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**AGC of America**  
THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA  
**Quality People. Quality Projects.**



*Submitted electronically to: windRFI@go.doe.gov*

July 30, 2010

Jacques Beaudry-Losique  
Program Manager  
U.S. Department of Energy  
Wind & Water Power Program  
Office of Energy Efficiency and Renewable Energy,  
1000 Independence Ave. S.W.  
Washington, DC, 20585

**Re: DE-FOA-EE0000392 “Solutions for Wind Industry Workforce Development”**

Dear Mr. Beaudry-Losique:

The Associated General Contractors of America (AGC) is pleased to provide the following comments on the U.S. Department of Energy’s Wind & Water Power Program’s draft plan for workforce development for the U.S. wind industry.

AGC is the nation’s largest and most diverse trade association in the commercial construction industry. AGC’s 32,000 members include 7,000 general construction contractors, 12,000 specialty contractors, and 13,000 suppliers and service providers, in a nationwide network of 95 chapters. AGC represents both union and open shop contractors in the building, highway, heavy industrial, and municipal utility sectors of the construction industry.

The draft plan appears to have examined comprehensively the range of opportunities that could be used to create and educate a pipeline of young people who are interested in careers in the “wind industry.” However, AGC fails to comprehend when the wind *sector* of the energy industry became its own standalone industry and was dismayed by the limited scope of stakeholders involved in the plan.

We think that trying to develop an independent “wind energy workforce” takes a narrow and shortsighted view of the nation’s critical need for large number of workers who hold a high school diploma, have obtained a post-secondary education credential, and who possess the foundational skills required by future employers.

AGC would like to encourage the Wind & Water Power Program to abandon its strategy of segmenting wind from the larger energy industry, and begin working to include the construction and manufacturing industries that provide the bulk of workers who construct, erect and maintain wind turbine farms.

We would note that there are few occupations where there are – or probably ever will be – entirely separate and distinct training for “wind energy” workers. A survey of higher-education institutions, for instance, shows that those colleges and universities that provide any wind-specific courses only provide a few electives at the top levels of study; an undergraduate studies to become a mechanical engineer not a wind mechanical engineer.



The recent U.S. Office of Management and Budget (OMB), update of the Standard Occupational Classification (SOC) system added only one new “green” occupation related to wind — wind turbine service technician. In explaining why it added only two of the 80 “green” occupations it considered, OMB noted: “In many cases, the work performed in the ‘green’ job was identical or similar to work performed in existing SOC occupations.”

The 2010 “Greener Skills – How credentials create value in the clean energy economy” report by the Center on Wisconsin Strategy (COWS) notes that the rush to establish “green” credentials for jobs that don’t exist will only exacerbate longstanding issues in the development of new workers. “Already we see the general and longstanding problems being recreated in whole – new programs being set up one community college at a time, new ‘standards’ being trained to with no jobs for the workers who complete the training, new initiatives and investments that aren’t even aware of existing workforce training infrastructure, ‘apprenticeships’ being established without sufficient understanding of the scale of demand for new workers in the industry.”

The COWS report calls for, among other things, “A real system of national skill standards” with a focus on the coordination and strategy of greening of existing credentials, rather than a rush to create myriad and redundant new green job programs.

“Just as ‘green jobs’ often turn out to be traditional occupations in traditional industries (like construction and manufacturing) and ‘green skills’ are in many cases not that different from ‘gray’ skills, there is no ‘green’ workforce development system, just the same imperfect, fragmented education and training system we had in the ‘gray’ economy,” notes the COWS report.

While the U.S. Department of Labor in June 2010 formally recognized Wind Turbine Technician as an apprenticeable occupation — a move of which we approve — all other workers involved in the building of a wind turbine farm — laborers, crane operators, ironworkers, etc. — are performing the same the tasks they would perform if they were paving a highway, building a bridge, or erecting a skyscraper.

Further, AGC would not like to see scarce government resources devoted so narrowly on creating wind energy sector workers, when even the most optimistic estimates – based on the DOE’s “20% Wind Energy by 2030” report – predict the wind sector of the energy industry will need 250,000 workers annually, with many of those workers coming from construction-related sectors. “To reach the 20% Wind Scenario, today’s wind power industry would have to grow from 9,000 annual construction jobs in 2007 to 65,000 new annual construction jobs in 2021.”

The total of 65,000 construction jobs – as predicted in the pie-in-the-sky scenario of 20% of the nation’s electricity coming from wind energy – pales against the 1.3 million jobs the U.S. Bureau of Labor Statistics anticipates will be added to the U.S. construction industry between 2008 and 2018. The BLS estimate works out to 133,700 new construction workers needed *annually* and doesn’t even account for the tens of thousands of construction workers who can be expected to retire during the same period.

Construction is the delivery system for a cleaner, healthier and safer environment. AGC believes the most significant barrier to the development of the future wind energy is the lack of understanding of the

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nature of the jobs need to design, build and maintain them – primarily skilled craftworker jobs educated within the traditional training and apprenticeship programs sponsored by the construction, manufacturing and energy industries.

What AGC would like to see in the wind energy workforce development plan:

- A clear link with a larger national effort to help children in grades K-12 make the connection between what they're learning in school and their future career path so that they stay in school, graduate with a high school diploma, and then continue their education as lifelong learners.
- A connection with a national effort that shows the need and opportunities for middle-skill workers (those people who have more than a high school diploma but less than a four-year degree), including the construction, manufacturing and energy industries.
- The inclusion of related and critical careers in construction, manufacturing, transportation distribution, and the larger energy industry.
- A map of federal (at a minimum) efforts that seek to promote wind energy. In conducting research for this letter, AGC found wind energy workforce grants given to community groups, training centers, colleges and other groups from agencies ranging from the National Science Foundation to the U.S. Department of Education. We greatly fear duplicative efforts that waste taxpayers' money and workers' time.
- Alignment with other federal agencies and their projects, such as the U.S. Department of Labor Employment and Training Administration's competency models that already exist at the lower tiers for advanced manufacturing; heavy/highway construction; energy/generation, transmission and distribution; and transportation, distribution, and logistics. These models provide the foundation for the bulk of the existing and future occupations in the wind sector of the energy industry and easily could be filled out at the higher tiers to include specific knowledge and skills needed by wind-energy-sector workers.
- Engagement of the manufacturers of wind turbine components and the construction firms that construct wind turbine farms to determine exactly what jobs and skills are required. For instance, AGC member Delaney Group Inc. of Gloversville, New York, which began some 30 years ago as a heavy/highway construction firm, has worked on more than a dozen wind farms around the nation and could serve as a valuable resource for an effort to determine what, if any, additional skills are needed for a highway worker to build wind turbine farms.

AGC very much appreciates the opportunity to provide input on the proposed workforce development plan – our members and chapters are engaged in workforce development efforts from children in elementary grades through colleges, nontraditional populations and military veterans, as well as the continued skill development of their current employees. We would be very interested in helping the WWPP connect to the commercial construction industry for further work on this plan.

Sincerely,

Liz Elvin  
Senior Director of Workforce Development