

September 15, 2014

H.R. 4526 “21st Century Energy Workforce Development Jobs Initiative Act of 2014”

Testimony by: Paula R. Jackson, President and CEO, the American Association of Blacks in Energy

Subcommittee on Energy and Power

Hearing on September 17, 2014

My name is Paula R. Jackson and I am the president and CEO of the American Association of Blacks in Energy. The American Association of Blacks in Energy is a national association of energy professionals founded and dedicated to The American Association of Blacks in Energy (AABE®) is a national association of energy professionals founded and dedicated to ensure the input of African Americans and other minorities into the discussions and developments of energy policies, regulations, R&D technologies, and environmental issues. Our membership of energy professionals is committed to building a cadre of young African American leaders for the energy industry.

The association fully supports H.R. 4526 “21st Century Energy Workforce Development Jobs Initiative Act of 2014” For more than 35 years we have been working diligently to educate and inform our communities about the opportunities in the energy industry. While we have had some success in this work, we recognize that there is much work to be done. This bill brings together all the key stakeholders to develop and curriculum and framework which will significantly move the needle at a time where our nation’s energy economy is growing and with that more opportunities become available.

Additionally, changes in the industry from grid modernization, higher demand for electricity, an aging workforce and adoption of new technology along with a changing demographic in this country has made the industry look closely at its workforce pipeline. In response the electric and natural gas utility industry formed the Center for Energy Workforce

Development (CEWD). CEWD is a non-profit consortium of electric natural gas and nuclear utilities and their associations - Edison Electric Institute, American Gas Association, Nuclear Energy Institute, and National Rural Electric Cooperative Association formed to help utilities work together to develop solutions to the coming workforce shortage in the utility industry. The organization partners with secondary and post-secondary educational institutions and the workforce system to create workable solutions to address the need for a qualified, diverse workforce. Additionally CEWD has established a partnership with the International Brotherhood of Electrical Workers because such a large part of the utility workforce that is represented by the union.

A 2013 workforce survey report issued by the CEWD entitled, “Gaps in the Energy Workforce Pipeline”, estimates almost 55% of the workforce may need to be replaced in the next 6-10 years. In whole numbers, there would be 76,500 potential replacements from 2013 – 2017 and 27,900 potential replacements from 2018 – 2022. These replacements are in job categories such as lineworkers, technicians, plant operators and engineers. It is important to note that these are all non-nuclear replacements. (Gaps in the Energy Workforce Pipeline 2013 Survey Results Executive Summary, p. 3)

At the same time the oil and natural gas industry through its association, the American Petroleum Institute also recognizes that increased domestic resources and an aging workforce presents opportunities to increase the participation of minorities in the industry. API has issued two reports: Minority and Female Employment in the Oil & Gas and Petrochemical Industries and Employment Outlook for African Americans and Latinos in the Upstream Oil and Natural Gas Industry which highlight the projected job growth in the industry (955,000 direct jobs and 500,000 respectively) and the potential participation of African Americans, Hispanics and women.

While the opportunities in the industry continue to increase, the demographics of our country are changing making it important that minorities are increasingly a part of the pipeline. In the 2012 The U.S. Census Bureau estimated showing that 50.4 percent of our nation's population younger than age 1 were minorities as of July 1, 2011 which is up from 49.5 percent

from the 2010 Census taken April 1, 2010. In fact, the population younger than age 5 was 49.7 percent minority in 2011, up from 49.0 percent in 2010. ([Census Bureau news release, July 1, 2011](#)). This combination of an aging workforce and tremendous growth in the energy sector coupled with a changing demographic in this country presents tremendous opportunities for underrepresented minorities in this country.

The AABE currently has over 35 chapters across the country, including student chapters located at Georgia Tech, North Carolina A&T, NYU Poly and South Carolina State University. Our chapters utilize the training and expertise of their members and the positions they hold in the energy industry to serve their local communities in a variety of ways. Our professional chapters are also closely tied to our student chapters, ensuring that these students are exposed to mentors as well as job opportunities in the industry.

