to be in many countries—there has been little price transparency along the energy value chain. The lack of price transparency and general lack of data reporting makes had made it difficult to quantify costs and benefits value even among OECD countries where energy related data is generally more available.¹³ Still, the large size of the global business turnover of energy products worth approximately \$2.4 trillion¹⁴ in 2000 suggests that measures aimed at reducing the barriers to the provision of competitively supplied energy services holds the potential for significant welfare gains for both developed and developing countries.

Classification and Definition of Energy Services

21. Another factor constraining analysis of international trade in energy services stems from the lack of clear definition of the boundaries of these services and inadequate classification within the WTO Services Sectoral Classification List known as the W/120.

Classifications

22. Because significant unbundling in the energy industry has taken place only relatively recently, various energy services remain poorly represented in the WTO Services Sector Classification List known as the W/120. In the three cases where they do appear, they are listed as part of other service entries. For example, pipeline transportation of fuels is covered as a subsector of “transport services.” Technical testing and analysis, mining services, maintenance and repair of equipment, and energy distribution services are found under “other business services.” A large number of energy services are completely absent.

23. A growing number of countries recognize that the W/120 list should be revised with a separate heading created explicitly for energy. Countries are now debating how this can be done—not an easy task, given the complexity of the energy industry and its logical overlap with so many other sectors. Determining the boundaries of energy services is complex, since these services are often intimately tied to what may be construed as other activities such as environmental services, financial services, transportation services, legal services, engineering services, and research and development related services. Classification proposals put forward for energy services vary greatly from country to country. A number of countries have proposed a “core” and “non-core” approach to classifying energy services. Recognizing that energy services involve various bundles of services, this approach would list energy in terms of direct energy services (e.g. exploration and extraction) coupled with their associated services (e.g. engineering services,

¹³ For recent efforts to quantify the aggregate benefits of electricity liberalization see: Faye Steiner, “Regulation, Industry Structure and Performance in the Electricity Supply Industry,” *OECD Economic Studies*, No. 32, January 2001; and, Samantha Doove, Own Gabbitas, Du Nguyen-Hong and Joe Owen, *Price Effects of Regulation: International Air Passenger Transport, Telecommunications and Electricity Supply*, Productivity Commission Staff Research Paper, AusInfo, Canberra, October, 2001.

¹⁴ Calculated from data reported in the *BP Statistical Review of World Energy*, June 2001 and Energy Information Administration, *International Energy Outlook 2001*.

environmental services, etc.).¹⁵ This approach would maintain the integrity of the existing GATS classification items while granting energy services a highly inclusive sectoral classification.

24. However differences have emerged between countries in their preferred level of aggregation. For example, Japan has submitted an initial negotiating position with highly aggregated classifications and urging countries to place an initial focus on "core" energy services such as wholesale sales, transport/transmission and retail sales of energy.¹⁶ This approach may reflect concerns that a more disaggregated classification could be used as a lever to force unbundling of its vertically integrated gas and power companies. Other countries are pushing for just the opposite. Venezuela has proposed a high level of disaggregation comprising three-steps. It has proposed: (1) dividing services by subsectors associated with energy sources; (2) develop criteria that specify services associated with production, transformation, transportation, distribution and sales processes; (3) divide energy services among core and non-core processes associated with the energy chain.¹⁷ This approach would provide a greater level of detail but also would permit countries to pick and choose among market access commitments for upstream oil services and/or other energy service sectors.

Definitions

25. In addition to the problem of classifying the scope of energy services, negotiators are also wrangling over key definitions. The most significant concerns whether electricity should be considered a good or a service. Both definitions have plausibility. Electricity has the characteristics of a service in that it is an intangible commodity that must be produced as it is consumed. On the other hand, it has the characteristics of a manufacturing process in that it materially transforms energy present in various fuels into electrical energy.

