CEVID NATIONAL FORUM: STATE ENERGY WORKFORCE CONSORTIA

November 14, 2019 Crystal City Marriott | Arlington, VA









Ann Randazzo, Executive Director, CEWD, welcomed members of State Energy Workforce Consortia by encouraging them to look around the room at how many people there were for them to learn from.

"Some of these great consortia have been doing this for a long time and doing a lot of great things," she said. "You think you can't do all that, but start small. Don't get overwhelmed with all the things that could be done, just focus on the things that need to be done to move your company and move your state forward.

"Remember, we can do more together than we can separately," she continued, as she encouraged members to network and collaborate, especially with their contractor partners, many of whom are now CEWD members.

She asked the group to let her know the issues they continued to struggle with that should be on CEWD's list to address in 2020. "Think about it as we go through the day," she said. "Jot down a note or grab a CEWD regional consultant. We want to make sure that whatever we're doing is meeting your needs."

Following a round of introductions during which consortia members took note of which consortia had been around for a while, which ones were in the process of getting started, and which ones had recently rejuvenated, Randazzo noted that the group included representatives from many different departments in energy companies.

"All the people in this room do not just represent human resources or workforce development," she said, adding that that's because "it can't just be one person doing all of this. You need true diversity to make all of this stuff happen."

Rosa Schmidt, Consultant, CEWD, then reminded the group that most of the work CEWD consortia do falls under four pillars: workforce planning, career awareness, education, and structure and support. Several consortia members were on hand to talk to the group about the work being done in each of those areas.

Pillar One: Workforce Planning

Amber Lopez, Manager, Core Human Resources and Leave Management, Entergy, said when she came to her first National Forum two years ago and heard about all the work being done by Georgia's consortium, her first thought was, "I don't know if I can ever be Georgia."

But since that time, her group has accomplished the unthinkable: It not only created a successful lineworker training program in Louisiana, it replicated that program in Arkansas.

"In 2017, we started this consortium with an urgent need around lineworkers," she said. "We knew in Louisiana we needed more lineworkers than we could produce."

With help from CEWD, the Louisiana consortium quickly developed a lineworker training program and has since graduated eight cohorts from two community colleges. Entergy, which operates in Louisiana, Arkansas, Mississippi, and Texas, hired more than 30 of the successful graduates. They're now looking to create similar training programs for other job groupings, such as natural gas technicians. Following the program's success in Louisiana, Entergy leaders in Arkansas stepped forward and asked if they could replicate the program to solve the same problem in their state. With help from **Ray Kelly, Consultant, CEWD**, an Arkansas State Energy Workforce Consortium was formed and a program was launched—all within less than one year.

"We cold-called educators and energy companies and said, 'We want to do this. Do you want to come hear about it?' And we took exactly what we did in Louisiana and we replicated it in Arkansas," said Lopez.

In August, the first cohort of 15 students started at the newly created lineworker training program at Pulaski Tech in Little Rock, she said. "The state felt it was such an important program, they fully funded it, so it was done at no cost to students. We were so proud.

"Louisiana had the template, the metrics, everything we needed," she said. "Don't be afraid to do something like this. Everything you need is there for you."

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Lopez said other lessons learned from this experience included:

- If you want a diverse group of students, you have to cast a very wide net.
- Don't rush. Create guidance around how to reach participants. For example, if you want to reach high school students, do you need to create an alternate pathway for them?
- Even if your consortium is brand new, be sure to develop a succession plan. The Arkansas group has already had turnover.
- Make sure companies have more than one person involved. "You can't just have one person who has a passion for this, you need a collective group of people with a common goal."
- Make a plan before you act.
- And finally, "If you need something, CEWD probably has a template for whatever it is you need."

During a question-and-answer period, Lopez was asked if any young women had taken part in the Arkansas lineworker training. "Just one, and unfortunately, she dropped out," she said, explaining that the woman's schedule made it difficult for her to attend night classes. The consortium is now adding a daytime alternative.

Maureen Wilt, Florida Power and Light (FPL), said she came across an innovative approach to recruiting young women during a recent field trip to the Daytona 500 that she held for students. During a tour of the raceway, she learned that NASCAR recruits female pit crew workers from high school athletic programs. "Female student athletes would have the agility, strength, and perseverance that we're looking for," she said. "I'm going to explore this for FPL, see what happens."

