CEWD has helped to launch and continues to support State Energy Workforce Consortia representing more than 30 states, with membership from the energy industry, educational institutions, government, unions, and now contractors. Representatives from these collaborative organizations gathered for their annual National Forum at the Edison Electric Institute (EEI) in Washington, D.C., to share best practices and learn about new tools and resources to aid them in their mission of developing a qualified, diverse energy workforce for America.

“Today is all about the consortia, about what they do and how we can learn from each other,” noted Rosa Schmidt, Consultant, CEWD, following a welcome and introductions by Ann Randazzo, Executive Director, CEWD. “I don’t know of any other industry that operates as we do, collaborating like this.”

**Best Practices: Workforce Planning**

The Louisiana Energy Workforce Consortium recently created two linemen certification programs in less than nine months, said Melonie Stewart, Director of Operations and Customer Service, Entergy, and Chair of the Consortium. She credited CEWD’s state consortium model and other guidance with their ability to do so as swiftly and efficiently as they did.

“When we started this program, I’ll be candid with you—I didn’t even know about CEWD,” she said. “We were going to launch this on our own.” Entergy had been trying to get a lineworker training program off the ground for several years, she said, in response to the need to replace a “mass exodus” of retiring Baby Boomers leading to “a lot of experience walking out the door.”

But it wasn’t until one of the company’s business partners told Stewart about CEWD and introduced her to Ray Kelly, Consultant, CEWD, that they were able to make real progress.

Kelly introduced them to the concept of a statewide consortium that could work collaboratively on their workforce planning and training needs, rather than each company trying to solve this problem independently. He showed them how to structure the organization; how to make sure all the right players were invited to the table and actively engaged in committee work; the importance of communicating with educational institutions about their current and future workforce needs; and how to use the CEWD competency model to design a training program to meet those needs, among other things.

“It was really the CEWD model, the consortium structure, and Ray’s guidance that helped us get this off the ground,” said Stewart. “It also helped to understand the value of following the consortium model and engage employers and educators from across the state instead of doing this on our own. As a consortium, you work as one group, with a common goal and a common focus.”

The first thing they did, said Stewart, was to pull together a group of utilities and contractors. “One of our best strategic moves was to start with the contractors that supply lineworkers to Entergy. We introduced them to the concept of the consortium structure, workforce development pipeline, and lineworker certification program. It was easy to get buy-in because we were all experiencing the same struggles—the loss of experience and training new hires.”
Stewart said key to the group’s success was making sure they had the right people involved: “Not only the right team of educators, but the right team of employers,” including people from the operations side of the business, who best understood the challenges and needs they were facing. “Those in operations understood the pain of hiring, onboarding, and training numerous lineworkers with limited success.”

The next thing they did was to quantify the demand. “We asked each company to project hiring needs and work locations over five years across the state,” she said. “We learned that, collectively, we needed 550 lineworkers over the next five years. That’s significant.”

Because some companies were hesitant to make the details of their hiring needs public, she added, they scrubbed the data to present it in aggregate. It was the first time many of them had thought about workforce planning as a pipeline, a concept she said was valuable in selling the project to other employers.

“We hadn’t thought of it like this before, of projecting our needs so that we’d have people coming out of training at the time that we needed them. There’s a lot of value in being able to hire lineworkers who have some training already under their belts and who want to be in the field. It’s really discouraging to spend years training and onboarding employees only to have them decide that this work is not for them.”

Stewart said they held an employer summit first to discuss what the industry needed, then a joint employer-educator summit to discuss what they needed to do to be able to meet that demand.

“Once we got the numbers, we were able to have more meaningful conversations with our education partners,” she said. They also learned that both educators and employers needed to stay involved—not just in communicating the need for a program, but throughout the entire process.

“You can’t just turn to a technical college and ask them to do it,” Stewart said. “You have to be dedicated to working hand-in-hand with the college every step of the way. They want to meet your needs, but they don’t know what those needs are if you’re not involved. In the past, we asked for a program and it never happened and we wondered why. We now know that it takes a lot of effort from both parties.”