26. Previous treatment of this issue provides limited guidance. For example, during the first GATT discussions, it was agreed that electricity should not be classified as a commodity. Although this view has persisted in some quarters, a number of countries have come to consider it a commodity and have taken out bindings on it. In a further complication, the WTO Secretariat has recently noted in a Background Note that the World Custom Organization (WCO) Harmonized Commodity Description and Coding System (HS) has made electricity an optional heading so that countries are not required to classify it as a commodity for tariff purposes.¹⁸ Some WTO members may have a stake in seeing electricity listed as a good for reasons that relate to liberalization strategies at home. For example, the reason the EU Commission holds electricity to be a good may extend back to the 1980s when it was developing a strategy to negotiating a common electricity market among member governments. At that time, a 'goods' as opposed to a 'services' designation may have provided the legal leverage to force governments toward open borders for electricity exchange by aligning it with the Single European Act's aim of promoting the free flow of 'goods' among member countries.¹⁹

¹⁵ For a more complete description see Rachel Thompson, "Integrating Energy Services into the World Trading System," Energy Services Coalition, Washington, DC, April 10, 2000.

¹⁶ Communication from Japan, "Negotiating Proposal on Energy Services," Council for Trade in Services, Special Session, World Trade Organization, S/CSS/W/42//Suppl.3, October 4, 2001.

¹⁷ Communication from Venezuela, "Negotiating Proposal on Energy Services," Council for Trade in Services, Special Session, World Trade Organization, S/CSS/W/69, March 29, 2001.

¹⁸ "Energy Services," Background Note by the Secretariat, Council for Trade in Services, World Trade Organization, S/C/W/52, September 9, 1998, p. 3.

¹⁹ Check for source.

27. A great deal rides on the issues of classification and definitions. Countries make commitments to their GATS schedules on the basis of the W/120 Sector Classification. As a result, the choice of classification scheme has a direct bearing on how broadly and effectively countries eventually schedule their market access commitments. Depending on how it is resolved, the classification issue may support comprehensive protections for energy services or it could if narrowly defined serve to hamper such efforts. Likewise the debate over whether electricity is defined as a good or a service has a significant bearing since it will determine whether it will be subject to the rules GATT or the GATS.

28. If WTO members decide to define generation as a manufacturing process, this could significantly reduce the scope of GATS Energy Services coverage by cutting out a large part of the global power industry. This is not a trivial consideration since final direct sales of electricity amounted to \$1.2 trillion in 2000. A concern is that classifications and definitions will be too narrow. To be most meaningful and useful, countries should strive for inclusive categories and definitions. In particular, the development of an effective set of rules may be undermined if electric power generation and other services are treated separately.

Bringing Energy Services Under the GATS

29. Extending coverage of basic GATS provisions will be beneficial to energy service companies providing services through cross-border trade and through companies providing services on a local basis through foreign affiliates. Among the most important will be to extend the specific commitments found in the basic GATS framework, which only apply if countries list them in their schedules. One set of protections is associated with market access obligations. GATS Article XVI in principle prohibits a variety of actions that are commonly used to protect service markets. These measures are:

- 1) number of service suppliers permitted
- 2) value of transactions or assets
- 3) total quantity of service output
- 4) number of natural persons that may be employed
- 5) measures that restrict or require specific types of legal entity or joint venture through which a service supplier may supply a service
- 6) limitations on the participation of foreign capital

30. Countries can take out exceptions to this list, but only if they are listed in the country's schedule of commitments. Providing that countries do not take excessive exceptions, these principles will contribute toward removing discriminatory restrictions that have undermined foreign energy service providers' ability to compete with domestic providers.

31. National treatment obligations comprise the second specific commitment. This requires governments to list any exemptions to the national treatment obligation (GATS Article XVII). Countries may maintain any form of discrimination in favor of domestic suppliers but only if it is scheduled. This provides a form of recourse to foreign energy service providers if they are denied national treatment in licensing process, taxation or in the regulatory matters.

32. Nondiscrimination is a core principle of the GATS. However, countries can claim MFN exceptions if they so choose. The ability to take exceptions arose out of concern that unconditional MFN would allow competitors with restrictive policies to benefit from protected markets and exploit opportunities in less restrictive markets. In the financial services and telecom negotiations the threat of

MFN exemptions was employed as a means to force sectoral reciprocity.²⁰ It is possible that a similar dynamic could come into play in the case of energy services. Uneven patterns of energy liberalization have opened unconditional MFN to potential abuse by free riding. For example, Canada (namely British Columbia, Manitoba, Quebec, and Saskatchewan) retain a closed market compared to much of the United States. In Europe, Switzerland retains a relatively closed market relative most of Europe despite its a key position as a transit point for power trading.

