NEETRAC
National Electric Energy Testing, Research, and Applications Center

NEETRAC NEWS

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Meet NEETRAC's New Director, Joe Hagerman

We are very pleased to announce that Joe Hagerman was appointed on June 1, 2023 as NEETRAC's new Director.

Joe joins us after directing the Energy, Policy, and Innovation Center (EPICenter), a division of the Strategic Energy Institute at Georgia Tech.

Prior to Georgia Tech, Joe served as a section head at the U.S. Department of Energy's Oak Ridge National Laboratory. He also served as the deputy chief scientist of the National Rural Electric Cooperative Association and as a senior policy advisory at the U.S. Department of Energy's Energy Efficiency and Renewable Energy (EERE) office.

Joe has a Bachelor of Architecture from Mississippi State University (MSU) and a Master of Science in Civil Engineering from Columbia University. Joe is a Grid Wise Architecture Council (GWAC) Member Emeritus and a recipient of the Secretary of Energy Honor Award and two DOE Distinguished Service Awards. He is a recipient of the 2005 Metropolis Next Generation Award, and the Rafael Viñoly Fellowship from 2005-2006.

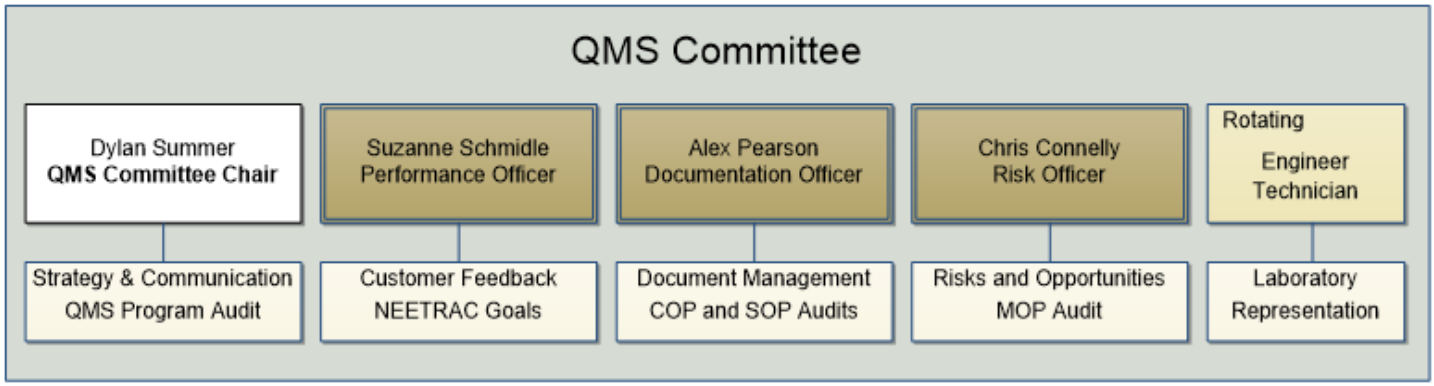
Joe's policy work and technical expertise in grid systems speak for themselves, especially regarding emerging areas like renewables, connected equipment, and cybersecurity. As NEETRAC prepares for the next phase of its journey, his passion, visionary approach, and bridge-building abilities will be indispensable for its success.

It's an exciting time for NEETRAC and we encourage you to take a moment to read more about its future and Joe's vision here: https://ece.gatech.edu/news/2023/05/new-neetrac-director-joe-hagerman-aims-center-lead-amidst-power-grid-transformation.

NEETRAC Quality Management Accreditation

NEETRAC attained ISO 9001 certification in 1998 to provide a backbone and driving force to improve our business processes. Due to resource challenges and a reorganization, NEETRAC was forced to allow its certification to expire in 2022. However, NEETRAC Members expressed that they strongly value certification, which has lead NEETRAC to a new approach and commitment to recertify.

The NEETRAC QMS was restructured to be run by a committee instead of a single person, which has significantly increased efficiency and better fits with the new organization.



The committee has developed a roadmap to recertify to ISO 9001 by Q1, 2024.

