

2023 ELECTRI Summer Meeting Recap

DAY 1

ELECTRI Leadership Overview - Kellie Holland, Council Chair

Kellie Holland reviewed her mission as ELECTRI Council Chair: to be accountable to the ELECTRI Council members and provide high quality research that is meaningful to their businesses. She reiterated the need for involvement from the Council, over and above engagement, as this is already a very engaged group of contractors and industry partners. Kellie asked Council members to provide their ideas, pain points, challenges, and future opportunities that ELECTRI can address. She reminded everyone of the importance of getting the word out about ELECTRI's resources.

- The **Program Review Committee (PRC)**, led by James MacDonald, is ensuring ELECTRI's research is more agile with two research cycles each year to meet the changing needs of the industry. The same methodology is applied: subject matter expert, focus groups, and traditional academic research. The PRC takes financial commitments to ELECTRI very seriously by vetting researchers and their process to ensure the best-in-class research, with the data owned by ELECTRI.
Call to Action: Please complete the research surveys that are sent out periodically so ELECTRI can ensure our research is reflective of the industry with as much data from our contractors and partners as possible. Contact Amanda Harbison at amanda@electri.org for more information.
- The **Talent Initiative Committee (TIC)**, led by Adam Rude, is spearheading NECA Student Chapters, Industry Connect events, the ECIC competition, and the new DOL-approved Office Apprenticeship program.
Call to Action: Once the details are finalized, champion the rollout and approval of the Office Apprenticeship in your state. Consider joining the curriculum committee to assess what classes should be included in this new program. Contact Anna Jochim at anna.jochim@electri.org for more information.
- The **Construction Technology Committee (CTC)**, led by Toby Mitchell, is a new committee working to understand what contractors are looking for in terms of technology, and the best ways to use tech stacks, software, and tools to better run their companies.
Call to Action: Participate in the productivity project to see what tools are best for tracking productivity. Contact Josh Bone at josh.bone@electri.org for more information.
- The **Development and Engagement Committee (DEC)**, led by John Frantz and Andy Berg, will spearhead the new business coaching program in which industry experts can help current contractors grow their business. The goal is to utilize the expertise of retiring contractors to not lose the knowledge in the room.
Call to Action: Keep an eye out for information to volunteer to be a consultant coach or join the steering committee for this new initiative. Contact Jessica Cardenas at jc@necanet.org for more information.

Keynote Address - Leadership and Growth

Steve Richman, Group President, Milwaukee Tool

Steve Richman emphasized that growth within a business starts with its culture, which is built on trust and a diverse team that challenges and debates ideas. To explain how he approaches achieving growth, he highlights the importance of holding individuals accountable for their actions and empowering them to achieve their goals.

Steve cautions against a short-term win approach and encourages businesses to disrupt their industries with breakthrough growth. To accomplish this, companies must invest in recruiting, retaining, training, and developing the best talent to drive change.

Incremental changes are essential for problem-solving, but the focus should also be on disruptive innovation to transform the industry. A combination of incremental, disruptive, and discontinuous innovation is necessary to stay competitive and avoid becoming obsolete.

Real success lies in making tough choices and investing resources in significant opportunities.

Companies must continuously evolve, staying humble and avoiding arrogance in the face of success. The journey to growth and innovation is ongoing and requires a commitment to be paranoid about potential disruptions so you can be ready for them. By focusing on short-term, medium-term, and long-term goals, businesses can thrive and remain relevant in an ever-changing world.

President's Remarks - Kirk Davis, ELECTRI Board of Trustees President & NECA President

Kirk provided an overview of the ELECTRI Connection Summit in Puerto Rico held earlier this year. He highlighted the impact ELECTRI's Student Passport Project was able to make, with students from the Iowa State Student Chapter working alongside contractors to install solar panels on the roof of a local residence and a generator in the home of another family. With the increasing cost and lack of reliable power in Puerto Rico, these projects made a big impact. Kirk also described the tour of the LUMA College for Technical Training and how LUMA is working to grow Puerto Rico's trained workforce to rebuild a more resilient electrical grid on the island.

Read the full recap of the [ELECTRI Connection Summit](#).

