

EXTENSIONS OF REMARKS

INTRODUCTION OF THE ENERGY INDEPENDENCE ACT OF 2000

HON. JOHN B. LARSON

OF CONNECTICUT

IN THE HOUSE OF REPRESENTATIVES

Thursday, October 26, 2000

Mr. LARSON. Mr. Speaker, I rise today to introduce my bill, the Energy Independence Act, designed to ensure the energy self-sufficiency of the United States by the year 2010 through targeted investments in an emerging green energy technology called fuel cells.

We have before us, for the first time in human history, the technology to provide clean, reliable energy for every person, home, business, and vehicle in America. With this technology, we have the opportunity to end once and for all America's reliance on foreign energy sources while at the same time creating quality jobs for the next century in a new and expanding technological field.

The technology I refer to is called a fuel cell. This technology has been with us since it was first used to power the Gemini and Apollo spacecraft, and is still powering NASA's fleet of space shuttles. It has finally matured to a point where stationary power plants are providing reliable commercial power today and is prepared to demonstrate its advantages to the general public in clean, quiet, and efficient residential, bus, and car applications.

Current stationary fuel cell demonstrations within the Department of Defense have showed an energy cost savings of over \$3 million, and another unit in service at South County Hospital in Rhode Island is saving an estimated \$60,000 to \$90,000 in energy costs per year. Perhaps the most important attribute of stationary fuel cell power generators in the new, high tech economy is that they nearly eliminate brownouts and other power outages that disrupt the sophisticated and critical systems operating many businesses today. For example, at the First National Bank of Omaha in Nebraska, where milliseconds without power can mean millions of dollars in lost revenues, the stationary fuel cell installed as the major component of an integrated assured power system is helping to provide power at 99.9999 percent reliability, which is equal to a power interruption of one minute every six years.

The environmental benefits of this new technology are also astounding. For example, the PC25 stationary power plant, which is the only commercially available until today, has been installed at 29 Department of Defense facilities throughout the United States since 1995. These fuel cells are estimated to have eliminated 399 tons of SO_x, 159 tons of NO_x, and over 20,000 tons of CO₂. Compared to a typical combustion-based generator, each individual fuel cell unit eliminates more than 40,000 pounds of air pollutants, including NO_x and SO_x, as well as two million pounds of CO₂

emissions per year. Finally, fuel cells have the capability to cleanly process methane emissions from landfills and anaerobic digester gases from wastewater treatment facilities into energy, thereby preventing these harmful emissions from degrading the environment.

This technology presents us with an extraordinary opportunity, at a critical time in this country's development. As you are aware, the United States imported an average of nearly 11 million barrels of oil per day last year from foreign countries to meet our domestic energy needs, totaling nearly 4 billion barrels during all of 1999. Even at last year's comparatively modest average price of \$15 per barrel, that adds up to more than \$60 billion spent on foreign oil. With the average price of crude oil at about \$24 per barrel for just the first 5 months of 2000, Americans have already spent more than \$48 billion on imported oil, roughly 80 percent of what Americans paid during all of 1999. We must break this cycle of dependency, and strengthen our economy by turning this level of spending back to domestic sources.

The current oil crisis has served to remind us, after nearly two decades of complacency, how fragile the relationship is between our energy sources, the vitality of our economy, and the livelihood of every man, woman, and child in this country. The price of a barrel of crude oil reaches into every corner of our society, from affecting the cost of transporting food from our farms and ranches to the dinner table, to affecting the cost of each one of us traveling to and from work, to affecting our very survival at home during cold winter and hot summer months.

We stand now on a fundamental crossroad in this country. We have the ability to provide for the economic and national security of the nation by integrating this new technology into our economy. The elimination of noxious chemical emissions into our environment and the freedom of not being bound to existing energy producing monopolies represent a potential impact on our society in the next century as profound as any of the achievements of the 20th century, from the elimination of small pox and polio, to the development of the Internet, to human's first flights in space through which this technology was born. However, bold action is needed, with courage and vision to lead the way.

Over the next five years, my legislation would invest approximately 1/60 of the nation's total yearly expenditures on foreign oil to develop and demonstrate fuel cell technology that can power our homes, businesses, and vehicles. My bill calls for a \$1 billion 5-year investment that should eliminate our reliance on foreign energy sources by 2010 and improve world environmental conditions by reducing overall consumption of fossil fuels and the harmful chemical emissions they produce. Specifically, the Energy Independence Act:

Directs the Secretary of Energy to transmit to Congress within one year a strategic plan to

ensure the United States is energy self sufficient by the year 2010. Authorizes up to \$20 million for completion of this plan.

Authorizes a total of \$140 million over 3 years to establish a federal pilot program to purchase up to 100 commercially available 200 kW fuel cell power plants or up to 20 mW of power generated from commercially available fuel cell power plants for use at federally owned or operated facilities.

