



# National Forum: State Energy Workforce Consortia 2015



*National Forum: State Energy Workforce Consortia  
November 4, 2015*

## Welcome and Introductions

**Ann Randazzo**, Executive Director, CEWD, opened the meeting by telling the 76 state consortia members in attendance that they represented the “biggest group ever” to attend the National Forum, now in its seventh year.

Noting that there were now 35 state consortia in varying stages of development, Randazzo told participants that CEWD had divided the seven regions into three groups to make it easier for staff to assist them. Consultants **Beth Britt** (Midwest), **Rosa Schmidt** (Northeast, Mid-Atlantic, and Southeast), and **Ray Kelly** (Northwest, West, and South) will each be available as a resource to members as they organize their state and regional consortia, develop strategic plans, apply for grants, or otherwise need help.

“If you need help getting your consortium to work better, call one of these people,” Randazzo said. “They are on the road going around to visit as many of you as possible. They are there to help.”

Randazzo encouraged consortia members to take advantage of the time at the Forum to connect with other consortia members and share ideas and best practices. “The whole purpose of the National Forum is to learn from each other,” she said.

She noted that CEWD’s website includes a section on state consortia where members can find out what others are doing on a state-by-state basis. A separate website was created by the Arizona Sun Corridor consortium, she said, under the TAACCCT grant they received. “Under that grant, it’s our responsibility to take what we learned and share it with everybody else,” she said, explaining that all tools and resources developed through the grant were available free to members as well as to the public, since they were developed with federal funds. Likewise, tools and resources developed under a grant from the Joyce Foundation to create state consortia in the Great Lakes region are available free to CEWD members.

“We have lots of tools out there, lots of information,” she said. “The point of all of this work is to scale it. And the best way to do that is by sharing it from one person to another.”

## 17<sup>th</sup> Career Cluster in Energy: What Are Consortia’s Experiences?

“How many of you are aware of efforts to put in a 17<sup>th</sup> career cluster? We’re here today to tell you all about it,” **Valerie Taylor**, Consultant, CEWD, told participants. She noted that information on how to create a 17<sup>th</sup> career cluster was available in the CEWD Member Wizard as well as in a toolkit given to Forum participants titled, “Adding a 17<sup>th</sup> Career Cluster in Your State.”

Currently, most states have 16 career clusters, Taylor explained. Jobs in the energy industry are usually listed under construction, manufacturing, or STEM, where it can be difficult to find them among other jobs in those categories. Though CEWD tried to get a 17<sup>th</sup> career cluster added at the national level, efforts were unsuccessful, so efforts shifted to securing the energy career cluster on a state-by-state basis.

Taylor told members that CEWD has tools and resources available to help them make the case for a 17<sup>th</sup> career cluster with state education officials. She then introduced a panel of consortia members who had three different experiences in tackling the issue.

## 2015 National Forum: State Energy Workforce Consortia

The Michigan consortia is in the process of getting a 17<sup>th</sup> career cluster approved, said **Nikki Rogers, Consultant, Office of Career & Technical Education, State of Michigan**.

It's been extremely important, she said, to bring on board partners from secondary education in the early stages of discussion. "Most of the time the communication starts with postsecondary education," she said. "But students get their foundation in secondary education and sometimes even middle school," so representatives from those early years of learning are also needed on the team.

**Sarah Whitman, Manager, Technical Training, KCP&L**, said her state had tried to create a 17<sup>th</sup> career cluster in 2013 in the state of Kansas, "but there just wasn't the appetite at that time. We did use the toolkit and build the case. The toolkit was extremely helpful to us and it gave us a leg up."

Whitman said the toolkit helped them to develop partnerships and start meaningful conversations with representatives from secondary education sooner than they might have otherwise.

That foundation proved useful when they received a call last year saying there was interest in picking up the conversation again, she said. "When the timing was right, we got back to the table, and we were able to establish a pathway for energy careers under the STEM cluster in Kansas."

