



**NEETRAC**

National Electric Energy Testing,  
Research, and Applications Center



# NEETRAC NEWS

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## **LEADERSHIP TEAM**

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Quality Resource Manager

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## **Baseline Projects Recently Launched**

NEETRAC launched the following Baseline project proposals presented during the September 2022 Management Board Meeting. If you would like to serve as an advisor for any of these projects, please email [suzanne.schmidle@neetrac.gatech.edu](mailto:suzanne.schmidle@neetrac.gatech.edu) and indicate which projects interest you.

### **Understanding Current Industry Practices While Installing Mobile Stations**

**Baseline Project Number 22-149**

**PI: Anil Poda, [anil.poda@neetrac.gatech.edu](mailto:anil.poda@neetrac.gatech.edu)**

As a part of today's substation operations and maintenance activities, it is common practice to install temporary mobile substations, either within substations or in nearby outside areas, during unexpected outages or planned maintenance. Utilities must follow OSHA safety regulations while using mobile substations along with any state and local regulations. IEEE 1268 and other guides provide general instructions on how to transport mobile substations and installation within an existing substation perimeter. However, no guidelines exist for installation of mobile substations when not co-located within a substation perimeter. The purpose of this project is to provide a better understanding of today's industry practices, regulations, and requirements for the installation and grounding of mobile substations, both within and outside a substation ground grid.



### **Benchmarking Utility Construction Quality Assurance Practices**

**Baseline Project Number 22-133**

**PI: Joe Goldenburg, [joe.goldenburg@neetrac.gatech.edu](mailto:joe.goldenburg@neetrac.gatech.edu)**

This project seeks to understand how utilities ensure the quality of new lines being designed and constructed by contractors. This benchmarking study will interview project Technical Advisors to discover:

- How utilities verify construction quality (inspection, testing, etc.)
- What components utilities inspect, and the decision-making process for what components to inspect
- Procedures utilities use for inspection
- How utilities hold contractors accountable through their RFPs and construction contracts

## Baseline Project Recently Launched - Cont'd

### IEEE Entity Standards Monitoring II

#### Baseline Project Number 22-148

PI: Joe Goldenburg, [joe.goldenburg@neetrac.gatech.edu](mailto:joe.goldenburg@neetrac.gatech.edu)

This project continues to explore IEEE's relatively new entity standards development process. The IEEE Standards Association describes their Entity membership as a way for "companies to engage and influence technology development to ensure their business interests are heard and represented". In BL #20-156, NEETRAC found several issues with some existing entity standards, including conflicts with requirements in North America for the construction, maintenance, and operations of overhead lines. NEETRAC developed a presentation that details the concerns that Management Board representatives and Technical Advisors have with the entity standards development process. The presentation includes information on how to tell whether a standard was developed using the Entity or Individual process. It has been delivered at three industry forums and two NEETRAC Members standards engineering groups. To obtain a copy, please contact Joe Goldenburg at 404.675.1858. This project will continue to monitor the process.

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### Standards Activities—What You May Be Missing

NEETRAC's engineers attend technical committee meetings sponsored by several standards bodies including IEEE, IEC, ANSI, and ASTM. These meetings provide avenues for our industry to come together to discuss existing problems and new developments. It gives NEETRAC a way to meet with our Members outside of regular project activities, provide independent technical input to standards development, share developments from NEETRAC baseline research (after Member approval) , and stay abreast of current industry issues.

In the Fall 2022 ICC Newsletter (Vol. 11, Issue 2), Brent Richardson wrote an article noting the reduced participation of electric utility engineers in standards development and meeting attendance at ICC (drop from 28.7% in Fall '08 to 18.6% in Spring '22). He noted that this is a missed opportunity for electric utilities as:

*Consistent utility representation provides a voice for utilities in the development of standards and balances the influence of material suppliers and manufacturers to provide a well-rounded view of issues and solutions for critical components of utility generation, transmission and distribution assets.*

Our industry needs this balanced voice not just at ICC but for all technical committee groups. If it has been a while since you attended, make plans to come to the next industry meeting and share your experience; you may find a solution unexpectedly.

| NEETRAC Staff      | Planned 2023 Meeting Attendance                                 |
|--------------------|---|
| Tristen Cline      | IEEE OHL  |
| Joe Goldenburg     | ANSI C119, ASTM B01 & E11, IEEE OHL, and Substations (IEEE 605) |
| JC Hernandez       | IEEE ICC and Transformers                                       |
| Thomas Parker      | IEEE ICC  |
| Anil Poda          | ASTM F18 and IEEE Substations                                   |
| Diana Ramirez-Wong | IEEE ICC  |
| Caryn Riley        | IEEE ICC and Switchgear   |