Contractor Ted Talk - Installation Through a Different Lens

Greg Padalecki, President & CEO of Alterman, Inc.

Greg addressed the challenges faced by the construction industry, such as declining productivity, labor shortages, and lack of skilled labor. Alterman sought to understand and improve productivity by evaluating employee performance through a testing lab. They focused on task-level improvements and measured productivity by first watching video footage of their employees performing different tasks and then using a scoring mechanism to evaluate performance.

Surprisingly, test results showed that all employees exceeded expectations, indicating that the company's initial assumptions about where to improve productivity were incorrect. The problem was their testing lab did not replicate real project conditions because it provided the exact tools and materials that they needed to complete the task. This realization prompted them to create the PACK (Packaged Alterman Construction Kit), a pre-planned and prefab system that optimizes tools, materials, information, and flow on the jobsite.

Implementing PACK required significant investment in preplanning and incorporating installation experts on jobsites. The process led to minimizing "bad jobs" and introducing new roles in the office, such as project designers and jobsite logistics coordinators.

To encourage a culture of continuous improvement, the company established feedback systems and acted upon complaints to demonstrate a commitment to change and trust-building. Ultimately, the effort invested in preplanning and continuous improvement led to unexpected positive outcomes and a shift in Alterman's mindset towards embracing change and innovation.

Breakout Discussions

Breakout discussions were held on the following topics:

- Measuring the Value of Business Development – Lessons Learned
- Capital is King - Best Practices for Managing Cashflow
- The Impact of Mega-Projects on Market Share
- The Future of Service & Maintenance – Electrification / Sustainability

ELECTRI will release white papers based on these topic discussions in the coming weeks.

Wendt Award - 2023 Recipient Announced

ELECTRI Executive Director Josh Bone announced that Greg Gossett, ERMCO Electric is the recipient of the 2023 Wendt Award. This award is presented each year to an individual or organization that has demonstrated outstanding service to ELECTRI International and to the EC industry. Greg thanked the Council and referenced all the knowledge he's gained from attending ELECTRI meetings and networking with this group of contractors. He also stressed the importance of getting young people involved early to benefit as well.

7 steps Material Management Research

Maria Davidson, CEO & Founder, KOJO

Maria explained how current procurement processes cost contractors millions of dollars every year due to:

- 48% of deliveries not being reported to the office
- The average overhead cost to process one PO is \$68

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- 11% of invoices have billing errors
- \$50M contractor spends an average of 20+ hours/week reconciling invoices
- 48% of purchases go unquoted
- 5-20% price variation between vendors

KOJO conducted research on 7 Steps to Better Procurement with the goal of identifying best practices across 450 contracting companies with which they work. Their research outlines the following steps:

1. Planning
2. Sourcing
3. Purchasing
4. Requesting
5. Receiving
6. Invoice
7. Payments

You can view the research here: <https://www.usekojo.com/series/the-7-step-process-for-material-management>

DAY 2

Josh Bone kicked off Day 2 of the ELECTRI Council Meeting by setting the mindset of “thinking outside the box”. He declared that our industry’s legacy is no longer behind us, and challenged attendees to think of how we are going to take advantage of new business opportunities before us in electricity 2.0.

Workforce Updates - Anna Jochim

ELECTRI’s Director of Future Workforce Development Anna Jochim shared exciting news that ELECTRI’s new Project Management Apprenticeship for non-bargained employees has been approved by the US Department of Labor. This one-year apprenticeship program will include 2,000 hours of on-the-job training with our contractors, as well as 180-300 hours of related instruction through the San Diego State University Global Campus in partnership with Construction Experts, Inc. For more details about this program, contact Anna at anna.jochim@electri.org

View the Project Management Apprenticeship Overview here: [Project-Management-Apprenticeship-Overview.pdf \(electri.org\)](#)

ELECTRI International is proud to present **2023-2024 NECA Student Chapters: Standard Operating Procedures & Best Practices** — a complete toolkit to support NECA Student Chapters in all aspects of development and growth. The toolkit includes information regarding: the leadership model, meetings and events, chapter engagement, community outreach and volunteering, fundraising, internship resources, awards and scholarships, Electrical Contracting Innovation Challenge (ECIC), and supporting chapter documents.

