

ONE HUNDRED THIRTEENTH CONGRESS
Congress of the United States
House of Representatives
COMMITTEE ON ENERGY AND COMMERCE
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MEMORANDUM

September 16, 2014

To: Subcommittee on Energy and Power Democratic Members and Staff

Fr: Committee on Energy and Commerce Democratic Staff

Re: Hearing on H.R. 4526, the “21st Century Energy Workforce Development Jobs Initiative Act of 2014”

On Wednesday, September 17, 2014, at 10:00 a.m. in room 2322 of the Rayburn House Office Building, the Subcommittee on Energy and Power will hold a hearing on H.R. 4526, the “21st Century Energy Workforce Development Jobs Initiative Act of 2014,” introduced by Rep. Bobby L. Rush.

I. BACKGROUND

A. Minority Participation in the U.S. Labor Force

Historically, there has been a consistent gap in employment rates and earnings between whites and racial minorities in the U.S labor force. The Bureau of Labor Statistics (BLS) August 2014 jobs report found that the unemployment rate for African Americans (11.4 %) was more than twice that for whites (5.3%). Hispanics had a 7.5% jobless rate.¹

The federal government supports several programs that aim to improve access to jobs training and employment opportunities for disadvantaged workers. In 2013, the Department of Energy (DOE) launched the “Minorities in Energy Initiative” to increase the participation of minorities and minority businesses in energy sector careers and business opportunities. The initiative, led by the DOE’s Office of Economic Impact and Diversity, has brought together stakeholders from business, academia, non-profits and government to develop strategies to better engage minorities in the energy sector. Stakeholders have identified three key areas of focus:

¹ U.S. Department of Labor, Bureau of Labor Statistics, *The Employment Situation – August 2014* (Sept. 5, 2014) (online at www.bls.gov/news.release/empsit.nr0.htm).

STEM Education/Workforce Development; Energy Economic Development; and Climate Change.²

Minorities have been vastly underrepresented in the science, technology, engineering and math (STEM) fields, which include some of the fast-growing and most promising industries in the world. While African Americans, Hispanics, and Native Americans represent 24% of the overall workforce, they make up only 9% of the U.S. science and engineering workforce.³ Although the U.S. had nearly 8.2 million STEM workers last year, U.S. businesses have repeatedly voiced concerns over the short supply and availability of qualified STEM workers and the untapped potential for job opportunities for American workers in these fields.

B. U.S. Energy Job Opportunities

The energy industry is the third largest industry in the U.S. and is projected to continue to grow.⁴ An estimated 60% of energy sector job growth will occur in skilled and technical jobs requiring up to two years of post-high school training.⁵ Many of these jobs will occur in the clean energy sector.

In recent years, clean energy industries have grown steadily in the United States, with thriving companies in all technology subsectors, including the energy efficiency, solar, wind, geothermal, hydropower, biomass, and biofuels sectors. In 2013, BLS reported that employment associated with the production of “green goods and services”— goods and services that benefit the environment or conserve natural resources – totaled more than 3.4 million in the fourth quarter of 2011. BLS discontinued green jobs reporting due to 2013 sequestration budget cuts.⁶

The clean energy sector offers the potential for significant job opportunities for minority workers. These jobs include manufacturing, construction, information technology and computer software design, engineering, sales and marketing, and operations and maintenance. Many of these jobs will support workers in industries hit hard by the recession, particularly construction, with positions that cannot be offshored because they involve installation and the building trades.

² U.S. Department of Energy, *Executive Summary: September 24, 2013 Kick Off of the Minorities in Energy Initiative* (online at energy.gov/sites/prod/files/2013/11/f5/executive%20summary.pdf).

³ *Id.*

⁴ U.S. Department of Commerce, SelectUSA, *The Energy Industry in the United States* (online at selectusa.commerce.gov/industry-snapshots/energy-industry-united-states) (accessed Sept. 16, 2014).

⁵ U.S. Department of Energy, *Executive Summary: September 24, 2013 Kick Off of the Minorities in Energy Initiative* (online at energy.gov/sites/prod/files/2013/11/f5/executive%20summary.pdf).

⁶ U.S. Department of Labor, Bureau of Labor Statistics, *Employment in Green Goods and Services – 2011* (Mar. 19, 2013) (online at www.bls.gov/news.release/pdf/ggqcew.pdf).

1. Solar Energy

Since 2010, the solar industry has grown by over 50% and added 50,000 new jobs. In 2013, there were over 142,000 workers throughout the solar industry supply chain in the United States. Leading this growth was solar installation jobs, which employed nearly 70,000 workers nationwide and paid an average of \$23.63 per hour (comparable to wages earned by skilled electricians and plumbers and higher than average rates for roofers and construction workers).⁷ BLS projects that employment of solar installers is projected to grow 24% from 2012 to 2022, much faster than the average for all occupations.⁸ Jobs in solar manufacturing, sales and distribution, and project development are also projected to grow. Many of these solar jobs are in urban areas, which often have substantial minority populations.