Baseline Projects Recently Launched

NEETRAC launched the following Baseline project proposals presented during the January 2023 Management Board Meeting. If you would like to serve as an advisor for any of these projects, please email suzanne.schmidle@neetrac.gatech.edu and indicate which projects interest you.

Scoping Study of Cable Minimum Bending Radius - Performance and Flexibility

Baseline Project Number 23-055

PI: Diana Ramirez-Wong, diana.ramirez@neetrac.gatech.edu

Underground power cables are often installed exceeding static bending limits, yet little is reported about the impact of overbending on cable life. At the same time, the flexibility of power cables is a function of the entire cable design, including all geometries and constituent materials. This project aims to gain insight into power cable static bending practices and cable flexibility. Two separate, but related, issues will be investigated: 1) impact of tight cable bend radii on cable life, with a view to developing a test protocol to verify static bending limits; and 2) the need for a flexibility test procedure specifically designed for power cables. The final outcome will be two separate comprehensive reports on the project findings that will include suggested test protocols for cable life under tight bending as well as cable flexibility

Baseline Projects Recently Completed

The following Baseline project closeouts were presented at the May 2023 Management Board Meeting. The reports will be finalized and distributed to eligible Members in the coming months. In the meantime, please contact the project PI listed below for more information.

Cable Drying Assessment and Decision Criteria

Baseline Project Number 18-102

PI: Tristen Cline, tristan.cline@neetrac.gatech.edu

Occasionally, cables (distribution and transmission) are found with water in the conductor. Moisture can cause a variety of issues; therefore, field drying is often performed. Many common drying practices are impractical and slow, and no criteria has been established for when the cable is dry enough to stop rehabilitation. Through Member engagement, this project identified a practical method from ICEA S-108-720 that may be used in the field to remove moisture from cable. Additionally, the project identified two methods that may be used to evaluate cable dryness. After identifying dewpoint (temperature) and desiccant color as potential indicators of cable dryness, four proof of concept tests were completed to investigate the effectiveness and practicality of these indicators using the drying practice from the ICEA S-108-720. Test results indicate that a desiccant and dew point temperature may be useful tools for detecting that water is being removed from the cable, but they have limitations that need to be explored further.

Proposal Scoping: Correlation of Laboratory Corrosion Tests to Field Corrosion Tests

Baseline Project Number 23-054

PI: Tristen Cline, tristan.cline@neetrac.gatech.edu

The purpose of the project was to develop a complete proposal to investigate the correlation of laboratory corrosion tests to field corrosion tests gathered from a diverse set of environments with an exposure period of up to five years. Some details such as potential exposure sites had been determined; however, Member feedback was required to determine the following topics:

- What coating should be used?
- What materials should be used for rank order?
- What should the total exposure period for field samples be?
- How often should inspections (blistering and scribe creepage evaluations) occur?
- Should scribe and blistering inspections be performed by NEETRAC?
- What laboratory tests and exposure periods should be used?

Member feedback was gathered through a conference call, phone calls, and polls. The proposal, CR3241, Correlation of Laboratory Corrosion Tests to Outdoor Exposure Mechanisms, presented at the May Management Board meeting, is the final deliverable.

NEETRAC Member Visits

NEETRAC's relationships with its Members is, and has always been, a top priority. During COVID, the ability to visit and interact with our Members was made more difficult. But thankfully, travel restrictions and needs for extensive social distancing have been relaxed, and our management team has hit the road again. Over the past few months, Caryn Riley, Joe Goldenburg, and Joe Hagerman have traveled throughout the continent to meet with our Members and discuss how NEETRAC can provide value to their company.

If you don't currently have a NEETRAC visit on your calendar, please reach out to Joe Goldenburg at 404-675-1858.

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Management Board Meetings

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

September 19 - 20, 2023

February 7 - 8, 2024

May 22 - 23, 2024

For details, please visit the Member Section of the NEETRAC website at www.neetrac.gatech.edu.

2023/2024 NEETRAC Member Management Board Representatives

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