Gives site selection priority to sites that (1) are classified as non-attainment areas under Title I of the Clean Air Act; (2) have computer or electronic operations that are sensitive to power supply disruptions; (3) need a reliable uninterrupted power supply; (4) are in a remote location or have other factors requiring off-grid power generation; or (5) need to maintain critical manufacturing or other activities that support national security efforts.

Authorizes a total of \$140 million over 3 years to establish a program for the demonstration of fuel cell proton exchange membrane (PEM) technology in commercial, residential, and transportation applications.

Authorizes a total of \$150 over 3 years to establish a comprehensive Proton Exchange Membrane (PEM) Fuel Cell Bus Demonstration Program to address hydrogen production, storage, and use in transit bus applications.

Promotes the application of technology developments and improved manufacturing production and processes for proton exchange membrane (PEM) fuel cell technology.

Directs the various agencies of the federal government that maintain fleets of federal vehicles to develop plans to transition the fleets to incorporate fuel cell technology by 2010.

Directs that any life-cycle cost benefit analysis undertaken by a Federal agency with respect to investments in products, services, construction, and other projects shall include an analysis of environmental and power reliability factors.

Authorizes \$110 million per year for five years to establish a grant program for state and local governments (requiring a 10 percent non-federal funding match) to make investments for the use of fuel cell technology in meeting their energy requirements, including the fueling as a source of power for motor vehicles.

Just as steam power generated the first real industrial revolution in the 19th century, and power from fossil fuels generated the tremendous technological growth seen in the 20th century, fuel cells are ready to power the country and the world in the 21st century and beyond. This legislation is an important step in this process, and the government must play a role in this transition for several reasons. First and foremost, it will provide for the security of the country in both economic and military terms by eliminating our reliance on foreign energy sources. Second, we have a long-term responsibility to our seniors and to other people living on fixed incomes to see that they will

● This "bullet" symbol identifies statements or insertions which are not spoken by a Member of the Senate on the floor.

Matter set in this typeface indicates words inserted or appended, rather than spoken, by a Member of the House on the floor.

one day have an opportunity to live within their means without being forced to choose between putting food on their tables, gas in their cars, or buying oil to heat their homes. Third, there is the opportunity within the government's infrastructure to most easily begin a widespread integration of this technology. Fourth, the spread and use of this technology has the opportunity to create a contribution in economic growth and in job creation every bit as significant as the development of the high tech industry during the last decade. Finally, as government regulations increasingly call for stricter clean air and other pollution limits, fuel cells can provide an effective way for states and communities to meet these new environmental challenges.

Specifically, the federal government can take a leadership role in transitioning and commercializing this technology by using the powerful leverage of large volume government purchases of fuel cells to power government facilities, including federal housing facilities, as well as its fleets of vehicles. Further, given the significant amount of federal assistance to states and local communities for public transportation, the federal government can play an important role in helping communities meet their transportation needs and meet clean air requirements at the same time. State and local governments and organizations can take the lead on this as well, by integrating this new technology in community planning efforts and municipal transportation programs, and I have included a significant grant program to help local governments interested in participating in this endeavor.

We have the opportunity to provide leadership, solutions, and opportunities at this critical juncture in our nation's history that can profoundly improve the security and independence of every American, providing a safer, more secure, more productive, and cleaner environment for generations to come. We must not allow this opportunity to be lost.

IN HONOR OF DR. PAUL
GREENGARD, 2000 NOBEL PRIZE
WINNER IN MEDICINE

HON. CAROLYN B. MALONEY

OF NEW YORK

IN THE HOUSE OF REPRESENTATIVES

Thursday, October 26, 2000

Mrs. MALONEY of New York. Mr. Speaker, I enthusiastically honor today Dr. Paul Greengard, the 2000 Nobel Prize winner in medicine, who resides and teaches in my district. Dr. Greengard received the Nobel Prize for his discovery of how dopamine—a human neurotransmitter that controls one's movements, emotional responses, and ability to experience pleasure and pain—affects the central nervous system. His advancements in the field of neuroscience have greatly increased our understanding of the relationships between neurobiological chemicals and some of the world's most widespread neurological disorders, such as Parkinson's Disease, Alzheimer's Disease, and Schizophrenia. Such an achievement is one I hold in tremendous regard and I truly hope my colleagues recognize the importance of Dr. Greengard's groundbreaking discovery.

Neurological diseases touch most every human being in some way. As the founder and Co-Chair of the Congressional Working Group on Parkinson's Disease, I am especially spirited by Dr. Greengard's research. I sincerely hope that medical and academic professionals, buoyed by Dr. Greengard's achievements, continue their pursuit of uncovering the causes of the most pressing neurological disorders.

