

Peter Muhoro, Ph.D.

pmuhoro@myrec.coop | 540-891-5817

Education:

2005 – 2010	University of Michigan, Rackham Graduate School, College of Literature Science and Arts; Doctor of Philosophy, Applied Physics
2005 – 2007	University of Michigan, Rackham Graduate School, College of Literature Science and Arts; Master of Science, Applied Physics
2000 – 2005	Hampton University, School of Science, Bachelor of Science, Physics and Mathematics

Training and Other Distinctions:

2021 – Present	Board Member, GridWise Alliance
2020 – Present	Board Member, Virginia Renewable Energy Alliance
2020 – Present	Board Member, Utilities Technology Council
2015 – Present	Board Member, Smart Electric Power Alliance (executive committee)
2015 – 2020	Board Member, Energy Storage Association (executive committee)
2014 – 2017	Board Member, Texas Renewable Energy Industries Alliance
2014 – 2017	Board Member, CleanTX
2019 – 2020	NRECA ACCESS Project, DOE Funded, Key Participant
2015 – 2017	PEC Battery Demonstration, TCEQ Funded, Principal Investigator
2014 – 2017	DOE Proposal Reviewer, Various Funding Opportunity Announcements
2013 – 2015	NRECA SUNDA Project, DOE Funded, Principal Investigator
2013 – 2015	NRECA GEARED Project, DOE Funded, Principal Investigator
2010 – 2012	APS Minority Bridge Program, NSF, Principal Investigator
2000 – Present	Published and presented over 1000 papers, articles and presentations

Professional Experience:

2020 – Present	Chief Strategy, Technology, and Innovation Officer, Rappahannock Electric Cooperative (REC), Fredericksburg, VA – Oversee areas of energy solutions and clean energy; information technology and cybersecurity; fiber and broadband services; corporate strategy, business planning and enterprise risk management.
2020 – Present	Executive Vice President and General Manager, Rappahannock Electric Communications (RE Comm), Fredericksburg, VA – Oversee two business lines: BrilliT – an IT, cybersecurity, and data analytics services provider, and Vividly Brighter: a suite of energy solution that provide consumers with better ways to utilize their energy consumption.

- 2017 – 2020 **Vice President, Strategic Industry Research and Analysis**, National Rural Utilities Cooperative Finance Corporation (CFC), Dulles, VA – Oversaw the technology evaluation and research activities for the bank, assessing technology readiness levels and risk of financing.
- 2014 – 2017 **Chief Strategy Officer**, Pedernales Electric Cooperative (PEC), Johnson City, TX – Provided guidance to corporate strategy, business planning, enterprise risk management, clean energy and energy solutions.
- 2012 – 2014 **Advisor**, National Rural Electric Cooperative Association (NRECA) for the Cooperative Research Network, Arlington, VA – Led research activities in areas of solar deployment, energy storage, distributed energy resources, and microgrids.
- 2010 – 2012 **Minority Bridge Program Manager**, American Physical Society (APS), College Park, MD – Oversaw a program to help drive more underrepresented minorities to find pathways to pursue advanced degrees in physics and related degrees.
- 2010 – 2012 **Senior Consultant**, The Idea Link, Ann Arbor, MI – Led energy consultancy practice in assessing access to electricity in developing countries, specifically those not connected to the grid.

John M. Arp, P.E.

jarp@myrec.coop

Education:

1995 **Tennessee Technological University;** Bachelor of Science, Electrical Engineering

Training and Other Distinctions:

2013 **Professional Engineer License, Virginia**
2006 **Professional Engineer License, Pennsylvania** (inactive)
1997 **Journeyman Electrician, Local 760 – IBEW** (inactive)
1995 **Engineer in Training Certification, Tennessee**

Co-author and Contributor – A Case Study in Volt-VAR Optimization and Conservation Voltage Reduction without Costly Communications Systems

Professional Experience:

2020 – Present **Chief Engineering & Grid Operations Officer**, Rappahannock Electric Cooperative (REC), Fredericksburg, VA

- Executive leadership of Substation, Transmission, and Distribution Engineering Departments; Distribution Design and Construction Departments; Vegetation Management Department; System Operations & Dispatch Department
- Executive leadership of Power Supply processes

2018 – 2020 **Western Region Manager**, Rappahannock Electric Cooperative (REC), Culpeper and Front Royal, VA

- Provide tactical leadership to the regional design, operations, and construction teams

2015 – 2018 **Director of System Planning & Engineering Design**, Rappahannock Electric Cooperative (REC), Fredericksburg, VA

- Provided engineering and power quality expertise for the Cooperative and membership
- Communicated daily with members as subject matter expert and primary point of contact for renewable generation activities
- Provided engineering expertise to the Cooperative for special or system wide projects

2012 – 2015 **Staff Electrical Engineering Supervisor**, Rappahannock Electric Cooperative (REC), Fredericksburg, VA

- Supervised Distribution Electrical Engineering Department

1999 – 2012

- Provided electrical expertise and power quality analysis for members and engineering

System Planning Engineer (Advanced Electrical Engineer), Allegheny Energy, Inc. (First Energy 2012), Greensburg, PA

- Provided power quality expertise to operations department and regional customers
- System protection coordination, power-factor correction analysis, phase balancing, load flow, steady-state voltage, flicker, motor start, and fault current studies.