Taylor noted that one of the reasons CEWD started this effort was because energy courses were often hidden in other clusters. "When you're hidden below the surface, it's hard to advocate for how important these jobs are," she said. "But energy is so integrated into everything we do in our society. You really want to draw that out."

Georgia does have a 17<sup>th</sup> career cluster, said **Debra Howell, Workforce Development Manager, Georgia Power**.

In 2011, she explained, her consortium had invited all of the candidates for state school superintendent to speak to them during the election cycle. The candidate who later became successful had a great interest in starting an energy career cluster, and was able to get it approved. In 2012, the first high school piloted that cluster and now 14 schools are teaching students how to get into careers in energy.

"There are so many tentacles to this. The complexity still continues to amaze me," said Howell, who added that it was important to keep the conversation going with stakeholders even when efforts seemed to stall. "I can't overstate how important it is to be ready when the timing is right," she said.

The Georgia energy cluster includes three consecutive courses, said Howell: Energy Industry Fundamentals (EIF), Energy and Power, and a science class. A major component is a capstone project or internship that takes place during the second year of the program, a student's senior year.

Howell said technical colleges also teach EIF as a standalone course. She recommended that secondary schools use the course as part of dual enrollment with technical colleges so that it's embedded in the high school program and students receive college credits.

Asked about who would teach these courses, Howell said that math, engineering, and mechatronics instructors were among those teaching in the Georgia energy cluster. Rogers noted that in Michigan, all career and technical education instructors had to have industry-related experience, by law.

What about those currently active in the energy industry?, asked another member. Can they teach?

Howell said some lab courses were being taught by those in the industry in Georgia, but with 14 schools all over the state, it became difficult finding sufficient staff in their own training programs that could also teach at the high schools.

Whitman commented that though they were unable to get a cluster approved, they were able to create a framework for an energy career pathway using many courses that already existed. They were also able to get a course code for the EIF course, which was a big success.

## Implementing a Talent Pipeline Management Strategy in Michigan

Moderator **Beth Britt, Consultant, CEWD**, told consortia members that the U.S. Chamber of Commerce Foundation had funded a project to develop a talent pipeline management strategy in Michigan, applying a supply chain model. The \$90,000 project was in line with the state consortia's strategic plan, which was developed under a previous grant provided by the Joyce Foundation through CEWD.

"The bottom line to all of this is the desire to develop a scalable model in Michigan to develop a talent pipeline for gas technicians and line technicians and eventually jobs in other sectors," said **Marcia Black-Watson, Energy Industry Cluster Director, Workforce Development Agency, State of Michigan**.

Black-Watson is responsible for helping the state's energy industry develop solutions to talent and workforce development issues. "Michigan is excited, in that we have climbed up from the bottom, from having the highest unemployment rate in the nation, to now for the first time being below the national unemployment rate," she said. "We are the comeback state; we truly have come back from many, many challenges."

In Michigan, she continued, the energy industry is broken into four broad sectors: utilities; energy efficiency; oil and gas exploration, extraction, and wholesaling; and alternative and renewable energy.

"We have 93,000 jobs in all four sectors in the energy industry," Black-Watson said. "That's an increase. We started with 84,000 in 2013."

Consumers Energy and DTE Energy combined had 1,500 new hires in 2014, she said, and 1,200 were hired in 2013. "That really shows that there is demand."

Because of this growth and current and looming skill shortages, the state legislature recently set aside \$50 million to purchase equipment for training in the skilled trades at community colleges and \$15 million to provide competitive awards for employer responsive training through Michigan's Skilled Trades Training Fund, she said.

Making sure all partners work collaboratively is an important element in developing a sustainable talent pipeline, said **Tracy DiSanto, Manager, Workforce Planning & Analytics, DTE Energy, and Co-Chair, Michigan Energy Workforce Development Consortium**.

"It's important to understand what programs are in place to provide training and also that employers are committed to hire from those programs," she said. "When business changes their commitments to hire due to short-term budget activities, there's a perceived impact to the value for the educational industry to build a long-term program that meets our needs," she said. "We need to make sure what we're doing is scalable and sustainable."