Need for Additional Commitments

33. Extending the basic MFN, market access and national treatment disciplines to energy services is important but not sufficient to ensure the contestability of energy service markets. To achieve a pro-competitive, transparent, reasonable and non-discriminatory regulatory environment additional commitments beyond the basic GATS framework are required. A reference paper provides an opportunity to clearly establish these minimum standards, which are tailored to the specific conditions and complexities of the energy sector. If it is too onerous countries are unlikely to incorporate it in their schedules of commitments under the GATS. It offers an opportunity to increase the value of, and add security to, the specific commitments on market access and national treatment. Some features of a Reference Paper for energy services are likely to look similar to the Telecoms Reference Paper, however the sectors have many differences and therefore a document of additional commitments for energy is required to reflect these differences.

Third Party Access to Essential Facilities

34. Many view the right to interconnect as one of the most important competition safeguards in a network industry.²¹ The Basic Telecommunications Agreement would have been far less meaningful without the provisions guaranteeing suppliers access to public telecommunications transport networks or services under non-discriminatory terms. Establishing the right to interconnect will be no less important for the energy services agreement. However, the parallels between telecoms and energy are imperfect. The term interconnection and principles developed to support it in the Telecom Reference Paper are likely to be too restrictive in the context of energy services. What is needed is a set of principles that will severely limit the ability of a major supply to refuse access not only to electric power transmission and natural gas pipelines but also to other "essential" energy infrastructure. Depending on specific circumstances essential energy infrastructure may include gas storage facilities, liquified natural gas (LNG) terminals, oil pipelines and oil storage facilities.

35. The need for a more encompassing set of principles can be illustrated by the competitive bottleneck created by monopoly control of Japan's 22 LNG terminals, which receive nearly all the country's gas supplies. Japan's vertically integrated power and gas utility monopolies built, own and operate the terminals, tanks and regasification equipment associated with these facilities.²² This not only gives a handful of companies control over 96 percent of the gas available in Japan (only three percent is

²⁰ Bernard M. Hoekman and Michel M. Kostecki, *The Political Economy of the World Trading System* (New York: Oxford University Press, 2nd edition, 2001), p. 252.

²¹ See Daniel Roseman, "Domestic Regulation and Trade in Telecommunications Services: Experience and Prospects Under the GATS," ???

²² *Japan 1999 Review: Energy Policies of IEA Countries*, International Energy Agency, OECD/IEA, 1999, pp. 112-115.

produced domestically), but also the ability to block competitors from accessing these facilities.²³ Given the advantages of gas as a fuel and its importance in power generation, the inability to gain access to Japan's LNG terminals has severely hampered competition in both the gas and electricity sectors and has become a point of contention in bilateral trade talks. As part of its annual trade review with Japan, the US government has raised the issue of establishing access for all market participants, but has stopped short of demanding mandatory access with regulated tariffs for competing suppliers.²⁴

36. In developing the appropriate language trade negotiators may look to the "essential facility doctrine" as it has developed in the context of competition policy in the US and more recently in Europe. For example, the facility must be shown to have monopoly characteristics that make it truly essential. It is not enough that suppliers seeking access be inconvenienced or bear some degree of economic loss as a result of refusal of access; it must be reasonably clear that an alternative to the facility is not feasible.²⁵ Since oil pipelines and oil storage facilities are more readily constructed by a competitor than infrastructure like electric power transmission systems, it is reasonable to believe that they will be less likely to be affected by an essential facility provision. There may be reasonable business justifications for denying access, however, the criteria that is established for this exception should be circumscribed lest it create a major loophole in the rules. Where access is provided it should be granted in a timely fashion at reasonable fees that reflect the cost of these facilities.