Download the toolkit here: [2023–2024 NECA STUDENT CHAPTER: Standard Operating Procedures & Best Practices - ELECTRI International](#)

Partnership for Career Advancement (formerly Early Career Awards) **Kellie Holland, James MacDonald, and Michael Parkes**

The goal of the Partnership for Career Advancement (PCA) is to allow ELECTRI to create a better research partner with whom we can work alongside and guide them to understanding our industry. The goal is to immerse this researcher into ELECTRI over the year so the resulting research becomes more meaningful to our industry.

Interviews were held earlier this year with potential recipients of the PCA. Kellie, James, and Michael chose a researcher who wanted to explore the topic of “MEP Contractors and GCs: What is the Cost of Inexperience?”. The driver behind this topic is, first, the aging workforce, with 41% of construction workers retiring by 2031 and, second, the need for more skilled labor, since 93% of construction firms report current job openings.

The research project objectives are to identify project impacts related to inexperience, and opportunities and strategies to address the impact of inexperience. The researcher will qualitatively evaluate the impact of inexperience in the field and recommend next steps to address the impacts of inexperience. The project outcomes will focus on what we are doing today and how to address this issue moving forward, to learn how to transfer knowledge from experienced workers to younger workers.

The Council voted to fund the project at \$30,000.

Research Proposals Presented by Task Force Leads

There were three new research proposals presented to the Council for the second research cycle of the year. The topics were:

- Fair Outcomes for Electrical Contractors for Schedule Compression and Out of Sequence Work, Timothy Becker, Arizona State University
- Managing Rework with an Early Warning System, Proactive Remedies, and Proper Documentation, Hala Nassereddine, NCM Consulting
- A Guide for Documenting Costs and Eliminating Rework, Todd Sirotiak, Diversified Construction Services

The Council voted to fund **Fair Outcomes for Electrical Contractors for Schedule Compression and Out of Sequence Work** and **Managing Rework with an Early Warning System, Proactive Remedies, and Proper Documentation**.

Reflections of our Past, Resilience for our Future

Ryan Baumann, VP of Kohler Power, and Chris Crear, Director of Heila Technologies

Ryan highlighted Kohler Power's 150-year history and its commitment to creating a better world through an entrepreneurial spirit and a community of creators. With 30+ brands, 50 manufacturing locations, and \$9 billion in sales, Kohler Power operates in various industries, including kitchen and bath, energy, and hospitality.

Notably, the company has taken significant steps towards sustainability, producing 100% of its electricity for its US and Canada operations from renewable sources since 2021. Embracing a clean energy mindset, Kohler Power partners with energy experts like Heila, pioneers in microgrid technology.

He discussed exploring microgrids as a solution to address the rising demand for electrification, which puts pressure on the traditional grid. With renewable energy technology costs falling by 80%, microgrids are becoming increasingly viable. Kohler Power envisions a 20% rise in microgrid implementation over the next decade.

Microgrids offer valuable solutions to energy consumers, tackling challenges such as high and volatile energy prices, power interruptions, strict sustainability goals, and the need for scalable resources. Chris Crear explained how Heila outlines the following steps for microgrid implementation:

1. Gather energy data to assess the installation location's specifics and determine appropriate asset types.
2. Prepare a Microgrid Sizing Report to analyze energy consumption and recommend suitable assets based on sustainability objectives and cost savings.
3. Install Distributed Energy Resources (DERs) and additional generators, utilizing Electrical Contractors for this task.
4. Implement a control system to optimize the microgrid, enhancing resiliency, reducing costs, and lowering CO2 emissions.

Chris introduced HeilaiQ, which provides a monthly analysis of your utility bill and opportunity assessment for microgrids. He also discussed Heila EDGE, an end-to-end platform that ensures widespread DER component interoperability. He stressed the need for electrical contractors to do the installation of microgrids to work towards a more sustainable future.

Remarks by David Long, CEO, NECA

David Long provided an overview of the challenges NECA and the IBEW are facing together, such as the need to add 300,000 people to our workforce in the next five years. He stressed the challenges that come with adding too quickly to a workforce, like declining productivity and a decrease in safety, and how NECA and the IBEW plan to overcome those challenges together with proper training.