In response to a question about whether they worked with local community colleges and how they secured state funding, Lopez noted that they had more educators interested in participating than they could manage. "Five or six community colleges wanted in," she said. "We determined which ones we wanted to work with based on the data, on the regions where lineworker demand was highest." As for state funding, said Lopez, they made sure they had a representative from the state at every meeting. "He was taxed with finding high-wage, indemand jobs in the state. He committed a month or two before the program started to fully fund this. He saw the demand and the commitment from industry was there."

Finally, Lopez noted that a key element for success was buy-in and support from company leadership.

"In Arkansas, an operations leader helped by reaching out to colleagues. That's when it really caught fire. Our first meeting was really important, because frankly nobody knew what CEWD was and how it related to lineworkers. Ray came in and was very clear on the structure and goals. It was basically an 'are you in or out' conversation."

When it was over, said Lopez, half a dozen employers and half a dozen educators wanted in.

That buy-in from industry leadership is critical, agreed **Rosa Schmidt, Consultant, CEWD**.

"Every state consortium is driven by industry," she said. "It has to be. It's your operations folks who are going to benefit. If it's driven by educators, it will not be sustainable over time. It's key that industry is at the table and driving this. First determine what are the needs for the business, then bring in the players to get the work done."

Pillar Two: Career Awareness

Energy consortia from Virginia and Michigan shared best practices for increasing career awareness.

The Virginia Energy Workforce Consortium (VEWC) is into its second five-year plan, said **Matt Kellam, Military and Recruitment Program Coordinator, Dominion Energy, and Chair, VEWC**. Membership continues to grow, with strong representation from industry and government. Consortium members are now included in the Governor's STEM education commission and are frequently consulted in statewide discussions on jobs.

The consortium has developed a growing number of secondary and postsecondary programs, said Kellam.

Ten Virginia high schools offer energy-related courses; most of these are using the Energy Industry Fundamentals (EIF) curriculum. There are also 10 community colleges offering energy programs.

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Virginia was the first state to create an energy career cluster using the legislative process, said Kellam. The law has passed and they are now working with the Department of Education to get the program up and running for the next academic year.

VEWC has held events for Careers in Energy Week for the past three years. This year, they also took part in an Innovation Challenge developed by the Virginia Chamber of Commerce. The contest encourages students to research innovative solutions to real-world problems.

VEWC asked students at four high schools in Virginia to find innovative, renewable energy or sustainability solutions that would help to create a "self-healing" energy grid for the state. Only schools teaching energy courses were selected for the competition, said Kellam. Each school was paired with an energy industry partner belonging to the state consortium.

Each industry partner provided mentors to work with teachers and students as they developed their projects over a three-month period. In April, the students presented their solutions to a panel of judges in a *Shark Tank*-styled competition. The panel included executivelevel representatives from each industry partner, as well as one from James Madison University's Office for the Advancement of Sustainable Energy.

First place went to students at Bridging Communities Regional Career and Technical Center, sponsored by Columbia Gas, for a model of regional microgrids combining conventional and renewable energy sources.

"This is the way we can bring work-based learning to our students," said Kellam. "It is our opportunity to have industry connect with students who are otherwise not aware of us."

"For us, it was critically important to get that access so they could find out the depth of careers that we have," said **Stephanie Metzler, Director of Development, The Mears Group**, which was paired with one of the teams. "They may be going into engineering or they want to work with 3D modeling, but all of that is available within our industry."

"It provides experience with problem solving, teamwork, and awareness of energy careers," added Kellam. "The goal is to bring STEM to life and have industry professionals support them and work with them." Metzler said the solutions the students came up with were truly impressive. "Every single one of our companies is benefiting from those ideas. One of the companies walked out of that room saying, 'We're going to start looking at this, this is a fantastic idea.'"

Next year, the Innovation Challenge will be expanded to include any high school in Virginia that wants to participate, said Kellam. The number of schools has already tripled. The winning team will earn \$1,000 for their school.

"Students will be asked to focus on energy inequalities and inefficiencies in their community or their school and to solve this problem innovatively," he said.

In Michigan, Careers in Energy Week activities have also grown significantly over the years, said **Amber Fogarty**, **Energy Talent Pipeline Specialist, Consumers Energy**.

When the Michigan Energy Workforce Development Consortium (MEWDC) started participating four years ago, they held company tours for students at Consumers Energy and DTE. But since then, the consortium has grown to include more energy partners—including municipalities, rural cooperatives, and contractors.

This year, together the consortium hosted 18 different events for Careers in Energy Week, she said, including not only tours but open houses and an online energy career trivia contest. "We engaged more than 900 students in tours alone," she said.

Each energy company in the consortium sponsored a winner in the trivia contest, who received an Amazon gift card, a drone, and a cash prize for the student's classroom.