Transparency

37. GATS related transparency provisions set forth in Article III are largely procedural. They require the prompt publication of relevant measures, notification to the WTO of significant changes in laws, regulations or administrative guidelines, and establishing channels a commitment for timely responses to information requests from other WTO members. While these provisions are valuable they are not sufficient. The transparency disciplines found in the Telecoms Reference Paper and Annex provide a good place to start. In addition, they should consider adopting a right of prior consultation on draft laws and regulations, with reasonable notice and time for comments.²⁶ Given the importance of licensing in the energy industry, similar standards should apply to ensure an efficient and fair system for siting, permitting and construction of new (or retirement of old/inefficient) power plants, pipelines and other energy related infrastructure.

38. But governments should not limit additional commitments to regulatory transparency. In addition to those measures, trade negotiators should consider developing language that would focus attention on the need for market transparency. In a competitive context, withholding, delaying or demanding excessive fees for basic market information can distort competition as readily as physical constraints. As noted above, all market participants need access to timely information on prices,

²³ For a discussion of why the right to block access is justified see Hisashi Nagahara, "The Antimonopoly Implications of the Deregulation of the Japanese Gas Utility Industry," Program on U.S.-Japan Relations, Harvard University, April 2001.

²⁴ See U.S. Trade Representative, "Annual Reform Recommendations from the Government of the United States to the Government of Japan under the U.S.-Japan Regulatory Reform and Competition Policy Initiative, October 14, 2001, Annex 11-15.

²⁵ Useful criteria for determining the reasonableness of a refusal to deal are spelled out in various US court cases. See in particular, *MCI Communications Corp. v. American Tel. & Tel.*, 708 F.2d 1081 (7th Cir. 1983)

²⁶ For more on how prior consultation might work see Keiyo Iida and Julia Nielson, "Transparency in Domestic Regulation: Prior Consultation" in *Trade in Services: Negotiating Issues and Approaches*, Industry, Services and Trade, OECD, 2001, 115-135.

transmission capacity, congestion, scheduled volumes, and other data relevant to efficient and fair business transactions. For this reason an energy services reference paper would be well served to include provisions that encourage governments to take proactive measures to ensure the free flow of timely information and establishing industry wide technical standards.

39. Provisions to promote market transparency along side regulatory transparency will have several benefits. It will make an important contribution toward the goal of improving market efficiency by reducing transaction costs and market distortions. It also has the potential to reduce the incentives that feed corruption in the energy sector.²⁷ Creating official and transparent channels for providing information to market actors can make a major contribution to reducing the existing incentives to bribe officials to gain access to information needed in the course of normal business.

Unbundling

40. As noted above, vertical control poses fundamental difficulties for effective competition to develop the network-based industries of gas and power. The full potential benefits of liberalization may not be achieved if measures are not taken to address the incentives that vertical integration to restrict competition. On the other hand, countries have widely differing institutional and legal systems, which appear to make a single approach impractical in the energy sector. Therefore the most realistic solution in the GATS context may be to adopt the approach taken by the European Commission in the formulation of the EU gas and electricity directives. Like the gas and electricity directives, a GATS energy services agreement could offer countries several choices ranging from ownership separation to account and management separation.

Independent Regulation

41. A number of countries have already taken steps to strengthen or introduce regulatory independence in the energy sector. The energy services negotiations offer an opportunity to reaffirm and codify the importance of independent regulators. In the telecoms Reference Paper, WTO members made independent regulators a requirement but did so without prejudice as to whether the regulator was separate or not from the ministry that makes telecom policy. This should be a minimum requirement in an energy services agreement.

42. Independent regulation is particularly important where weaker forms of unbundling have been adopted for electric power and gas restructuring. If, for whatever reason, structural remedies such as ownership separation between production, transmission and marketing are not taken, there is a much greater onus placed on regulators to monitor and enforce against incentive and opportunity to engage in anti-competitive behavior.²⁸ The weaker the structural remedies the greater the level of vigilance required on the part of regulators in the execution of behavior remedies. This can only be achieved with any degree of assurance if the regulator is independent in the full meaning of the term.