He encourages contractors to pursue service and maintenance work, and to use EV charger installation work to get into this market. He emphasized the multitude of work coming to our industry in EV charging installations and a pathway to entering into the residential market without some of the problems that come with that. He urged contractors to leverage their relationships with our industry partners to help with issues like eliminating manhours or costs on a project.

David reiterated that electrical contractors have more opportunities than ever before and our companies need to evolve and focus on electrification to not miss out on these opportunities.

Panel Discussion: Building Strategic Partnerships

Mike Carroll, Graybar; Ryan Evans, Border States; Paul Hollenbacher, Sonepar; and Jimmy Nall, Mayer Electric/Rexel

The distributor panel discussed why trust with industry partners is key to a strategic partnership. They emphasized how they encourage customers to be proactive and communicate openly to work together when problems arise.

They pointed out that a major underutilized service by our contractors is the use of data that the partners can provide to look at trends and reduce manhours and costs.

When it comes to improving material management practices, they recommend moving away from the traditional bid and buy approach. Instead, the emphasis is on reallocating time and resources into optimizing onsite workflows. Preconstruction and early engagement with suppliers play a vital role in this process. By involving suppliers during the specification stage, you can get better lead times for materials.

Sonepar announced it is in the process of developing a national project strategy aimed to simplify material management.

All panelists agreed that while material prices remain the same for both small and large contractors, the services provided can differ. Advancements in technology have made it possible to accommodate smaller contractors better. However, there is still work to be done in increasing productivity, such as partners handling more tasks in-house for electrical contractors. This approach aims to enhance efficiency and overall project success.

DAY 3

Updates on Current Research Projects

Please reference the slides for the current research updates [HERE](#). Contact Amanda Harbison at amanda@electri.org if you have any questions.

Panel Discussion - Doing More with Less—How are you Driving Productivity?

Gael Pirlot, Inglett Stubbs; Ted Robertson, Fisk Electric; and Jeff Weir, Kelso Burnett

The panel addressed the common challenge of declining productivity in the construction industry and the struggle to motivate workers, particularly the younger generation, to be more productive. To improve productivity, they suggest structuring jobs to align with the motivating factors of the younger workforce.

In a speed-to-market industry, they have found prefab to be essential. For example, Fisk Electric worked on an Amazon warehouse and by prefabricating the racks, saved on man-hours and resulted in a 25% profit. The panel also encouraged contractors to leverage partnerships with distribution companies to aid in prefab efforts and overall productivity. They recommended involving the field in the prefab process because those workers have good ideas from their experience and can help increase efficiency. It also helps to reduce resistance from field workers if they are involved in an already well-established system.

While Collective Bargaining Agreements (CBAs) might hinder prefab initiatives in some areas, the current booming industry provides an opportunity to negotiate changes.

The panel suggested maximizing your tools and technology to be more productive on the jobsite and to use deliverables to effectively measure productivity. One example of a tool that Fisk Electric found useful was Austin Lane Mobile, or ALMobile.

The Council requested research to support the idea that prefab not only saves time and money but also produces a better end product.

The decline in productivity is a widespread issue affecting contractors of all sizes. To tackle this pain point, embracing prefab and productivity-driven measures become crucial for success.

Contractor Ted Talk: Construction Technology Committee Vision and Goals

Toby Mitchell, President & CEO, Classic Electric & Consulting

Toby provided an overview of the Construction Technology Committee (CTC), made up of one person per NECA District plus some industry partners. He reiterated that contractors are way behind in the technology space and, if we learn how to use technology more effectively for our EC industry, then we can do more with less.

Toby explained that the committee can't answer, "What software should I use?" because that question can't be answered without knowing your specific business model and processes. The goal of the CTC is to help contractors figure out how to choose which technology is right for their company, and how to implement it.

He pointed out that it is harder for larger contractors to move and pivot or reevaluate their processes. It's easier for smaller contractors to change and add new processes. It's also easier for newer companies that implement technologies from the beginning.

Toby asked Council members to help the CTC by identifying what your specific needs are in the technology space, sharing what you're afraid of or what you don't know how to do, so that the CTC can be a better resource to the Council.