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INTRODUCTION

Chairman Brady, Ranking Member McDermott and distinguished members of the Committee, thank you for the opportunity to testify today on trade in energy services. This is a subject I feel is critically important because removing barriers to energy services creates the opportunity to grow the American economy – and increase jobs. We can do this by building multilateral trade commitments on energy services, which are lacking in the current World Trade Organization services agreement. We should also continue to provide commitments in U.S. FTAs to remove restrictions to energy services, including those that force localization. One specific step the United States should take is to develop a model international agreement to facilitate and increase the international movement of highly-trained energy services personnel, who are critical to operating power generation assets around the world.

APEC's recent success in capping tariffs on a list of 54 environmental goods shows progress can still be made on trade liberalization. The Office of the United States Trade Representative deserves high praise for launching this tariff capping initiative and achieving outstanding results. Similar efforts should now be undertaken on services, particularly energy services.

Just a moment of background about me: I was born and raised in Massachusetts. I attended the University of Vermont for my bachelor's degree in mechanical engineering and received my master's degree in management from Rensselaer Polytechnic Institute. I joined GE in 1996 as part of our Aviation business in Cincinnati, and for the past several years, I have held leadership roles with the services side of GE's energy portfolio.

In this statement, I will describe my Atlanta-based global organization – GE's Power Generation Services business, known as PGS. I will also discuss how PGS provides services from the United States across international borders or through a commercial presence abroad. Finally, I will discuss the challenges and opportunities my business faces and ways the Committee can help us overcome them.

GE'S ENERGY SERVICES – POWER GENERATION SERVICES

Energy services is a core component of GE, playing a crucial role in how our customers provide clean, efficient and reliable power to their consumers. My global business provides electric utilities with lifecycle services to support GE's heavy duty gas turbines, steam turbines, generators, control systems and related balance of plant equipment. This service support begins as soon as we install our equipment at the power plant and can last through the time the equipment is retired, which could be as long as 25 to 30 years. Our services can be transactional (on a case-by-case basis) or

contractual, multi-year agreements. We have approximately 600 contractual agreements, predominantly in the United States and Europe.

With our services, utilities can maximize the performance of their equipment, manage costs and reduce risks, ultimately operating their power plants more efficiently and delivering more reliable power to their customers. Our services span from contractual maintenance, equipment inspection and field engineering services to equipment repair, parts provisioning and remote plant monitoring and diagnostics. And we can customize solutions, depending on whether our customers want to install, upgrade, maintain or optimize their power generation facility.

My business has nearly 7,600 employees, working in more than 100 countries around the world — 4,100 of these employees are based in the United States. We have more than 50 GE facilities in 15 countries on 6 continents, as well as 9 joint ventures.

ENERGY SERVICES SUPPORT EXPORTS

The need to be global — and local — along with a technology revolution, has altered the way we think about energy services and the way we operate our global business. Our ability to be a large manufacturer in the United States is directly tied to the services we provide, and is a key reason our customers purchase power generation equipment from us. These factors offer opportunities and challenges.

Gas turbines are GE's — and the country's — biggest clean energy export. In the United States, we make large gas turbines in Greenville, South Carolina and export these turbines around the world. Greenville is one of GE's largest manufacturing facilities in the United States, employing more than 3,400 people. GE also manufactures steam turbines and generators in Schenectady, New York, employing more than 1,400 employees. We have more than 250 small and medium sized businesses in 24 states that feed into our supply chain. In the last two years, we exported 100% of the heavy duty gas and steam turbines we manufactured in the United States. Providing services for these turbines is a long-term, repeat business that helps to keep jobs in the United States. As part of our service offerings, we ship more than 5 million parts a year around the world from key centers in Atlanta, Georgia and Amsterdam in The Netherlands.

For example, GE's \$3 billion 7,000MW power generation agreement with the Government of Iraq includes exporting 22 gas turbines made in Greenville and a multi-year services agreement to install and maintain these turbines. GE's service capabilities helped secure the equipment orders, and in turn the services agreement will support U.S. jobs long after GE ships the last turbine. Under that services agreement, GE will send both components and people from the United States to the power plant sites over the agreement period.

EXAMPLES OF SERVICING POWER GENERATION ASSETS

I'd like to share a couple of examples to help illustrate what we do on a daily basis to deploy components or people to foreign countries rapidly, often times on very short notice.

Last year, on the island of Cyprus, four GE gas turbines were knocked out of service by a huge explosion at a nearby naval station. We quickly deployed a GE service team to perform repairs and supply parts within days of the disaster. We sent more than 200 repair engineers and other technicians, who repaired or replaced more than 10 major turbine components on site. We were able to get two turbines back in service less than a year after the accident.

In Nigeria, we helped a customer who was having problems with a steam turbine. The original equipment manufacturer wanted the customer to ship a component to Asia for repair, significantly delaying completion of the work. GE was able to provide an on-site solution by quickly negotiating critical logistics issues such as obtaining work permits and visas, and navigating international customs to ship equipment to the site. We were able to get the customer up and running in about six weeks.

We are also investing to provide better service to our customers locally. We have invested more than \$250 million in a new manufacturing technology center in Saudi Arabia that employs 400 people and has serviced 450 gas turbines that power the Kingdom. GE supports the generation of half of the Kingdom's electricity through more than 500 turbines installed at various sites. Many of these turbines were manufactured in the United States. The center also provides extended service to more than 50 key customers in Saudi Arabia and across the Middle East, Africa and Europe.