²⁷ Steven R. Salbu, "Battling Global Corruption in the New Millennium," *Law and Policy in International Business*, Vol. 31, No. 1, 1999, pp. 47-78.

²⁸ For a discussion of structural versus behavior remedies in the context of electricity liberalization see Ronald J. Binz and Mark W. Frankena, "Addressing Market Power: The Next Step in Electricity Restructuring," Competition Policy Institute, Washington DC, undated, pp. 51-56.

Investment

43. The GATS provides no automatic right of establishment to foreign investors. These rights are only established if and when they are scheduled by a country. The only obligations occur when WTO members choose to liberalize. At this time they must schedule any existing restrictive measures they wish to maintain and ensure freedom of payments and transfers relating to the investments in such sectors. However, the GATS permits governments to maintain foreign ownership restrictions in sectors where they make commitments. Governments are free, if they choose to make commitments on commercial presence, to maintain existing discriminatory or quantitative restrictions. Governments can use the GATS selectively to encourage investment in sectors of their choice, subject to the conditions they wish to impose or retain, including with respect to technology transfer and the employment of local workers. The GATS also permits governments to maintain foreign ownership restrictions in sectors where they have made commitments. Unlike legal or accounting services, the provision of energy services are closely tied to the construction and maintenance of physical infrastructure.

Public Service Obligations

44. A country's decision to schedule market access commitments does not require changes or any diminution of that country's regulatory standards or preferences. The GATS provides WTO members with considerable flexibility to pursue legitimate national policy goals. Article XIV permits measures to achieve noneconomic objectives and the preamble to the original GATS Agreement recognizes "the right of Members to regulate, and to introduce new regulations, on the supply of services within their territories in order to meet national policy objectives."²⁹ The GATS financial services agreement recognized the right of countries to impose prudential measures to protect consumers of financial services and to ensure the overall integrity and stability of the financial system. The maintenance of universal service was an important priority for countries in the context of telecommunications services and the Basic Telecoms Agreement and supporting Reference Paper recognized the right of countries to impose special universal service obligations. What the GATS has sought is to encourage countries to pursue legitimate public policy objectives in a reasonable, objective and impartial manner.

45. Given the important social and economic role that energy plays and the large externalities associated with energy production, transportation and use, the scope of public service obligations that need to be acknowledged in an energy services agreement may be broader than previous GATS agreement. In addition to recognizing universal service obligations, an agreement may need to recognize the right of a country to define environmental protection goals as well as to make market interventions to achieve energy security goals, include short-term reliability and long-term access to supply and diversified fuel mix.³⁰ However, to ensure the full benefits of competition requires that these regulations are imposed equally between incumbents and new entrants. In some cases, this may mean dismantling special obligations or "incumbent burdens" that have been imposed on existing players and sharing them equally across market participants.³¹ In other cases, it may mean removing special protections or advantages that have been granted exclusively to incumbents.

²⁹ Cite GATS document.

³⁰ Completing the Internal Energy Market, Commission Staff Working Paper, SEC (2001) 438, Commission of the European Communities, Brussels, March 12, 2001, pp. 27-54.

³¹ For an extended discussion of the problems and solution presented by incumbent burdens see J. Gregory Sidak and Daniel F. Spulber, "Deregulation and Managed Competition in Network Industries," *Yale Journal of Regulation*, Vol. 15, No. 1, Winter 1998, pp. 118-147; and in the context of natural gas deregulation, Paul W. MacAvoy, Daniel F. Spulber and Bruce E. Stangle, "Is Competitive Entry Free?"