At the joint summit, everyone was asked to sign up for a consortium committee and to commit to playing a role, she said. “If you have committees with really strong leaders, you can make a lot of progress. Each has to focus on one piece. We’re all running in parallel, but toward the same finish line.”

**Lauren King, Interim Director of Community and Economic Development, Delgado Community College**, who co-chaired the Education Committee, said the employer input was invaluable. “You don’t often have an employer partner who comes to the table and asks to help, so this was very refreshing for us.”

Together, they came up with 83 competencies that needed to be aligned to curriculum, she said. “We wanted to look at industry-based credentials and we wanted people to be able to take these credentials elsewhere. We wanted them to be nationally recognized. We looked at what was already being offered, such as the NCCER curriculum, and found some things that worked. Everything did not align fully, though. We had to agree upon what was needed.”

Having employers “at the table to review every step” allowed them to make changes quickly and efficiently, King said. “Having regular check-ins was very important.”
Employer involvement also allowed them to establish a realistic budget and to secure $227,000 in donations, including volunteer time, labor, and equipment from the utilities and contractors that would benefit from the program. Those donations—including two $50,000 grants—allowed them to build two training labs complete with climbing poles. Employers will also be directly involved in the program through hands-on training in the labs and other interactions with the students.

“We’ll be watching along the way, observing in the classroom,” said Stewart. “We’re all going to be recruiting from these programs.”

Working collaboratively helps to ensure the training program they developed could be delivered consistently throughout the Louisiana Community & Technical College System (LCTCS) and that it would be the same at each, said Tandra LeMay, Associate Vice Chancellor for Workforce Solutions and Integrated Production Technologies, Fletcher Technical Community College.

The training program will initially be held at Delgado during the evenings and Fletcher during the day. Students will earn professional credentials, not academic credits. Those who complete the program and pass the assessment will earn the NCCER credentials, as well as the option to obtain additional certifications including OSHA 10, CPR, and First Aid.

LeMay said the Career Awareness Committee developed marketing materials that allowed them to communicate important information about the training program and highlight essential details, such as the tuition cost, the pre-assessment requirements, and career options available upon successful completion. The team also developed a social media campaign to build awareness of the training program and held information sessions to allow interested students to see the equipment, tools, and materials that would be used, as well as ask questions.

She emphasized the close relationships that developed while working together so intensely. “It felt like a family working together. We had a dinner after one of our two-day sessions, and we just sat at the table together and talked. It gave us the energy to cross the finish line.”

Maintaining close contact with team members is critical, said Stewart, who added it was also incredibly challenging, given that all of this work was being done on top of everyone’s full-time jobs.

“We held painfully frequent checkpoints,” she said. “It was our inside joke that, every Tuesday at 8 a.m., come Hell, high water, or hurricane, for one hour we would go through our action items, plan next steps, and problem solve. We did that every week and we’re still doing it today.”

The keys to success, she concluded, were “a strong team, the structure provided by CEWD, true partnerships with employers and educators, and ownership and participation from all.”

**Best Practices: Consortium Structure/Support**

So you’ve created a state energy consortium—but should you operate it as a nonprofit organization? And if so, should it be a 501(c)(3) or a 501(c)(6) organization? And what’s the difference, anyway?

Beth Britt, Midwest Regional Consultant, CEWD, led a question-and-answer panel addressing these and other questions about how to structure a statewide energy consortium, with answers provided by consortia chairs from Florida, Georgia, and Wisconsin.
Diane McClearen, Director of Community and External Relations, Oglethorpe Power Corporation, and Chair of the Georgia Energy and Industrial Construction Consortium (GEICC), said her organization became a nonprofit when it was initially created so that it would be eligible to receive a grant from the Department of Labor. Because GEICC is a membership organization formed by industry to serve its members, they opted to form a 501(c)(6). McClearen said doing so allowed them to later begin charging dues, lobby on behalf of the industry if needed, and also perform charitable functions, such as providing scholarships to students, fund training for teachers, or receive donations to support its work.

“Fifty percent of our money comes from dues,” McClearen said. The other half comes from an annual golf tournament fundraising event.