"We got entries from all over the state," said Fogarty, who noted that 500 students had entered. Next year, they hope to reach even more.

Pillar Three: Education

North Carolina and South Carolina started a joint consortium two years ago, said Melissa Miranda, Vice President of Human Resources, ElectriCities of North Carolina, Inc., and Vice Chair, Carolinas Energy Workforce Consortium (CEWC).



"We started out of crisis," she said. "We were having a hard time finding lineworkers and had no way to collaborate. So we brought people in the industry together to see what the problem was and how long they thought it would last. That was our early focus, to get more people into the pipeline quickly. We had to understand what the landscape was."

At the time, there were four lineworker training programs, but one no longer had an instructor. Students graduating from these programs still lacked the training companies needed, so many weren't hiring them. There was no consistency between programs, said Miranda.

"We wanted a common curriculum," she said. "It was a pretty daunting task."

The process involved 10 industry partners and initially four community colleges, but more jumped on board once they learned what was happening, Miranda said. The project succeeded because it had two champions one from industry and one from education—who took the lead.

"Exceptional leadership was the best decision we made starting out," she said.

The group also took advantage of the tools and resources CEWD provides for developing a core curriculum, she said. "Those tools laid out all the steps we needed to go through."

Industry partners laid out the competencies they needed and explained what they were already doing in-house to train employees. "The challenge came when we needed to prioritize what everyone needed," she said.

The process helped education partners see where the training gaps were and what needed to be modified in the programs they already had in place, Miranda said.

"It took a great deal of time to get this done," she said. "About eight months."

North Carolina now has 10 community colleges offering the new curriculum, she said. "The next step will be for us to replicate this in South Carolina. All in all, it was a good success for us."

The Dakotas have also created a joint consortium. Because it covers such a large geographic area, monthly meetings are done by phone, with a single in-person

meeting each year, said Michelle Black, Human Resources Generalist, NorthWestern Energy.

"It's very important to have dedicated utility and education partners," she said. "We've had great success with that."

Partnering with schools such as Mitchell Tech, the consortium has created both gas worker and lineworker training programs, she said. The utility has donated equipment to Mitchell Tech for its training programs because of the relationship developed through the consortium, Black said.

The consortium allows education and industry to think through how many graduates are needed so they don't overpopulate the state with people who won't be able to find jobs, said **Bruce Emmil, Dean, National Energy Center of Excellence, Bismarck State College**. "The colleges work well together."

For example, "Mitchell Tech had a gas program on the shelf. They dusted it off and reworked it when they learned there was more demand. We don't offer gas, so it was good that they did," said Emmil. "We're not competing."

Black said each of the education and industry partners takes turns hosting the consortium, giving tours of the facility and providing meeting space. Rotating doesn't overburden any one partner and shares the burden of travel, she said.

To reach potential students, Mitchell Tech hosts an energy camp for high schoolers, with presentations from industry partners. The colleges also host career fairs and open houses to talk about energy programs. Students in North Dakota gain early exposure to energy careers through curriculum taught in both 4th and 8th grade, said Emmil.

Pillar Four: Structure and Support

Missouri was one of the first states to create a consortium, but momentum died and it became inactive several years ago, said Kimberly Erskine, Manager of Talent Acquisition, Ameren Corp, and Co-Chair, Missouri Energy Workforce Consortium (MEWC).



The group was re-energized two years ago after she ran into **Stephanie Metzler**, **Director of Development**, **The Mears Group**, and they organized a phone call with senior-level executives from both companies.

"They all talked about their commitment to having a consortium," said Erskine. "It gave us an opportunity to get together and create a strategy. We went through our needs for the state and went back to the executives to report. This was a great way to get buy-in."

Consortium leaders continue to meet twice a year by phone with industry executives "to ensure accountability and make them aware of what's happening, as well," said Erskine. "We also made sure we had a project manager. She helps us stay accountable. Everyone gets minutes from the meetings. We get agendas and topics and can come prepared to be as effective as possible."

"Building in required accountability to the executive team twice a year is a really big deal," said Lauren Gandy, Organizational Development Business Partner, Associated Electric Cooperative, Inc. (AECI). "We have a huge interest and passion, but we want to have deliverables, too, to talk about. This keeps us focused."

In addition, said Erskine, many members of the consortium have included their consortium work in their job performance objectives. "We get rated on a yearly basis."

Gandy said the group's structure ensures engagement from everyone. "We've had a lot of turnover in the original company representatives and still we have somebody from every organization coming to the table," she said. The group includes representatives from industry, education, contractor organizations, and the governor's office.