Special Exclusions

46. A final question facing negotiators is whether there are grounds for establishing exemptions from GATS disciplines at the outset of the negotiations. In the preliminary talks on energy, a number of countries have already put forward proposals to exclude publicly owned natural resources and nuclear power from the talks. The United States and Venezuela have proposed excluding the ownership of publicly owned natural resources.³² The initial proposal by the EU has argued that an exemption is also required for nuclear power. The EU argued that the international nuclear trade is subject to preexisting international agreements or specific provisions in more general agreements, and therefore cannot be assimilated to general energy trade.³³

47. Given the delicate national sovereignty involved in national resources and safety and security concerns associated with nuclear power these proposals may be inevitable and politically expedient at this stage. However, it is worth noting the potential cost of accepting these exclusions in their entirety and without careful review. In the case of natural resources, such exclusion could permit governments to continue to discriminate against foreign firms in leasing blocks for oil exploration. This has the potential of excluding a large number of energy services that can be supplied competitively. There are similar implications for nuclear power related exclusions. In the future, there will be growing service opportunities relating to the decommissioning of aged reactors. Blanket exclusion could also hamper the introduction of new technologies and management techniques.

Can the GATS Disciplines Prevent Rollback?

48. Experience in previous service negotiations shows that countries tend to make negotiating offers that reflect their existing domestic regulatory regimes. This has generated skepticism among some about the ability of the GATS to drive regulatory reform. Yet even those less sanguine about the ability of the GATS to drive domestic regulatory reform point to the advantages provided by the GATS to bind the *status quo*.³⁴ Although not ideal from the standpoint of expanding market access, standstill agreements have value in preventing slippage and in creating a firm foundation for future rounds of liberalization.

49. Regulatory reversals and backsliding is not an issue of idle concern for the energy industry. In recent years, there have been major cases of governments pulling back from previously announced liberalization measures. One recent case is the decision by California Public Utilities Commission to suspend retail competition. Another was the British government's decision in 1997 to place a moratorium on the construction of gas-fired power plants. In both cases foreign and domestic energy service providers were adversely affected so it is worth exploring what, if any, GATS disciplines might have applied.

Bypass and Partial Deregulation in Natural Gas Markets," *Yale Journal on Regulation*, Vol. 6, No. 2, Summer 1989, pp. 209-247.

³² See Communication from the United States, "Framework for Negotiation," Council for Trade in Services, Special Session, World Trade Organization, S/CSS/W/4, July 13, 2000, Section II; and Communication from Venezuela, "Negotiating Proposal on Energy Services," Council for Trade in Services, Special Session, World Trade Organization, S/CSS/W/69, March 29, 2001, Section III, 16.

³³ See Communication from the European Communities and Their Member States, "GATS 2000: Energy Services," Council for Trade in Services, Special Session, World Trade Organization, S/CSS/W/60, March 22, 2001, Section I, 5; and Communication from Japan, "Negotiation Proposal on Energy Services," Council for Trade in Services, Special Session, World Trade Organization, S/CSS/W/42/Suppl.3, October 4, 2001, Section I, 5

³⁴ William J. Drake and Eli M. Noam, "The WTO Deal on Basic Telecommunications: Big Bang or Little Whimper?" *Telecommunications Policy*, Vol. 21, No. 9/10, pp. 799-818.

California's Suspension of Retail Competition

50. On September 20, 2001, the California Public Utilities Commission suspended retail competition. This decision revoked the right of consumers to choose their preferred electricity supplier, which had been previously granted as part of the state's electricity liberalization program. The action was justified by the Commission as necessary a necessary measure to respond to the heavy fiscal burden stemming from the state's response to California's power crisis in 2000/2001. Specifically, the state sought to ensure a stable customer base needed to recover the cost of power it had purchased and continued to purchase via \$13.4 billion bond offering and feared that if given the choice, consumers might switch from utility service in order access potentially lower nonutility sources of electric power.³⁵ These debt obligations were assumed by the state when it took over purchasing electricity on behalf of the state's major public utilities, which had been driven into insolvency by the state's failed electricity restructuring plan.³⁶

51. Closing off retail access was not the only solution available to California. One alternative would have been to apply a nonbypassable charge, applicable to all customers. This would have allowed the state to recover the cost of bonds and contracts incurred by electricity purchases, but in a way that preserved market openness. Another possibility would have been to retain direct access. This approach assumed that the bond issue would not have been undermined by customer switching and retaining the option would have the added benefit of creating needed discipline to ensure that the state made prudent energy purchases. Only if the states electricity contracts were too expensive would customers seek out lower direct access prices.³⁷

