Setting Standards for Excellence

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Vice President, Government Relations

December 11, 2008

The Honorable Jeff Bingaman
Chairman
Committee on Energy and Natural Resources
United States Senate
Room 703 Hart Senate Office Building
Washington, DC 20510

cc: Members of the Committee

RE: Investments in Clean Energy and Economic Stimulus Recommendations

Dear Chairman Bingaman:

I am writing to encourage that the inclusion of energy infrastructure and efficiency projects as a pillar of the infrastructure stimulus bill. Our electrical system powers today's digital economy and will enable tomorrow's green energy. To fully realize its potential, however, the backbone of our grid will require a significant overhaul. We have included several of these necessary steps in this letter.

Energy infrastructure upgrades are well-suited as a stimulus measure because they generate short-term labor needs and long-term benefits. The deployment and installation of these technologies will require a wide range of skill sets, including assemblers, laborers, contractors, mechanics, and engineers. The work force capabilities needed for an energy infrastructure build-out will remain relevant as the United States provides efficiency and clean energy solutions to the rest of the world. After the projects are completed, the reinforcement of our grid will provide the engineering feasibility to accomplish policy goals such as energy independence and carbon reduction. Efficiency improvements will continue to pay dividends as savings from reduced energy expenses can be reallocated to other priorities.

The National Electrical Manufacturers Association (NEMA) represents 430 manufacturers who produce equipment used in the generation, transmission, distribution, control, and end-use of electricity. These products include a broad range of electrical equipment that are installed in utility, industrial, commercial, residential, medical, and institutional markets representing some 400,000 jobs and nearly $100 billion in domestic shipments. On behalf of NEMA members and their employees, I urge your support for these programs in any economic stimulus package considered by Congress.

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Existing Authorized Programs

To accelerate employment benefits and reduce the administrative burden of creating new programs, NEMA recommends immediate funding of the following existing programs from the Energy Independence and Security Act of 2007:

Energy Efficiency and Conservation Block Grants, EISA 2007 Sec. 541.

These grants help state and local governments to improve energy efficiency and reduce greenhouse gas emissions. An EPA study found that upgrades to lighting, HVAC, building controls, and operational practices can decrease office building energy costs by as much as 30%. As local governments struggle to balance budgets, federal aid can help support local employment while reducing long-term building energy consumption.
Authorization: $2 billion annually through 2012

Energy Sustainability and Efficiency Grants and Loans, EISA 2007 Sec. 471.

These grants and loans help institutions such as universities, public schools, or local governments to pursue projects that improve energy efficiency, utilize renewable generation, engage students, and reduce emissions. This program can be used to simultaneously teach energy concepts to students while improving the energy performance of their school buildings.
Authorization: $250 million in grants and $500 million in loans annually through 2013

Smart Grid Demonstration Projects, EISA 2007 Sec. 1304 and
Energy Storage Research and Demonstration, EISA 2007 Sec 641

These programs will help demonstrate the feasibility of next-generation grid technologies that will be necessary to support large renewable generators and plug-in hybrid electric vehicles. As both programs incorporate cost-sharing and geographic diversity criteria, they are an efficient way to draw out private capital for large projects. In particular, the Smart Grid projects must be regional, potentially bringing improved service quality to multiple utility service areas. The greatest obstacle to both wind and solar power is the need to transit from remote locations to populated areas on a grid that is able to handle variable power sources.
Authorization: $100 million annually through 2012 for Smart Grid, $295 million annually through 2018 for Storage

Smart Grid Investment Matching Fund, EISA 2007 Sec. 1306

Funding and implementation of the 20% matching fund for smart grid technologies would jump start the installation of advanced technologies that are on the cusp of being commercially viable. Smart Grid technologies will help connect renewable generators, enable customers to automate energy-saving measures, and prepare for plug-in hybrid electric vehicles. The provision in EISA has a built-in sunset period in 2012.
Estimated Cost: $1.3 billion annually through 2012

Demonstration Grant Program for Local Governments, EISA 2007 Sec. 493

The EPA is authorized to help local governments deploy cost-effective energy savings technologies and strategies, with a goal of reducing energy consumption by 40%. The matching grants would be used to train workers and retrofit existing buildings.
Authorization $20 million through 2012 (but should be increased 2-10 times)

High Performance Federal Buildings
The new administration should ensure that existing programs to decrease energy and fossil fuel consumption remain on track and acclerated through the transition. These programs include energy reduction goals (Sec. 431), a 55% fossil fuel reduction by 2010 for new buildings (Sec. 433), the high performance green federal buildings program (Sec. 436), and the technology acceleration program (Sec. 439). These programs should incorporate the use of efficient technologies, such as high efficiency lighting and controls, building automation controls, and NEMA Premium motors and distribution transformers, to help federal agencies meet these energy targets.

Solid State Lighting Research and Deployment, EPACT 2005, Section 912
Fully fund the research, development, demonstration, and commercialization activities for solid state lighting (i.e., LED and OLED) at the Department of Energy authorized by EPACT 2005. Advances in LED lighting need to be accelerated so that this highly efficient light source and new luminaires (light fixtures) can be brought to market faster resulting in significant energy and environmental benefits (e.g., no mercury). Commercialization activity includes DOE management of a new Energy Star program and specifications for LED lighting. LED lighting represents the single biggest opportunity in reducing energy use from lighting (nearly 22% of all electricity is used for lighting in homes, businesses, workplaces, roadways).
Authorization: $50 million annually through 2012.