Gandy keeps her internal AECI group abreast of any updates or relevant activities from CEWD, including items from its monthly newsletter, she said.

The MEWC has developed a website, held a summit, and is in the process of setting goals for 2020, said Gandy. "We want to work on partnerships with community-based organizations. We're also looking at what we're going to do in the areas of career awareness and education."

Get Into Energy/Get Into STEM Student Registration Site

Energy companies need a way to stay connected with students who have shown an interest in energy careers, said **Rosa Schmidt, Consultant, CEWD**. That's why CEWD has developed its Get Into Energy/Get Into STEM Student Registration Site.

"We all want diverse applicants and diversity in our workforce," she said. But to have this, energy companies need to reach a diverse group of young people early in their education and maintain that contact over the years to help lead them down an energy career pathway.

"You have got to keep up the momentum," she said. "If you meet with them in 7th grade and they're all excited, then in 8th grade they never hear about energy again, you've lost them. They may find another career path. You're investing time and resources on energy camps and summer programs and then you lose track of them and you don't know how to connect with them again."

The online Student Registration Site solves that problem, said Schmidt. It allows students and their parents to register their contact information in a database that CEWD member companies can access. The data enables members to stay in touch with students to alert them to news and information about future programs, internships, scholarships, and other opportunities as they arise.

"The registration site gathers student *and* parent information," said Schmidt. "We all know how important the parents are and how much they influence their children."

In addition, the registration site allows students to update their information should there be a change, said Schmidt. It also allows companies to track students by school, program, and year of graduation. "You can sort the data however you like. If you would like to know if a student has come to each event you have held over the past three years, it will show you that. Or you can see if they've stopped coming and may no longer be interested."

The system also allows students and parents to unsubscribe if they are no longer interested in an energy career, she said.



The site allows member companies to set up student landing pages with their company name. It is only available to CEWD members, and each member will only have access to its own students. It is intended for use with students in energy programs such as summer camps, after-school programs, FIRST® Robotics, and Energy Academies. This tool is not to be used for college students who are jobseekers or to promote job openings, said Schmidt.

"We have a jobseeker database designed specifically for those students," she said.

"We talk about measurement and how important that is," added Schmidt. "If you are investing time and money into a program and students sign up but then don't attend any other activity, this will help you determine if the program is, in fact, a good investment. It might be years before you get to hire one of these students, but we know you need to start early and it provides a way of measuring how much interest you are generating from your programs."

This tool is also available for consortia who have implemented or plan to implement these types of programs. However, only CEWD members who are part of the consortium will have access to the data.

Strategic Planning Template

CEWD has also revised its strategic workforce planning template, **Ray Kelly, Consultant, CEWD**, told the group. Three major changes were made:

• Wording changes were made to better reflect the work companies are doing. For example, Quadrant One, called "Business Planning," was changed to "Workforce Strategy" because "the workforce planning group does not do business planning, so terminology did not ring true," said Kelly. "You only need to understand business planning for how it impacts your workforce. If you are doing away with meter reading, what are you going to do with meter readers? You need to know the impacts on the workforce so you can figure out what to do to achieve your business goals."

- The templates are now simpler and shorter. Each block used to be several pages long with step-bystep instructions, explained Kelly. Now each is one page that "cuts to the chase. Where do I start? What do I need to do and what results should I expect?" Hyperlinks to tools and resources are included in bold.
- Well-defined activities, such as assessment tools, were moved up front. "If you have a template that asks you questions on how well you are doing, there's a current state assessment that helps assess performance and will also act as a teaching tool," said Kelly. These tools help companies identify where they may have missed something they should be doing.

Consortia Updates

State consortia were given an opportunity to provide additional information to the group on some of their recent accomplishments and ongoing needs.

Arizona

"Our consortium has been kind of dysfunctional lately, so we are working to rebuild it," said **Tony Robertson**, **Supervisor, Customer Service, Southwest Gas Corp.** "We're trying to figure out what can we do to improve it. It doesn't mean we aren't doing anything, though."

Arizona held a Construction Career Day as part of Careers in Energy Week that involved 4,000 students in grades 8–12 over two days. Students were given the opportunity to climb poles, fix gas pipes, hold hot sticks, and learn about job opportunities through a multitude of hands-on activities.

The consortium has also developed several eight-week gas and electric training programs at community colleges in Arizona and Nevada.

Arkansas

Arkansas is gathering supply and demand data from its partners and hopes to report on this next year.