Another important area of energy services is what trade experts call "cross-border supply." My team provides international services from the United States without having to physically leave the country. From our Generation IQ™ Center in Atlanta, we monitor power generation assets 24 hours a day, seven days a week around the world. We collect more than 30,000 operating hours of data from a fleet of more than 1,500 deployed gas turbine, steam turbine and generator assets owned by utilities. Using a combination of tools, the team analyzes the data and diagnoses problems ranging from failed sensors to combustion system contamination ... all without leaving Atlanta.

SERVICES RESTRICTIONS

The examples of energy services I just provided demonstrate the importance of GE's ability to provide services globally. However, many countries enact restrictions that prevent or delay us from providing our services. Exports of service, unlike goods, often require the establishment of local offices or facilities to be commercially feasible, which means that the right of establishment (and other related rights) is critical.

The two restrictions that most impact my business and limit our ability to work abroad are, first, entry and visa requirements, and, second, forced local content requirements.

Moving Employees Across Borders

Today's global, competitive marketplace demands that companies like GE maintain capabilities to rapidly deploy highly-specialized energy services workers to job sites in countries other than their home country. My workforce is extremely dispersed and diverse. While many employees go to an

office or work from home, we have more than 1,200 field engineers located around the world, who work in a small service center or at a customer's remote power plant. We have more than 800 plant operations and maintenance specialists who work at a customer's site, and we have more than 2,000 technicians and specialists who travel the world to make repairs and install new parts, often times on a moment's notice. Entry requirements by host nations impede GE from rapidly deploying these workers and delay the host nation from receiving the services these workers provide.

Specifically, visa application, work permit and residential permit processes often hinder a company's ability to rapidly deploy these workers. For large corporations like GE, the international nature of this population further complicates lead-time requirements for entry into host nations. Given the specialized nature of the skills our energy services workers perform to maintain the thousands of products associated with GE's power generation equipment, it is not economically feasible to hire and sufficiently train skilled workers in each country to respond to the array of situations our workers and customers face at any given time.

For example, if a key power plant shuts down and electricity stops flowing to consumers, the host nation would require immediate repair services to get the plant running. If the equipment was purchased from an international supplier, it is likely the service workers would need to travel from abroad to conduct the emergency repair. This need could be considered an issue of national security for some situations. And the cost of the shutdown could easily exceed \$2 million per day for local businesses.

Forced Localization Measures

At GE, we believe local investments can help develop stable, prosperous economies and enhance shareholder value by expanding long-term business opportunities. GE operates in more than 100 countries and has more than 300,000 employees, so we know firsthand the benefits of being a responsible, locally-focused business. We have seen how governments can attract investments in local markets by putting policies and regulations in place to foster a dynamic, entrepreneurial business environment and to create "win-win" opportunities for investors, local businesses, employees and communities.

In recent years, however, numerous countries have imposed forced local content measures, which we believe are ineffective and inefficient, and should be avoided. Their widespread adoption may discourage foreign direct investments and inhibit economic growth. These requirements often disqualify high-quality, financially secure foreign contractors, ultimately dissuading local investments by manufacturing companies. These requirements can also undermine the sourcing practices these manufacturers use to ensure product quality and reliability. Local content requirements may also be inconsistent with the adopting countries' obligations under the World Trade Organization and other trade agreements.

For us in the energy services sector, forced local content measures appear in the form of laws requiring our workers to be nationals of the country imposing the law, requiring specific procedures

to take place within the country or requiring local partners or majority local ownership. Other, more insidious policies also restrict the provision of energy services by foreign companies, such as cumbersome approval processes and standard setting or certifications that do not recognize foreign service providers.

As I have mentioned, the ability of my Power Generation Services team to rapidly deploy energy services workers to locations around the world at a moment's notice ensures that power plants around the world have assets that are online and available — ultimately providing electricity to consumers. Our services allow us to help utilities maximize turbine and generator asset value, availability, reliability and flexibility. These depend on global free trade for services.

CHALLENGES AND SOLUTIONS FOR ENERGY SERVICES TRADE

We believe strongly in the power of free trade and open markets to strengthen the countries we trade with and invest in — supporting jobs, competitiveness, rule of law and better governance; and strengthening the United States overall.

Trade in services is a growing part of GE's business. In 2011, product services (energy infrastructure, aviation, transportation and healthcare) accounted for almost 30% of GE's total revenues, and this number continues to rise. As services grow in GE's portfolio of product offerings, we rely heavily on our ability to send employees at a moment's notice to locations around the world and to easily operate and sell these services globally.

The old "vision" of trade, where goods are sourced and built in one country, placed on a ship and sent to another country, simply doesn't reflect modern business. Today, trade happens through integrated global supply chains, and includes life-cycle commitments to servicing, maintaining and operating the goods across international borders.

Services are often "sourced" globally, and measures that interfere with global sourcing of services (whether by the US or other governments) hurt the commercial competitiveness of service providers. A recent World Trade Organization and Organization of Economic Cooperation and Development report found an increase of protectionist measures. From an anecdotal perspective, we see it too — whether its "indigenous innovation" policies in China, local content requirements in Nigeria or "Buy America" policies in the United States. It is bad policy, and it is growing.

In the long-term, we must establish a multilateral agreement on liberalized trade in energy services. In the short-term, the United States should push for the incorporation of meaningful measures and commitments in all FTAs and in plurilateral forums, such as APEC, to remove services restrictions. We should ensure the right of establishment for commercial services facilities through high-standard bilateral investment treaties. Finally, we should include in trade agreements a section to facilitate and speed movement of highly-trained energy services personnel between countries.

Thank you for the opportunity to speak before you today.