Dr. Greengard is a genuinely fascinating individual. He currently serves as the head of the Laboratory of Molecular and Cellular Neuroscience at The Rockefeller University in New York City and is the director of the Zachary and Elizabeth M. Fisher Center for Research on Alzheimer's Disease, also at Rockefeller. The Fisher Center, where I serve as a member of the Board of Trustees alongside Fisher CEO Michael Stern, is an extraordinarily valuable research center where Dr. Greengard has made pioneering discoveries in neuroscience which provide a more conceptual understanding of how the nervous system functions at the molecular level. His research into the abnormalities associated with Dopamine serves as a window through which scientists can examine the effects that Dopamine has on psychiatric disorders of human beings, such as substance abuse and Attention Deficit Disorder.

Dr. Greengard has dedicated his life to scientific exploration. Since 1953, when he received his Ph.D. in biophysics from Johns Hopkins University, Dr. Greengard has worked as a scientific professional in every sense of the word. From his days as a scholar at Cambridge University in London, and years as a professor of pharmacology at Yale University, Dr. Greengard has possessed a passion for knowledge into the scientific basis of human existence. His life is nothing short of an admirable testament to the joy of scholarship and the rewards of knowledge.

Mr. Speaker, I am immeasurably proud to have such an esteemed American living and working within my district. Dr. Greengard's Nobel Prize is a well-deserved honor and a tremendous reward for his dedication and tireless pursuit of scientific truth.

MYRTLE HILL CEMETERY AND
THE TOMB OF THE KNOWN SOLDIER,
ROME, GEORGIA

HON. BOB BARR

OF GEORGIA

IN THE HOUSE OF REPRESENTATIVES

Thursday, October 26, 2000

Mr. BARR of Georgia. Mr. Speaker, one of the most beautiful cemeteries in the nation sits atop Myrtle Hill in Rome, Georgia, where the Etowah and Oostanaula rivers come together. The cemetery was opened in 1857 and is a National Register site. It is the resting place for more than 20,000 people who have shaped Georgia's history. The hill was purchased from Shorter College founder Alfred Shorter. The historic significance of the cemetery, combined with its beauty, makes it one of the most unique in the world.

In one corner of the cemetery is a monument to General John Sevier, a Revolutionary

War hero. During the Civil War almost 400 men were buried in the cemetery. Their graves, at the base of the hill near the entrance, are a silent tribute to the men, both Union and Confederate, who made the ultimate sacrifice. In 1901, the Xavier Chapter of the Daughters of American Revolution erected a monument in honor of General Sevier, and the marker is located in the southwest corner of the cemetery. A Confederate monument atop Myrtle Hill was erected by the Women of Rome as a memorial to the soldiers from Floyd County who lost their lives in defense of the Confederate States of America. A monument erected by the United Daughters of the Confederacy to the memory of General Nathan Forest for his bravery and valor in protecting the city from a siege by the Yankees also stands in the cemetery. There are 377 Confederate soldiers, both from the north and south, who lost their lives while here or who were originally from Rome.

Ellen Axon Wilson, first wife of President Woodrow Wilson, and who was a native of Rome is buried at Myrtle Hill. She is the only First Lady to be buried in the State of Georgia.

After the First World War, Charles Graves, an infantryman from Rome, in the American Expeditionary Force, was killed near the French-German border. On October 15, 1918, he was given military honors and buried in France. In March 1922, his remains were returned to U.S. soil. The American people thought something should be done to prevent wars, and the notion of honoring an Unknown Soldier and a Known Soldier, was developed. An Unknown Soldier was selected in France, and his body was enshrined in Arlington National Cemetery in Washington in 1932.

It was decided that one of the bodies from the final troopship would be selected as the Known Soldier. A sailor was blindfolded, asked to run his hand down a long roster of names and when his finger stopped on one name, that one would become America's Known Soldier of the World War. The moving finger stopped on the name of Charles W. Graves of Rome, Georgia. However, his mother preferred to have his remains brought home to Rome, rather than be interred at Arlington. Charles Graves' coffin was taken from the troopship with special care, covered with the American flag, and carefully placed on a special carriage drawn by six white horses. An honor guard, made up of U.S. Army generals, accompanied his coffin down the streets of New York City. Admirals of the Navy, Generals of the Marines, Governors from various U.S. States, five U.S. Senators, four Representatives of Congress, the Secretary of War, and the Mayor of New York, all watched as thousands of soldiers, veterans, dignitaries, and Gold Star mothers descended upon the city. When the coffin finally stopped, President Warren G. Harding spoke about Charles Graves and all the others who had paid the ultimate price for freedom.

When the ceremonies were complete, the body of Charles Graves was loaded onto a southbound train and a day later it pulled into Rome. He was buried in a small cemetery outside of Rome. After his mother's death, the body was moved to Myrtle Hill Cemetery; where it has been to this day. Thirty-four magnolia trees were planted around the grave to