The last six months have seen an "amazing amount of in-kind contributions in time and effort," she said, explaining that CEWD had provided best practices from all of its members, particularly from the work done under the Arizona grant.

"The key is to include everyone up front," she learned, "building partnerships, linking measures across the value chain, and communicating return on investment."

The tools being created under this grant, she added, will be available for other industries to use when they are finished.

In describing the industry data collection and analysis phase of the project, "the overall goal was to have a common learning program that was relevant, efficient, and cost effective," said **Deborah Majeski, Manager, Center of Excellence, DTE Energy**.

Working with Raytheon Professional Services, DTE Energy and Consumers Energy worked with subject matter experts to collect and analyze training requirements for first-year gas and electric line technicians in both companies. The analysis showed that the two companies had a significant number of training activities in common and that a majority of their training aligned with the energy industry competency model developed by CEWD.

## 2015 National Forum: State Energy Workforce Consortia

“We realized we don’t need to recreate the wheel here,” Majeski said. “We decided to take the training from both companies and use it as a platform for our Tier 1 schools to provide.”

**Amber Fogarty, School to Work Coordinator, Consumers Energy**, said gas and line technician positions were chosen for analysis because both were in high demand. “I think the biggest benefit was just having that clarity, that commonality, so that we can take this now to our other industry partners in the consortium and say, ‘Look how close we are. Where do you fit in?’”

Fogarty said the analysis also showed them where there were differences and helped them determine why those differences existed.

“It just gave us a valid place to begin,” she said. “We know we have so much more work to do.”

It’s analyses like these that make an educator’s job much easier, said **Matt Dunham, Program Director & Assistant Professor, Lansing Community College**. “The biggest challenge for education programs sometimes is developing what the industry is looking for. I can provide on-target training if I know what you are looking for.”

As a key deliverable of the grant, Dunham said Lansing Community College hosted an education summit for Tier 1 technical schools and community colleges, at which they talked about DTE Energy and Consumers Energy requirements for common industry. Next steps are to agree on the type of common credential that will be offered, by which schools, and how that will be linked to the CTE standards that will be delivered through Michigan’s 17<sup>th</sup> career cluster.

“I would say my goal is to have this ready for next fall with all these colleges,” said DiSanto. “These are excellent jobs with excellent benefits. When students see the salary and benefits, they get very excited.”

Summing up, she said, “Here is what is important for you to understand. Working together, we were able to come up with clearly defined credentials, efficiencies, reduced time to build a pipeline, greater awareness of high-paying jobs, and because of this, an increased likelihood of success for everyone.”

## Consortia Update – Careers in Energy Week and Other 2015 Highlights

### State Consortia Representatives

#### *California:*

This state is working with CEWD to re-energize its consortium. They’ve consolidated Careers in Energy Week activities into a statewide effort, a change that brought everyone together and resulted in higher-caliber applicants and more submissions for its student contests. The consortium also began to build their 2016–2020 strategic plan late in 2015.

#### *Nebraska:*

Their first project was a Women in Trades program that grew from 79 girls in 2014 to 105 last year and has growing interest from both schools and utilities for next year. They will develop a consortium strategic plan in the first quarter of 2016.

#### *Mid-Atlantic:*

Formed this year, this consortium, which represents New Jersey, Pennsylvania, Delaware, DC, and Maryland, is still adding members. Careers in Energy Week activities were handled separately by individual utilities. The consortium plans to focus on issues such as increasing the number of applicants able to pass pre-employment tests, reaching transitioning military and veterans, and strategic planning for 2016 and beyond.

## 2015 National Forum: State Energy Workforce Consortia

### *Louisiana:*

This consortium is re-energizing, having been minimally active and then dormant. This year the three main IOUs focused on exploring the opportunity to work together. Strategic planning should begin in the first quarter of 2016.

### *Mississippi:*

This consortium is re-energizing, having been active and then dormant. This year they focused on Careers in Energy Week by partnering and spending the week on a career awareness roadshow at various schools around the state. They're now beginning to work on career awareness and how to increase the pass rate for EEI pre-employment tests.