Additional or New Programs
In addition to direct investment in technology, the federal government can encourage private investment in commercially-available efficiency improvements through tax and policy incentives.

Refundable and Extension of Renewable Production Tax Credits
By enabling refunds on the PTC, renewable energy developers could proceed with projects with more independence from distressed Wall Street banks. Many renewable projects have the necessary regulatory approval but are delayed pending access to capital. An eight-year extension for all renewable PTCs would also help address investor uncertainty.

Accelerated Depreciation for Clean Energy Equipment Investments
Speeding up the expensing of new energy-efficient technology investments is critical to stimulating demand for the equipment and in deploying state-of-the-art technologies. Accelerated depreciation for NEMA Premium motor-driven systems using adjustable speed drives and for deployment of new utility electrical distribution equipment.

Efficient Motors Tax Credit
As included in the Food and Energy Security Act of 2007 (Section 12409), this tax credit would speed adoption of highly-efficient electric motors. Businesses and individuals trying to cut both capital and energy costs can be motivated to do both with a tax credit. Investment in new motors today can lock in carbon emission reductions and help make domestic agriculture and manufacturing facilities more competitive.
Estimated Cost: Less than $100 million total through 2010

Efficient Distribution Transformers Tax Credit
A tax credit would speed adoption of highly-efficient distribution transformers. Utilities would be motivated to swap out old transformers with NEMA Premium Efficiency Transformers, which would reduce the amount of electricity lost in the distribution system. Investment in new transformers today can lock in carbon emission reductions and help reduce overall electricity costs.

Extension of Bonus Depreciation
The Economic Stimulus Act of 2008 provided for a fifty percent (50%) first-year bonus depreciation for business assets contracted for in 2008 and placed in service in 2008, or, for assets with an expected lifetime of 10-20 years, placed in-service in 2008 or 2009. Many companies have found it difficult to make large capital decisions before the expiration of the provision. For example, before an investor-owned utility can commit to significant transmission equipment upgrade, it must seek regulatory approval which adds significant lead time beyond the utility's control. A one-year extension of the contract date and two years for the in-service date will create jobs from the production and installation of new equipment, and provide long-term economic benefit as a result of improved infrastructure.
Estimated Cost: $7 billion total cost

Federal and Military Facility Efficiency Improvements
A fund for federal agencies and the military would help them install energy efficiency and clean distributed energy in federal buildings, required by provisions in EISA 2007. Federal agencies need funds for comprehensive energy efficiency improvements and should use those funds to leverage additional improvements via private sector Energy Performance Service Contracts (see below). Administration should be at the Federal Energy Management Program of the DOE.

Clear the $1.3 Billion Pipeline of ESPC Projects
The new Administration should direct FEMP to clear the project backlog of $1.3 billion in Energy Service Performance Contracts, which provide agencies with efficiency upgrades and retrofits in return for a share of the energy savings. To accelerate activity, the treasury could provide a 25 percent match if projects are implemented within 24 months. As precedent, in 2006 FEMP implemented more than $400 million in projects in a concerted six-to-nine-month burst. Congress should clarify that the ESPC mechanism can help fund new construction as well as retrofits of existing buildings.

Energy Efficient Lighting Fixtures and Bulbs in Public Buildings
EISA 2007, Sec. 323, directs GSA to equip public buildings with, to the maximum extent feasible, energy efficient lighting fixtures and bulbs. An October 31, 2008 letter from the Government Accountability Office cites GSA officials' view that a "limited availability of capital" is "the principal barrier" to making upgrades that would improve energy conservation. GSA should be provided with funding above current appropriations to enable and accelerate the deployment of energy efficient lighting throughout its 175 million square feet of owned space. Such technologies include light-emitting diode (LED) lighting, smaller diameter linear fluorescent and new metal halide lighting, all of which are manufactured in the U.S.
Estimated Cost: $500 million

Energy Efficient Commercial Buildings Tax Deduction
An increase in the tax deduction for efficient technologies would appropriately address the slowdown in commercial building construction. The current Energy Efficient Commercial Building Deduction now in effect through December 31, 2013 should be increased from the current $1.80 per square foot to a minimum of $2.25 per square foot, with $3.00 preferred. The increase in the deduction would not only stimulate demand for energy efficient lighting, HVAC/hot water, and building insulation, but also support commercial construction and smart, efficient buildings.

Conclusion
Energy infrastructure investments score treble benefits. First, they generate an immediate need for labor, from entry-level to highly skilled. Second, the projects will provide a reliable and efficient electrical backbone necessary for low-carbon economic growth. Finally, the workforce will be left with skills and experience in a high-tech, clean energy economy.

NEMA membership are energy solution providers, and we stand ready to assist the Congress and the new Administration in advancing the deployment and use of clean, green, energy-efficient technologies, and sound policies to stimulate and support economic recovery and growth.

Sincerely,

Kyle Pitson

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