52. One way the California could have run afoul of the GATS was by violated market access commitments since the decision on retail access effectively limited the number of services providers to one- the state. Given the political and fiscal pressures created by the power crisis it is debatable if a pure market solution would have been realistic. By some estimates prices would have spiked to 29 cents per kilowatt hour during the worst period of shortage but then would have fallen to around \$0.11 per kWh, assuming that additional power plant capacity was brought on line. Instead, the state's action effectively locked in prices at an average of \$0.16 per kilowatt hour. This prevented a politically volatile price spike but effectively locked the state into higher prices for a much longer period of time.³⁸ Had GATS market access commitments been in place, it may have provided disciplines necessary to achieve a more efficient outcome. GATS market access commitment may have provided the additional discipline needed for the state to have chosen a more efficient response to "protection" needed to float the bonds but preserved market openness.

³⁵ California Public Utilities Commission, Decision No. 01-09-060, Application 98-07-003 et. al., September 20, 2001.

³⁶ *Beyond California's Power Crisis: Impact, Solutions, and Lessons*, Special Report, Cambridge Energy Research Associates, Cambridge, Massachusetts, March 2001.

³⁷ This approach was advocated by two commissioners who dissented from the majority California Public Utility Commission ruling. See California Public Utilities Commission, Decision No. 01-09-060, Application 98-07-003 et. al., September 20, 2001.

³⁸ Edward Leamer, et. al. "Short Circuit: Will the California Energy Crisis Derail the State's Economy?" The UCLA Anderson Forecast for the Nation and California, The Anderson School at UCLA, June 2001, pp. 2.1-2.31.

UK's Moratorium on Gas-fired Power Plants

53. The liberalization of the UK's power market unleashed a surge in new gas-fired power plant capacity additions during the 1990s. The so-called "dash for gas" led to a total of 9,500 megawatts of gas-fired capacity to be built between from 1990 to 1996. In December 1997, Britain's Energy Minister announced that his department was deferring decisions on outstanding applications to build gas-fired power plants.³⁹ This action, which put proposals for 27 plants in limbo, was justified by a concern over the country's long-term security of supply fuel diversity reduce excessive dependence on one fuel. However, employment considerations also loomed large and appeared to many as a stop gap measure to stem the end of the UK's coal industry.⁴⁰ In particular, the remaining high-priced, long-term coal supply contracts with power generators were due to expire the following spring. Anticipating that these contracts would be abandoned or renegotiated at a much lower price and shorter terms, the main mining company threatening to lay off 5,000 workers if the contracts were not renewed.

54. It is not clear if the action to could be actionable under the GATS. This would of course depend on what binding commitments the government had made and how the treatment of electricity as a good or a service is eventually resolved. The ban, which lasted until 2000, was made public before the EU gas and power directives were put into effect and therefore neither came play. In a narrow sense the action was non-discriminatory in that it applied to UK firms as well as to foreign firms seeking to build gas-fired generating plants. However, if energy services received comprehensive coverage under the GATS the action could have violated provisions against trade distorting subsidies. The moratorium on gas created an anti-competitive subsidy by favoring some energy service suppliers over others. Protections granted to coal had a negative effect on electricity marketers and energy service companies that were attempting to build a portfolio of assets compete in the increasingly competitive UK market. It also negatively affected integrated engineering and project management service providers who were denied business as well as firms involved in servicing new natural gas fields.⁴¹ It is therefore questionable if a blunt instruments like an outright ban was the least trade-restrictive means necessary to achieve the goal of protecting the domestic coal industry. This case reinforces the need within the context of WTO rulemaking to ensure that protectionist policies taken by governments cause no greater loss of economic welfare than is necessary.⁴²

Uncertainty and Escape Clauses

55. It has been observed that countries sometimes make binding commitments below their existing levels of liberalization. One example is the level of foreign equity participation permitted in commercial banks. The Philippine government made a binding commitment of only 51 percent even though domestic law allows 60 percent.⁴³ While this may be regrettable from the perspective of liberalization, under

³⁹ Chris Godsmark and Anthony Bevins, "Blair calls halt to gas-fired power stations as coal crisis mounts," *Independent*, December 4, 1997.