Kristie Kelley, Workforce Development Coordinator, Gulf Power Company, and Chair of the Florida Energy Workforce Consortium, said her group was the first state consortium to form, but initially operated under the state’s Workforce Board and not as a separate entity. After almost a decade, however, the group felt constrained by administrative and other hurdles created by being part of a state entity and decided to form a 501(c)(3) organization so that it could operate independently.

The Florida group opted not to become a 501(c)(6) organization because it had no interest in lobbying, Kelley said. “We leave that to the different utilities. Our focus is workforce development. We’re more about building awareness of careers in energy.”

Both types of organizations are free to collect dues using any type of structure they like. Kelley said her group collects dues on a tiered basis, charging industry association members a higher rate than individual utilities, for example, and offering free memberships to educational institutions as long as they have industry sponsors.

Both Florida’s and Georgia’s consortia are run by volunteers who serve on the executive and other committees, but Kelley said Florida does pay for an executive assistant 20–40 hours per month. The assistant runs their social media accounts and holds other administrative responsibilities. “She’s the glue that holds it all together,” Kelley said.

Jim Lorenz, Director of Electric Construction and Operations, Madison Gas & Electric Company, and Co-Chair of the Wisconsin Energy Workforce Consortium, said his group was still in the process of forming and expects to formalize its 501(c)(3) structure in the first quarter of 2018. The group plans to hire a management company to collect dues and handle administrative duties, budgeting, tax forms, and to oversee their website.

Asked how they sold the idea of charging dues to their members, all three agreed members saw value in what they got for their money.

“You get access to information and access to top students, technical college presidents and instructors, legislative updates, and more,” said McClearen. “Membership dues are a great value.”

Asked about the size of their consortia, each reported having 20–25 dues-paying members, with larger numbers participating in general meetings.

Britt asked the panelists what advice they would have for anyone considering forming a nonprofit for their consortium.

“My advice is to do it yesterday,” said Kelley. “Really. Had we known 11 years ago what we do now, we would have created our own 501(c)(3) to start with. It has given us forward momentum that is priceless at this point.”
Lorenz suggested taking the time to present potential members with information about the value and benefits first, to bring everyone on board. “We took two meetings to plant the seed to make sure our membership was in agreement and to make sure our strategic plan wouldn’t change as we became a 501(c)(3).”

Kelley noted that CEWD provides a toolkit for how to create a nonprofit organization. “Take that document. Use it. It’s a tool to help you make that decision. I’m happy to share our bylaws and governing documents with you,” she added. “You’re welcome to borrow, steal, whatever you want to call it. It’s yours.”

Additional resources for forming a nonprofit structure can be found on the State Energy Workforce Consortia Wizard at http://www.cewd.org/wizard/consortium/index.php.

**New Tools and Resources**

The National Energy Education Network (NEEN) database has been updated and now includes 194 educators across 38 states, 59 of which offer the Energy Industrial Fundamentals (EIF) course, Consultant Ray Kelly said. There are also 23 institutions offering the NUCP certification, 20 offering courses in renewable energy, and 83 offering electric utility technology programs.

Kelly offered to provide an orientation to anyone needing help navigating the database. He noted that now educators and employers can independently make changes on their administrative pages, but he is available to help those who need guidance doing so.

Members can also download Tableau Reader, a free app that will soon allow them to visually display the data. For example, it can be used to show NEEN schools by degree type, such as all of the lineworker schools and how they are distributed across the United States, or a map of all the EIF providers in the nation.

Reports will also be available to members showing workforce development pipeline supply and demand data. For example, if someone wanted to know how many lineworkers the state of Louisiana would need over the next five years, this data would be broken down by the year in which they were needed, as well as showing how many students were enrolled in and expected to graduate from schools in the state during the same timeframe. The demand data will come from a Google form filled out and submitted by consortia, not from CEWD workforce survey data.

Kelly said he's still working on cleansing the database to ensure all data is current and accurate. “We need members to update their information,” he said, encouraging them to call or write to him or their regional consultant if they have questions about how to do so.

As the point of contact for CEWD contractor members, Consultant Beth Britt provided an update on the surge of contractor membership in 2017 and its positive implications for the membership at large.