At the association, educating young people and their families about careers in the industry is one way we engage our communities. Through the AABE scholarship program which was established more than 30 years ago, we are able encourage more students to study in the STEM disciplines and pursue a career in energy. As a result, the AABE scholarship program has granted more than \$1,000,000 in scholarships to minority students around the country. And as the industry's needs have changed, our scholarship program has also changed. One such change is to expand the scholarship so that students who are interested in pursuing a degree in business and have an interest in this industry would be able to take advantage for the opportunity. Our chapters, who have individual scholarship programs, have also adjusted their program to attract more students and support their studies. For example our Atlanta chapter offers scholarships to students who are pursuing degrees at 2-year as well as 4-year institutions.

Additionally, ,any of the associations' chapters have created innovative collaborations with schools to help students at all levels to not only succeed in science, technology, engineering and math (STEM), but to seriously consider energy as a career choice. For example, the South Carolina Chapter of AABE (SCAABE) mentors students at several elementary, middle and high schools throughout the state. At Burton Park Elementary School chapter members

work with students on their social skills, act as math tutors and are lunch buddies. The New York Metropolitan Area Chapter, in partnership with Polytechnic Institute of New York University, Con Edison, and National Grid, offers the Summer Energy Academy for middle school students. The six-week program introduces students to careers in the energy industry by having them research and develop energy projects. And in Atlanta, the chapter is working with a local chapter of the Black Data Processors Association (BDPA) to build an app that for the association. The 8 week project has introduced high school students who are interested in computer science, to think creatively about how those skills could translate to jobs in the industry. These are just a few examples of what AABE chapters are doing around the country to work with students to encourage their interest the energy industry.

Each October, AABE chapters celebrate Black Energy Awareness Month by hosting interactive learning activities, where local students can broaden their knowledge about the energy industry, new technologies, and the many varied career opportunities available within the energy field. These BEAM programs touch thousands of students every year.

In addition to offering programming directed at the students, the association also works closely with communities to educate and inform them about opportunities in the industry. This year, in partnership with Hispanics in Energy, the Department of Energy's Minorities in Energy Initiative and the American Petroleum Institute we have kicked off our Energize series – A Community Conversation about Energy, Opportunity, and Workforce Readiness in Diverse Communities. This “eight city tour” has brought together industry leaders, community stakeholders, policy makers and others to discuss the opportunities in the energy industry and the challenges which made accessing these opportunities difficult. To date, we've hosted conversations in Bakersfield, Canton, Chicago, Denver, Las Cruces and Philadelphia, with future stops in Charlotte and Detroit.

One result of these community conversations is the creation of the OIC National Energy Council. OIC (Opportunities Industrialization Center) America is a national organization whose mission is to continue to be the nation's leader in providing quality education, training, employment, and housing services through a national network of local affiliated organizations

enabling economically disadvantaged people of all races and backgrounds to become productive fulfilled members of the American society. The OIC National Energy Council is a coalition of public and private energy-related organizations, corporations, businesses, agencies, utilities and private individuals who are committed to the goals of recruiting more women, African Americans, Hispanics and Native Americans for employment and business opportunities within the industry. This council is one example of how communities are beginning to discuss and develop programming to address the growing workforce needs of the energy industry.

As an association, collaborations are important to moving our mission forward. Another such collaboration is by joining CHANGES - Coalition of Hispanic, African and Native Americans for the next Generation of Engineers and Scientists. Formed in November 2013, CHANGES mission is to bring the collective influence of our coalition of Hispanic, African American, and American Indian STEM and architecture-focused professional organizations to bear in the effort to broaden participation in STEM and architecture; specifically by encouraging scientific and technical excellence, fostering workforce development and inclusion, and developing policies and programs that promote workforce diversity in science and engineering. Some members of the coalition include: American Indian Science and Engineering Society; American Association of Blacks In Energy (AABE); Black Data Processing Associates (BDPA); Latinos In Science And Engineering (MAES); National Action Council For Minorities In Engineering (NACME); National Organization For The Professional Advancement Of Black Chemists And Chemical Engineers (NoBCCHE); National Organization Of Minority Architects (NOMA); National Society Of Black Engineers (NSBE); National Society Of Black Physicists (NSBP); Society For Advancement Of Chicanos And Native Americans In Science (SACNAS) and the Society Of Hispanic Professional Engineers (SHPE).

Community outreach, scholarship, and collaboration are the key tenets to the AABE's work in increasing the participation of underrepresented communities in the energy industry. We know that the energy industry is a driver to our economy and working in this industry can change lives and move families into the middle class. This legislation is critically important to ensuring that all Americans will have the opportunity to participate in this industry.