NATIONAL ENERGY POLICY GOALS PROCLAMATION
111TH CONGRESS

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We, the leaders of America's engineering community, call on the new President and Congress to act quickly on establishing National Energy Policy Goals to help ensure the nation's economic and national security and to guide the development of energy technology for the 21st Century.

GUIDING PRINCIPLES

America's National Energy Policy Goals should be based on these guiding principles:

1. An adequate, sustainable, environmentally acceptable and economically viable supply of energy is essential for the economic growth and national security of the United States.
2. The United States must further develop and maintain a balanced portfolio of energy sources, including coal, petroleum, nuclear, natural gas, solar, wind, geothermal, biomass and hydroelectric power.
3. Sustained and long-term federal investment is required for accelerating the implementation of best available energy technologies and development of new technologies for transportation, heating, cooling and electric power generation.
4. The nation must strongly encourage energy conservation and increase the efficient use of all energy resources.
5. The nation's dependence on petroleum must be reduced by increasing supplies of non-petroleum-derived fuels, increasing automotive fuel efficiencies, and maximizing electrification of the transportation sector.
6. Any comprehensive national energy strategy should incorporate carbon mitigation and adaptation.

NATIONAL ENERGY POLICY GOALS

We recommend the following National Energy Policy Goals:

MAXIMIZE THE USE OF ELECTRIC POWER GENERATED BY SUSTAINABLE, ECONOMIC AND ENVIRONMENTALLY-ACCEPTABLE TECHNOLOGIES.

Today, petroleum based products such as gasoline and diesel fuels are the primary energy sources for transportation. Natural gas and fuel oil are the primary energy sources to heat our homes and businesses. Because of expanding use of these resources around the world, the limitation of available supplies, and concerns related to the emission of combustion products on the environment, the United States should maximize the use of electricity generated by new sustainable, economic and environmentally-acceptable technologies.

MODERNIZE THE NATION'S ELECTRIC TRANSMISSION GRID.

The electric grid that exists in the country today has served us well for decades. A redesigned and engineered system is needed that builds on the grid that is in place and makes use of the most advanced control technology available. The new design must support bringing electricity generated by new sustainable, economic and environmentally-acceptable technologies to load centers around the country.

MAXIMIZE ELECTRIFICATION OF THE TRANSPORTATION SECTOR.

The transportation sector is dependent on the use of liquid fuels which are primarily derived from petroleum. Because petroleum resources are limited, the replacement of petroleum-derived fuels is necessary if we are to maintain a modern transportation system. Electricity is one of the energy sources that can be used both by on board storage using battery technology and by continuous connection such as electrified public transportation.

ESTABLISH VISIBLE AND SUBSTANTIAL NATIONAL ENERGY EFFICIENCY AND CONSERVATION GOALS.

Energy efficiency and conservation represent the least expensive, lowest risk, and most effective means of immediately reducing energy consumption and our dependence on fossil fuels. Quantitative national energy efficiency goals and incentives should be established with an emphasis on the transportation sector and commercial and residential buildings.

EMPLOY INDIGENOUS RAW MATERIALS TO MANUFACTURE LIQUID AND GASEOUS FUELS.

Since some systems will continue to require liquid fuels for the foreseeable future, the manufacture of liquid replacements for petroleum will be required. These liquids can be manufactured from crops grown specifically for that purpose and also from indigenous resources such as coal using current technologies and new and more efficient processes developed by further research.

BUILD AND DEPLOY GENERATING CAPACITY TO SUPPLY RELIABLE ELECTRIC SERVICE.

Capacity is the amount of electricity the system can provide at any given time and it must be sufficient to reliably provide all the power required even at times of peak demand. Growth in capacity will be required to accommodate economic growth and increased electrification of the transportation system. The need for additional capacity can be limited by reduced usage through conservation and increases in efficiency and system capacity can be increased by the construction and operation of new generating systems.

PROVIDE A LONG-TERM COMMITMENT TO ENERGY RESEARCH, DEVELOPMENT AND DEMONSTRATION.

As the primary supporter of high-risk, high-potential basic research, the federal government should embark on a significant effort to identify and develop the next generations of energy technologies. The government should launch bold research initiatives in promising new technologies such as plasma, fusion energy sciences, carbon sequestration and hydrogen, and continue support to the point where a determination of commercial feasibility is possible.

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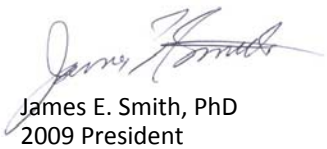

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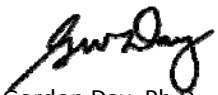

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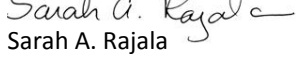

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