“When CEWD’s Board looked at specific game changers last year that would have an impact on the industry and how they affected key jobs, one of the things that stood out was how much we depend upon our contractor workforce,” she said. “If they don’t have the people they need to do the work, that’s definitely an issue for our electric and gas utility members.

“This was a driving factor for us to encourage contractors from across the U.S. to join CEWD and become part of the solution,” she said. As a result, five contractor companies and the Distribution Contractors Association have joined CEWD and attended the National Forum and Annual Summit.
Britt said she and Executive Director Ann Randazzo were in the process of meeting with contractors to identify what their issues and challenges were, where they had shared issues with utilities, and where their issues were unique to the industry.

She noted that some contractor members had also been nominated and elected to the CEWD Board and Executive Council and that at least one statewide consortium—Wisconsin—had added contractors to its membership. CEWD has also created a Community of Practice for contractors to give them a shared forum for addressing workforce challenges.

“In preparation for the 2019 CEWD Workforce Survey, we want to be able to translate contractor workforce needs to utility workforce needs,” she said. “Their needs are driven by the needs of utilities.”

SkillsBridge Initiatives
SkillsBridge is a program developed by the Department of Defense that allows soldiers finishing their last six months of service to begin preparing for civilian employment while still on active duty. CEWD has developed some tools and resources based on the experience of several consortia members that can help utilities implement their own SkillsBridge programs. Consultant Rosa Schmidt highlighted the ongoing initiatives of members in three states:

Georgia Power was the first CEWD member to implement a SkillsBridge initiative. The program, which trains servicemen for transmission line and substation construction jobs, is offered at Fort Stewart. Those who meet the requirements for the program are offered jobs before they take the training, contingent upon their completion of the program and meeting all other requirements.

ConEd and National Grid offer a SkillsBridge natural gas boot camp in New York at Jefferson Community College as part of their Troops to Energy Jobs initiative. Both utilities were actively involved in the design and implementation of the program, including the screening process for candidates. Graduates are interviewed for open positions after completing the course.

Virginia Natural Gas also offers a SkillsBridge program for veterans that has been accredited and can be paid for through the GI Bill, said Schmidt. The graduates from the first cohort are currently being interviewed for open positions.

“What we’ve learned is that every state is different,” said Schmidt. “SkillsBridge is a common program across all bases, but it’s up to each base how they implement and operate the program.”

To guide members who are interested in creating a SkillsBridge initiative for their company, CEWD offers online tools and resources on its Troops to Energy Jobs site, she said. For example, there is a checklist based on lessons learned by other members, highlighting what companies need to consider for success. “It’s a great tool and we suggest you look at it before you even think of talking to a base,” she said. “It will help you prepare for what you need to do internally, first.”

Marji Morris, Tucson Electric Power Co., noted that some bases also refer to the program as CareerSkills. In Arizona, her company is working with the U.S. Army and two Air Force bases, offering a military internship program that also allows them to increase the diversity of their hires.

“The military is so diverse,” she said, “ethnically, in gender, and in its skill sets. It’s such an amazing pipeline. Every single one of the people who entered this program is still with us, either participating in the program, hired as a contractor, or hired as a full-time employee. They bring so much dedication and talent, it’s impressive.”

Schmidt advised collaborating with other utilities when developing SkillsBridge programs to ensure enough demand for those completing the program. “One company may not be able to hire all of the soldiers that take the program,” she said. “It does create another level of complexity when more than one company is involved, but it is worth it.”
She also emphasized the importance of getting buy-in from senior leadership and operations within the company, first. “They need to understand the program content, and why the company is implementing it, in order for them to buy into and support the program. After all, they are the ones who hire the graduates.”

She advised members to also make their communications, community affairs, and government affairs departments aware of their efforts. “They all play a critical role in the implementation of a successful initiative. They can help you communicate both internally and externally.”

Matt Kellam, Military and Recruitment Program Coordinator, Dominion Energy, said Virginia Natural Gas launched a Natural Gas SkillsBridge Program in partnership with Norfolk Naval Base and Tidewater Community College. The training is a one-week introductory course used and recognized by the oil and gas industry nationwide. “The Navy saw value in this because it is industry-recognized training that is short and to the point,” he said. “They were not interested in adding work readiness skills training because they say they already get that through the military.”