2. Wind Energy

Wind turbines are complex machines composed of some 8,000 components. Turbine manufacturing involves an extensive supply chain, and the construction, operation and maintenance of a wind-farm project requires a large number of workers. In 2012, wind energy development employed 75,000 full-time workers across the United States, including 30,000 jobs at manufacturing facilities throughout the country. Eight of the ten largest global wind turbine makers selling in the United States have factories here, up from just one in 2004.⁹ BLS projects that jobs in the wind industry will continue to be available to people with a broad range of education and experience levels, from machinists in manufacturing factories to technicians working on wind farms every day. These positions average salaries between \$30,000 to nearly \$90,000 annually.¹⁰

3. Energy Efficiency

There are significant gains to be made in achieving greater energy efficiency in U.S. buildings, appliances and lighting, and industrial facilities. According to the American Council for an Energy-Efficient Economy (ACEEE), the United States economy could support 1.3 to 1.9 million jobs by 2050 through the deployment of existing and more advanced energy efficient

⁷ Solar Foundation, *National Solar Jobs Census 2013* (Jan. 2014) (online at www.thesolarfoundation.org/sites/thesolarfoundation.org/files/TSF%20Solar%20Jobs%20Census%202013.pdf).

⁸ U.S. Department of Labor, Bureau of Labor Statistics, *Occupational Outlook Handbook: Solar Photovoltaic Installers* (Jan. 8, 2014) (online at www.bls.gov/ooh/construction-and-extraction/solar-photovoltaic-installers.htm).

⁹ Governors' Wind Energy Coalition, *Renewable Electricity Standards: State Success Stories* (Mar. 2013) (online at www.governorswindenergycoalition.org/wp-content/uploads/2013/03/RES-White-Paper-March-2013.pdf).

¹⁰ U.S. Department of Labor, Bureau of Labor Statistics, *Careers in Wind Energy* (Sept. 2010) (online at www.bls.gov/green/wind_energy/).

technologies.¹¹ Examples of energy efficiency job opportunities include energy auditors, insulation and weatherization technicians, electricians, heating/conditioning installers, building inspectors, civil engineers, green construction and architecture, and manufacturers, distributors, and salespeople of energy efficient products.

Many cities and states have implemented energy efficiency programs as a way to support jobs and economic development in construction and related energy services, which are very labor-intensive sectors of the economy. For example, Massachusetts has a long record of success in implementing energy efficiency programs. Following Massachusetts's enactment of the Green Communities Act of 2008, the state's investments in energy efficiency have increased funding for more efficient material and appliances for new construction projects and created job opportunities in building auditing, retrofit services for residential homes (window and door treatments, and insulation), residential lighting and appliance change-outs, lighting and equipment upgrades for commercial buildings.. A 2014 study found that in the first six years of implementation, the law produced \$1.2 billion in net economic benefits and more than 16,000 jobs.¹²

4. Oil and Gas

A recent report released by the American Petroleum Institute projects that, by 2030, the oil and natural gas industry will create over 800,000 new job opportunities, with most of the job potential growth (417,000 jobs) expected to occur in the Gulf region. The report estimates that the share of African American and Hispanic employment in the industry is expected to rise from one quarter in 2010 to one third in 2030.¹³

II. H.R. 4526, THE 21st CENTURY ENERGY WORKFORCE DEVELOPMENT JOBS INITIATIVE ACT OF 2014

H.R. 4526 directs the Secretary of Energy to establish a new program to improve the education and training of minority workers for energy-related jobs. Elements of this new program include:

- Direct assistance (including grants, technical expertise, mentorships, and partnerships) to community colleges, workforce development organizations, and minority-serving institutions.

¹¹ American Council for an Energy-Efficient Economy, *Energy Efficiency Job Creation: Real World Experiences* (Oct. 2012) (online at aceee.org/files/pdf/white-paper/energy-efficiency-job-creation.pdf).

¹² Analysis Group, *The Impacts of the Green Communities Act on the Massachusetts Economy: A Review of the First Six Years of the Act's Implementation* (Mar. 4, 2014) (online at www.analysisgroup.com/uploadedFiles/Publishing/Articles/Analysis_Group_GCA_Study.pdf).

¹³ IHS Global Inc. prepared for the American Petroleum Institute, *Minority and Female Employment in the Oil & Gas and Petrochemical Industries* (Mar. 2014) (online at www.api.org/~media/Files/Policy/Jobs/IHS-Minority-and-Female-Employment-Report.pdf).

- Establishment of a clearinghouse of information and resources on training and workforce development programs for energy-related jobs.
- Collaboration with schools, community colleges, universities, workforce training organizations, national laboratories, unions, state energy offices, and the energy industry to develop and implement energy-related training programs.
- Collaboration with the Secretaries of Labor and Education to develop educational guidelines for institutions of all levels – from elementary to post-graduate university programs – to help provide students with the skills necessary to work in energy-related jobs, including energy efficiency and conservation initiatives.
- Outreach to minority-serving educational institutions, with the objective of increasing the number of minorities and women trained to work in the energy sector.
- Collaboration with the energy industry to develop a workforce trained to work in various energy industry sectors, including oil and gas, coal, nuclear, utility, pipeline, alternative fuels, renewable, and energy efficiency.
- Collaboration with organized labor and community-based workforce organizations to help identify students and other candidates, including from historically underserved communities such as minorities, women, and veterans, to enroll into training and apprenticeship programs for energy-related jobs.

III. WITNESSES

The following witnesses have been invited to testify:

The Honorable LaDoris Harris

Director of the Office of Economic Impact and Diversity
Department of Energy

Mr. Harry Alford

President and Chief Executive Officer
National Black Chamber of Commerce

Dr. Jim Barrett

Chief Economist
American Council for an Energy-Efficient Economy

Ms. Paula Jackson

President
American Association of Blacks in Energy

Mr. Jack Gerard
President and Chief Executive Officer
American Petroleum Institute