## New NEETRAC Staff

**Ian Brown** joined NEETRAC in April 2022 as a temporary test technician but was recently hired permanently as a Test Technician III. Ian is from Virginia Beach, VA and received a B.S. in Mechanical Engineering from Virginia Commonwealth University (Richmond, VA) in 2010. Since graduating, his unique career progression has taken him through a variety of roles and places, including product development roles in Seattle and Chicago. Ian worked for several years at Hayward Industries, a major player in the swimming pool products market, performing R&D testing on a variety of products. Throughout his diverse experiences, Ian has developed into a jack of all trades. When Ian isn't working, he enjoys music and DJing, reading, traveling, and catering to his dog's every desire.



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### Management Board Meetings

The next three Management Board meetings have been scheduled for the following dates:

**January 25 - 26, 2023**

**May 17 - 18, 2023**

**September 19 - 20, 2023**

For details, please visit the Member Section of the NEETRAC website at [www.neetrac.gatech.edu](http://www.neetrac.gatech.edu).

**Carlos Chapa** joined NEETRAC in December 2022 with 15 years experience in oil filled distribution transformer design. He earned a B.A. in Mechanical and Electrical Engineering in 2005 from Universidad Autónoma de Nuevo León (UANL) in Mexico. Over the years, Carlos worked with companies in Mexico, the United States, and Canada doing mechanical and electrical transformer design, implementing new features, and developing standard processes for the design and manufacture of products. He participated in training and mentoring employees and was responsible for pad mounted product lines for about 9 years. Being involved in transformer failure diagnostics spiked his interest in interaction with the electrical grid and how other elements might affect its operation and components.



## 2022/2023 NEETRAC Member Management Board Representatives

- |                                 |                     |  |                 |
|---------------------------------|---------------------|--|-----------------|
| 1. Aluma-Form.....              | Pete Landsgaard     | 20. Okonite.....                       | Bill Crawford   |
| 2. Ameren.....                  | John Crotty         | 21. Pacific Gas & Electric.....        | Jim Gill        |
| 3. American Electric Power..... | Jim Salerno         | 22. PPL Corporation.....               | Adam Eshleman   |
| 4. BC Hydro.....                | Hudson Giesbrecht   | 23. Prolec GE.....                     | Carlos Gaytan   |
| 5. Borealis Compounds, Inc..... | Susan Song          | 24. Prysmian Group.....                | Jared Weitzel   |
| 6. Conductores Monterrey.....   | Raul Garcia         | 25. Public Service Electric & Gas..... | Ed Gray         |
| 7. Consolidated Edison.....     | Frank Doherty       | 26. Rauckman Utility Products.....     | Jim Rauckman    |
| 8. Dominion Energy.....         | Liz Sullivan        | 27. S&C Electric.....                  | Tim Qualheim    |
| 9. Dow .....                    | Paul Caronia        | 28. San Diego Gas & Electric.....      | Kevin Galloway  |
| 10.DTE Energy.....              | Abdalla Sadoon      | 29. Slacan Industries.....             | Ian Pollock     |
| 11.Duke Energy.....             | Chris Fletcher      | 30. Smart Wires.....                   | Haroon Inam     |
| 12.Eaton.....                   | Alan Yerges         | 31. Southern California Edison.....    | Alan Kasanow    |
| 13.Exelon.....                  | Lisa Perrone        | 32. Southern Company.....              | Michael Pearman |
| 14.FirstEnergy.....             | Randy Coleman       | 33. Southern States, LLC.....          | Steve Fan       |
| 15.Gresco Utility Supply.....   | Brad Schafer        | 34. Southwire Company.....             | Yuhsin Hawig    |
| 16.Hubbell Power Systems.....   | Charles Worthington | 35. Tacoma Power.....                  | Joe Rempe       |
| 17.LS Cable & System.....       | Tim West            | 36. TE Connectivity.....               | Brian Ayres     |
| 18.Nova Scotia Power.....       | Jim McFadgen        | 37. TVA.....                           | Steven Coley    |
| 19.NRECA.....                   | Reed Cooper         | 38. WEC Energy Group.....              | Michael Smalley |