Kellam said the Virginia Department of Veterans Services is exploring a statewide SkillsBridge agreement that would eliminate the need for employers and industry to obtain individual approval from military installations in the state and make it easier for employers to offer service members internships or fellowships, aiding in their transition from the military to the civilian workplace.

CEWD also offers help to veterans who want to find out how their job skills translate into civilian energy jobs. A translator is available on the Troops to Energy Jobs website but further guidance is also available from Karl Christopher, Virtual Career Coach. Schmidt said that they are also working on additional tools to help companies with their veteran hiring.

Veterans Database

“We have veterans who are looking for jobs and we, as an industry, are looking for veterans to fill our jobs,” noted Consultant Rosa Schmidt. “How do we connect the two?”

The answer is through a Veterans Database that can be accessed through the Troops to Energy Jobs website.

Veterans can upload their resumes and add them to the database, she said. The database also includes a list of employers who are veteran-friendly and looking to hire veterans, along with recruiter names and contact information. “It’s not just a link to a company website,” said Schmidt. “There’s actually a name of someone they can speak with.”

Schmidt said the database scrapes industry jobs every night to keep job listings current. Veterans can put in their MOS code and see available jobs that align with their skills and experience.

The database also offers employers a direct connection to veterans who are looking for jobs in the energy industry, she said. “It offers you a way of reaching out to them proactively about job openings and allows you to communicate directly with them, to communicate how you support veterans in your company. It is a way to let them know you are veteran-friendly and raise awareness of your company.”

Employers can search by MOS, by state, and by skills, she said. They can pull up email addresses and resumes of potential candidates.

Schmidt encouraged members to promote the site on both their company and consortia websites and in all of their marketing materials.
Consortia Updates

*Arizona*
After several intense years of work developing programs through a major Department of Labor grant and partnership with CEWD, Arizona's consortium experienced some fatigue, members reported. However, it is now gearing up again and expects more activity in the near future.

*California*
This consortium is improving its meeting structure, doing simultaneous quarterly face-to-face meetings in the north and south ends of the state and joining them by web technology. It ran its annual Careers in Energy Week student advertising contest and will be judging the entries at its December meeting. It is also beginning to develop a boot-camp-style training course through a partnership with a southern California military base, employers, and a state university. Finally, the consortium is exploring a 501(c)(3) structure and starting up a workforce planning committee early in 2018.

*Carolinas*
The Carolinas Energy Workforce Consortium is reforming and has new support from co-op members in North Carolina. State agencies from both Carolinas have been invited to meetings as well as technical colleges. The group is currently focused on developing a strategic plan and has identified where there is demand. They are now working on the supply side: education pathways around pre-apprenticeship programs; career awareness at the high school level; and exploring a 17th career cluster.

*Colorado*
This consortium had an active year with a strong focus on recruiting people with disabilities and raising awareness of disabilities among industry partners. Activities included a Lunch and Learn and career fair for the disabilities initiative, continued work on increasing veteran hiring, Careers in Energy Week, and development of an energy curriculum with a tour of their facilities for 60 schoolchildren. The group hopes to re-engage its education partners in the future.

*Connecticut*
This consortium is gaining new interest from the renewable energy sector, which allows them to stay in the forefront working with business association members and universities. They are developing bylaws and committees.

*Dakotas*
This rural consortium includes six utility members and two cooperatives. They are working on their strategic plan and, after losing some initial steam, decided to refocus on career awareness. They held Careers in Energy Week activities that included an employer presentation at Bismarck College, a career exploration program for middle school students at a local technical school, an energy camp, a high school expo, an essay contest for students in grades 3–5, and a Careers in Energy Week proclamation.

*Florida*
Because of the state’s size, this consortium rotates the regions in which it holds its meetings. It is currently focused on the connectivity between industry needs and what education partners can provide, to ensure that everyone is getting what they need. Three events were held across the state for Careers in Energy Week, with more than 200 participants including utilities, education partners, teachers, and students. The annual membership meeting and annual meeting for teachers were held back-to-back this year so that more people could attend both meetings. They are researching the availability of grants to support expansion.