### *Virginia:*

In 2013, the VA Department of Education approved the EIF certificate, and several Career and Technical Education schools are teaching it this year. More are planning to do so next year, along with some community colleges, and working on dual enrollment. In addition, they are creating a two-year degree at the community college level. There is also a newly formed VA Nuclear Energy Consortium, with whom they are partnering and sharing resources.

The Central Virginia Energy Alliance has formed in Lynchburg as well. They are working to partner with these organizations to avoid duplication of effort. They are planning to host a VA Energy Workforce Summit to bring the leadership of all of these organizations together.

### *North and South Dakota:*

The Dakotas Energy Workforce Consortium has held two face-to-face meetings and one video conference and is continuing to formalize its strategic plan. It covers a large geographic area that does not have many education providers. Committees, including career awareness, have been formed. They are planning to discuss issues around supply and demand.

### *Wisconsin:*

Formed in 2013, this consortium has matured rapidly and is one of the first consortia to successfully transition to new leaders for 2016. The partnership enjoys great support from technical schools and government. They have made a PowerPoint with a voiceover on the issue of career awareness to use in meetings with educators and other partners.

### *Georgia:*

GEICC hosted its annual golf tournament and used the proceeds to send students to SkillsUSA and First Robotics championships. They sponsored a \$500 scholarship for a welding student to get into a technical college.

They were also involved with the state CTE and counselors' conferences and a STEM forum for teachers. For Careers in Energy Week, they sent packets to technical colleges with activities for students and held activities at the state's energy pathways schools. They hold meetings all over the state and with 91 utilities, they are continuing to grow.

### *Ohio:*

The consortium experienced a temporary lull in activity but with help from CEWD has re-energized. It held a meeting of its energy partners in August to revisit and fine-tune its strategic areas of focus and scheduled a full consortium meeting in November.

## 2015 National Forum: State Energy Workforce Consortia

### *Minnesota:*

This consortium replicated Wisconsin's model for a gas technician program, the first in Minnesota. They are now working on a lineworker program that will offer consistent curriculum at numerous colleges around the state. They are also redesigning a wind energy training program.

The consortium is adding to its membership by reaching out to other associations, such as the Minnesota Underground Contractors Association. They have increased career awareness through a summer workshop program for teachers called Energy Education for Educators. That program continues to grow. They are also working on an energy science, solar-powered trailer that will travel to high schools around the state.

Careers in Energy Week included 15 activities over an entire month.

Consortium members are also tackling the issue of diversity and attended a three-day workshop in Arizona on this topic. They are in the process of developing a training program that will provide a group of highly qualified, diverse job candidates from non-traditional populations. A second trip to Arizona was planned for December to learn more about the model program being used there that they hope to replicate.

### *Michigan:*

This consortium developed a video called Energize Your Future as part of their Careers in Energy Week activities. The video focused on the importance of building the talent pipeline and was funded by the USCCF grant.

### *New York:*

New York's Troops to Energy Jobs program has hired more than 300 veterans since its inception. They are currently developing a natural gas boot camp.

For Careers in Energy Week, they provided information on energy careers to veterans at training centers in New York and Massachusetts.

### *New Mexico:*

To begin generating ideas, this consortium gathered and asked the question, "Is this working for us and what is its value?" They have fewer retirees to replace than most. They've decided to gather only as ideas and projects present themselves. For example, they are working on two education-related camps right now, one for fifth graders and one for seventh graders, in order to generate excitement about energy careers with younger students.

### *Arizona:*

This consortium is completing their \$13.5M TAACCCT grant in 2015. They'll be focused now on sustaining the structure and processes put in place through the grant. One member school is poised to fund a half-million-dollar mechatronics program, seeing real value in employer hiring in both the utilities and other regional employers. This school has also recently created a directory of organizations that serve veterans, ranging from federal government agencies to local nonprofits. They are happy to share it.

In Tucson, a two-year associate degree program created through the grant accelerates their E&I apprenticeship program and is saving about \$100,000 in training costs for Tucson Electric Power.