



U.S. Department of Energy

Office of Electricity Delivery and Energy Reliability

# **Electricity Advisory Committee Workforce Ad Hoc Committee**

## **Recommendations on Electric Delivery Workforce**

September, 2014

# 2012 Workforce Ad-Hoc

Created an EAC Workforce Ad Hoc Working Group in March, 2012

DOE's interest is to ensure competencies are available to 1) provide the nation with reliable energy, 2) create innovation to secure a leadership position with related technical advancements, 3) achieve the vision of the future grid

## Ad-Hoc Committee Members:

- |                       |                 |                 |       |
|-----------------------|-----------------|-----------------|-------|
| • Wanda Reder (Chair) | S&C             | • Elaine Ulrich | DOE   |
| • Anjan Bose          | DOE             | • Gil Bindewald | DOE   |
| • Merwin Brown        | U of California | • Ann Randazzo  | CEWD  |
| • Rebecca Wagner      | NV PUC          | • Barbara Kenny | NSF   |
| • Chris Peters        | ES              | • Dennis Ray    | PSERC |
| • David Meyer         | DOE             | • Barbara Tyran | EPRI  |
| • Titilayo Ogunyale   | DOE             | • Kishan Baheti | NSF   |

# 2012 Recommendations



- First-Tier EAC Recommendations - Easier
  - Identify scalable solutions from ARRA electricity delivery workforce training grants.
  - Identify workforce lessons from ARRA-funded smart grid investment projects.
  - Incorporate workforce elements in future OE technology development efforts.
  - Develop a set of criteria and prizes to acknowledge the best worker training and education programs at the state and city levels
  - Review current state of benchmarking / metrics on workforce needs.

# 2012 Recommendations



- Second-Tier EAC Recommendations – More Challenging
  - Facilitate regulator / industry dialog: create workforce metrics
  - Increase NSF and OE coordination
  - Improve coordination and communication with other agencies.
  - Perform workforce scenario planning.
  - Identify best practices to accelerate transition into the workforce
  - Retain experienced workers.
  - Increase the visibility of career opportunities to build awareness
  - Develop an educational road-map that aligns with industry needs.

# 2013 Workforce Memo

- Importance of following the DOE ARRA projects on workforce training and education
- Survey results presented from 2013 CEWD National Energy Education Network (NEEN)
- 2013 Recommendation
  - Educational and training materials produced by ARRA projects should be made available through a web portal.
  - WG will continue to investigate the range of activities that was focused on the alleviating the shortage in the energy workforce.

# 2014 Observations

- Good work was done on the ARRA workforce training and education projects.
  - New curricula and educational materials were developed
  - Not clear if these materials will be available widely or adopted
- No Department ownership of the issues associated with the development of the workforce in electric power and energy.
  - NSF has a broad mandate on STEM education
  - DOE has a more targeted focus on energy related issues but not necessarily on the education and training.

# 2014 Workforce Recommendations

- DOE create a response to the OCT 2012 paper and the Oct 2013 memo providing an update on the recommendations.
- OE should take the lead to coordinate power and energy workforce activity across federal departments including, though not limited to DOE, NSF, Department of Education, and Department of Labor.
- Provide resources for OE to take a lead workforce coordinating role.
- Inventory existing programs across federal agencies that provide material and resources for the private power and energy industry sector.

# 2014 Workforce Recommendations

- Define and create a portal to be used as a repository for workforce materials across federal agencies that includes content and curriculum from the ARRA workforce training grants.
- Develop a division of responsibility that clarifies ownership and accountability across federal agencies for various aspects of workforce development programs to address power and energy needs. This is needed to coordinate activity and make goals and objectives actionable.
- DOE OE completes the final report assembling information and findings from ARRA Smart Grid Workforce Training Grants and makes it generally available.