*Georgia*
Consortium committee members were invited to judge a Technology Student Association competition event, which they are trying to develop into a career fair, as well. Georgia Power provided a keynote speaker to open the event. At this stage, the consortium reports more than 800 students are somewhere in the pipeline for energy career pathways. They are also about to publish an “energy pathway playbook” to help people create energy pathways in their state.
Illinois
Following a transition in leadership, this consortium focused on Careers in Energy Week. Activities included a proclamation, press releases, career awareness events, and a contest for teachers. Teachers can win $250 grants by tweeting pictures of how they use free energy materials provided to them online in their classrooms. The group is contemplating whether to become a 501(c)(3) organization.

Iowa
This consortium is working on researching data on supply and demand across the state, based on a model provided by Wisconsin’s consortium. They’ve added more questions for members to make the data qualitative as well as quantitative. Northeast Iowa Community College has received a renewable energy grant.

Kansas
Two companies in this consortium are going through acquisitions and mergers and the group recently went through a leadership change. Careers in Energy Week activities included a proclamation, a wind energy event at a community college attended by nearly 400 students, and media coverage. They are in the process of reviewing their energy pathway, which is in its third year.

Michigan
This consortium has also gone through a recent leadership transition and spends time each year reviewing its strategic planning document. Six high schools and six colleges in the state currently offer the EIF program. A stackable credential program is being launched at Henry Ford College, which will offer pre-apprenticeship training. The first cohort is now in session. Careers in Energy Week activities included eight utility tours for 200 students from a variety of high schools and industry guest speakers sent into public schools. A welding contest, based on Florida’s program, is being held for the first time and has had 99 applicants.

Minnesota
Based on models provided by Nebraska and South Dakota, this state consortium opened a new linework indoor training facility. Workshops are being held around the state every summer for high school and middle school science teachers, with attendance from more than 160 teachers. The teachers can also sign up to have an energy science trailer visit their school for a week, which includes kits for solar, wind, and hydro energy activities and concludes with solar-popped popcorn for the students. This popular activity is already booked through the end of the school year. Minnesota Public TV is also working on a documentary that features a wind energy program at one of the state’s college campuses. It is expected to run in spring. They are also preparing to introduce drone instruction to their wind and power line programs. A career academy model is being developed in partnership with a local school district. Finally, the Legacy program is starting its third cohort and experiencing some challenges. They’ve added the EIF program and exposure to pole climbing earlier in the process to ensure students in the program are sincerely interested in pursuing this type of career.

Missouri
This consortium is under development and plans to launch in 2018.

Nebraska
This consortium recently completed its strategic plan. Careers in Energy Week activities included bringing middle and high school girls to a service center where each company held a workshop based on an energy career path for which they expect to have hiring gaps. Students were introduced to the degree programs they would need to pursue for each of these careers. A separate program was held to introduce boys of color to energy career pathways. Students were recruited through the Urban League and other community organizations with connections to young people. A Legacy program was also recently launched in this state, with the first cohort starting in September.
**New York**
Troops to Energy Jobs started its third cohort in this state. Even though the consortium is focused on veteran recruitment and hiring, utilities held Careers in Energy Week activities that included inviting students to visit their learning centers and sponsored FIRST® Robotics events and URGENT, a workshop for women in nontraditional fields.

**Virginia**
This consortium, now 10 years old, recently regrouped and now has 20 member companies with about 100 participants from utilities, associations, education, and government. In March, they held an energy workforce and pathways summit at which a representative from Dominion Energy gave the keynote speech. CEWD and the Director of Workforce Development from the Governor’s office were also in attendance. Issues discussed at the summit included pushing for a 17th career cluster in energy, bringing the Legacy program to Virginia, offering EIF (under the name Energy in Power) at area high schools and community colleges, and development of two SkillsBridge programs.

**Wisconsin**
This consortium is working on updating its numbers for supply and demand and hopes to look at the data by region. They are also working on raising career awareness and the future needs of the gas industry. They hosted the Midwest Regional Meeting for CEWD and are now working on becoming a 501(c)(3) organization.

“I am overwhelmed by all of the work that is going on out there,” said Ann Randazzo, as the meeting concluded. “The work that you’re doing is amazing. Keep it up.”