Carolinas

North Carolina is working to create a 17th career cluster for energy careers.



Dakotas

The Dakotas is changing its structure from three committees to two for greater efficiency.

Florida

Florida will soon be adding municipal utilities to its membership, as well as the Natural Gas Association. Through the consortium, they learned that a local community college needed equipment to train its students and one of the members was able to donate it. They increased the number of Careers in Energy Week events from three to five and hope to expand to more parts of the state next year.

Georgia

Georgia is revamping its website and about to start work on a three-year strategic plan. For Careers in Energy Week, they took students and parents to a substation and showed them what it's like to be a lineman. They are offering summer internships and students who do well will be offered scholarships for electric lineman training school.

Illinois

Illinois recently succeeded in getting a 17th career cluster for energy. For Careers in Energy Week, they held an annual contest for teachers, who are asked to send in pictures of energy activities in the classroom. Their names are put into a drawing to win \$250 for classroom materials. The consortium is working on a succession plan and ways to re-engage corporate leaders.

Kansas

Kansas is in the process of rebuilding.

Louisiana

Newly established as a 501(c)(3), Louisiana is in the process of establishing a gas worker training program. Its lineworker program continues to flourish.

Michigan

Michigan has brought a lot of new members to the table and recently got a grant to hire a project manager. They are also working with an organization that helps people to "think outside the box." They hosted a professional development workshop for teachers. Working with the Department of Education, they established a 17th career cluster for energy and are now working to get more jobs covered by this cluster. They have six high schools and four community colleges teaching Energy Industry Fundamentals (EIF).

Mississippi

Mississippi is not an active consortium but they look forward to creating one. Meanwhile, the governor signed an Energy Academy Act that created two high school energy academy programs with funding from both the state and the Department of Labor. These academies are hoping to offer EIF and will use CEWD curriculum for students in grades 9–12. For Careers in Energy Week, they brought students to visit a nuclear simulator.

Missouri

Missouri developed a website, issued a proclamation for Careers in Energy Week, and is reaching out to colleges through social media. In 2020, they will focus on skilled craft workers and work with educators to determine how to help students gain the skills they need. They are working on a 17th career cluster for energy and focusing on increasing diversity.

Nebraska

The construction of Nebraska has changed and it now meets every other month instead of quarterly, which has helped to strengthen it. The Department of Education has joined as a member, which has created new opportunities. For example, the state works with SkillsUSA and this year the consortium sponsored a SkillsUSA competition. In 2020, they will attend a CTE conference, where they will present information about energy careers. They are also in the process of developing a website. For Careers in Energy Week, they once again held a hands-on workshop for male and female students and guidance counselors. They tried holding an adultsonly workshop for guidance counselors but found it was too difficult for them to be away from school for two days in the same week.

New York

New York is in the process of trying to put together a consortium.



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Oklahoma

With a brand-new state legislature in place that is passionate about the workforce, Oklahoma is now able to make great progress. Energy is the second-largest industry in Oklahoma, with some of the highest paying jobs, but nobody knows about them. They also have the biggest skills gap. They took the state data and met with the Petroleum Alliance, which has 1,300 companies, asking them to collaborate on building a consortium. They are now all working together to create a 17th career cluster. They also partnered with career technical education to identify and map out the top five jobs that need to go into the cluster. They hope this will be completed in 2020.

Virginia

Virginia's goal was to get a seat at the table at the state level and it has now achieved that goal. The Virginia Energy Workforce Consortium (VEWC) is part of the state Chamber of Commerce blueprint for jobs in the energy sector and is invited to statewide discussions with the governor on workforce issues. Two months ago, the governor signed an executive order expanding its clean energy goals and mentioned VEWC in the order. In 2020, the group hopes to find ways to better leverage all the work it is doing and better promote energy career pathways.

Ann Randazzo, Executive Director, CEWD, closed the session by reminding everyone that CEWD has a community of practice for consortia and inviting them to participate.





About CEWD

Formed in March 2006, the Center for Energy Workforce Development (CEWD) is a non-profit consortium of electric, natural gas, and nuclear utilities, contractors, their associations – the Edison Electric Institute (EEI), American Gas Association (AGA), American Public Power Association (APPA), Distribution Contractors Association (DCA), Nuclear Energy Institute (NEI), and National Rural Electric Cooperative Association (NRECA); and their unions – the International Brotherhood of Electrical Workers (IBEW) and the Utility Workers Union of America, AFL-CIO (UWUA).

To learn more about CEWD, please visit www.cewd.org or www.getintoenergy.com.