⁴⁰ Over a ten year period between 1984 to 1994, employment in the British coal industry fell from nearly 250,000 miners to only 7,000 in 1994. See David Newbery and Michael G. Pollitt, "The Restructuring and Privatization of the U.K. Electricity Supply- Was it Worth It? *Public Policy for the Private Sector*, World Bank, No. 124, September 1997.

⁴¹ David Wighton, "Ban on gas-fired stations set to proceed," *Financial Times*, September 14, 1998, p. 8.

⁴² Alan O. Sykes, "'Efficient Protection' through WTO Rulemaking," in Rodger Porter, et. al, eds, *Efficiency, Equity and Legitimacy: The Multilateral Trading System at the Millennium* (Washington, DC: The Brookings Institution, 2001), pp. 114-141.

⁴³ Aaditya Mattoo, "Financial Services and the WTO: Liberalization Commitments of the Developing and Transition Economies, *The World Economy*, Vol. 23, No. 3, March 2000, p.371.

committing is perfectly rational. Governments face considerable uncertainty with respect to liberalization. They can never foresee with one hundred percent accuracy the degree of future demands for more protection at home. They respond to this uncertainty by seeking flexibility.⁴⁴ They will do so whether or not they are acknowledged in the formal rules. The GATS does not have a formal emergency safeguard mechanism. However, as the financial services negotiations showed, governments like the Philippines will, in effect, define their own escape clauses.

56. How governments respond to uncertainty has direct relevance to the energy services and the GATS. The importance of energy in social, economic and security terms and some of the problems that have arisen as a result of energy liberalization programs in California and elsewhere, suggests that trade negotiators can approach negotiations in one of two ways. One way is to proceed as other sectors have proceeded without developing emergency safeguard measures. However, if this course is adopted, the results could very well be disappointing. Even if governments are fully convinced of the merits of opening their energy sectors to greater competition, the uncertainty about how energy liberalization will unfold and its key role that it plays in every economy, suggests that governments will seek to retain flexibility. Under the current GATS framework the only way this can be done is to either significantly under commit or to selectively commit. In order to move liberalization forward, it may be worth considering establishing special emergency safeguard measures for energy services. Operationalizing such measures is not an easy matter as some have been quick to point out, particularly if abuses of these measures are to be constrained.⁴⁵ Nevertheless, it may need to be considered in order to elicit more meaningful commitments in the area of energy services.

Conclusion

57. Energy markets are undergoing major change throughout the world as a result of privatization and market liberalization. The era of vertically integrated monopolies with clearly defined service territories and locked-in customers bases is giving way to more flexible and competitive market arrangements. This is true even for those countries that have chosen to retain public ownership of their oil, gas or electric utility companies. These changes are creating pressures to adjust not only domestic regulatory frameworks but also to establish international trade rules that harness the gains achieved through competitive markets. The interest shown by governments in negotiating GATS energy service disciplines reflects this new reality.

58. Previous GATS negotiations have had a major impact by triggering national debates on the optimality of national regulatory systems in important service sectors. The process of debate contributed to significant liberalization of domestic and foreign trade through domestic regulatory reforms. There is every reason to believe that the recently launched GATS energy services negotiations will do the same for the energy sector liberalization and international trade in energy services. The goal should be to devise trade disciplines that give energy service providers the broadest opportunity to provide their services on a non discriminatory basis. This will contribute toward generating the welfare gains associated with energy consumers have access to competitively produced, market-priced and reliable energy.

⁴⁴ B. Peter Rosendorff and Helen V. Milner, "The Optimal Design of International Trade Institutions: Uncertainty and Escape," *International Organization*, Vol. 55, No. 4, Autumn 2001, p. 831.

⁴⁵ Gilles Gauthier, Erin O'Brien and Susan Spencer, "Déjà Vu, or New Beginning for Safeguards and Subsidies Rules in Services Trade?" in Pierre Sauvé and Robert M. Stern, eds. *GATS 2000: New Directions in Services Trade Liberalization* (Washington DC: The Brookings Institution, 2000), pp. 165-183.