Christopher J. Stoia, PE

cstoia@myrec.coop | 540-891-5814

Education:

9/1993 – 5/1997 **Clemson University**, Bachelor of Science, Electrical Engineering

Professional Experience:

- 1/2023 – Present **Managing Director – Engineering & Power Supply**, Rappahannock Electric Cooperative (REC), Fredericksburg, VA – Responsible for leading the following departments: Distribution/Transmission Planning & Engineering, Substation/Transmission Engineering Design & Construction, Relay Engineering & Project Management, Apparatus, and Metering. Responsible for leading the power supply process and coordinate with Rates and Accounting to predict power supply needs, peak demands, and budgetary projections. Responsible for ensuring compliance with REC guidelines, recognized industry standards, and applicable regulatory requirements. Responsible for advancing the Cooperative's Construction and Long-Range Work Plans, the Strategic Plan, and ensure the safe operations and long-term success of the Cooperative. Acts as an engineering resource to the Cooperative, providing guidance to the staff engineering group and sound engineering counsel as needed.
- 5/2021 – 12/2022 **General Manager**, Mountain Electric Cooperative (MEC), Mountain City, TN – Responsible for managing the day-to-day operations of an 89 employee TVA member electric cooperative serving approximately 35,000 members in eastern Tennessee and western North Carolina via 11 substations, 25 miles of 69kV transmission lines, and 2,300 miles of 13kV distribution lines. Activities include (but are not limited to) budgeting, salary plan development, and administration of cooperative policies. Utilize RD Apply to submit and approve RUS paperwork. Supervise and address employee issues/concerns. Correspond with cooperative members and the public as necessary to support the cooperative's mission. Participate in monthly BOD meetings.
- 3/2020 – 5/2021 **Director of Engineering & Operations**, Mountain Electric Cooperative (MEC), Mountain City, TN – Responsible for managing the engineering and operations departments. Activities include (but are not limited to) the development, budgeting, and administration of projects and programs in accordance with cooperative policies to safely operate the electric system. Supervise and address employee issues/concerns. Correspond with cooperative members and the public as necessary to support the cooperative's mission. Make monthly presentations to the Board of Directors.

- 5/2006 – 3/2020 **Technical Leader of Distribution & Planning**, Patterson & Dewar Engineers (P&D), Norcross, GA – Responsible for leading, supervising and mentoring the Distribution & Planning group of nine employees, consisting of engineers and field designers. Developed technical standards and specifications. Responsible for maintaining relationships and coordinating business with multiple clients. Created and analyzed engineering models. Developed system planning recommendations for clients. Managed the design and construction of substations.
- 6/2001 – 4/2006 **Engineer**, South Carolina Electric and Gas (SCE&G), Charleston, SC – Responsible for design, management, and inspection of construction projects on distribution power systems. Designed major new business and system improvement projects including underground electric service for large industrial, commercial, and residential developments as well as city wide overhead to underground conversions. Managed major project construction for new business, system improvement and highway relocations. Utilized CAD, GIS and work management software for major overhead and underground designs. Utilized GIS and outage analysis software to prepare the Charleston District's mapping information for OMS implementation.
- 6/1997 – 5/2001 **Electrical Engineer**, Marlboro Electric Cooperative (MEC), Bennettsville, SC – Responsible for planning, design, and management of construction projects. Also served as IT coordinator. Managed implementation of GIS and OMS. Analyzed parts of distribution system with engineering software. Worked with consultants on substation design and system improvement plans. Managed project construction for system improvements and substations including substation installation and overhead to underground conversion of an industrial park.

Jason E. Satterwhite

jsatterwhite@myrec.coop | 804-632-5585

Education:

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| 2008 – 2011 | Columbia Southern University , Associates Degree, Business Administration |
| 2012 – 2014 | Columbia Southern University , Bachelor of Science in Business Administration with concentration in Management |

Training and Other Distinctions:

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| 1994 – Present | Lifetime Member , Bowling Green Volunteer Fire Department |
| 2016 – 2020 | Mayor , Town of Bowling Green |
| 2008 – 2016 | Town Council Member , Town of Bowling Green |
| 2018 – 2018 | NRECA MIP Select , Class of 2018 |
| 2017 – 2018 | REC Leadership Development , Class of 2018 |
| 2016 – 2017 | Leadership Fredericksburg , Class of 2017 |
| 2014 – 2017 | Northwest Lineman College , System Operator Technician Apprentice Program |

Professional Experience:

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| 2022 – Present | Managing Director of Regional Operations , Rappahannock Electric Cooperative (REC), Fredericksburg, VA –Function as the primary managerial representative in REC’s Eastern Region and has responsibility for engineering, operations, and construction in the Regional Office. |
| 2021 – 2022 | Director of Operational & Construction Services , Rappahannock Electric Cooperative (REC), Fredericksburg, VA – Plan, direct, and coordinate the functions of the System Operations, Operational and Construction services, and SCADA/LM and Field Communications departments. Manages the Cooperative’s outage program in accordance with Cooperatives and RUS Guidelines. Negotiate, administrate, and monitor contracts involving overhead and underground line extensions. Responsible for coordinating major power outage restoration between regions, VMDAEC, contractors, and power suppliers. |
| 2015 – 2021 | System Operations Supervisor , Rappahannock Electric Cooperative (REC), Fredericksburg, VA –Oversee the operation of the Central Operations center, Assist in maintaining efficient and effective relationships with power suppliers, VMDAEC, ODEC, and state and federal agencies. |

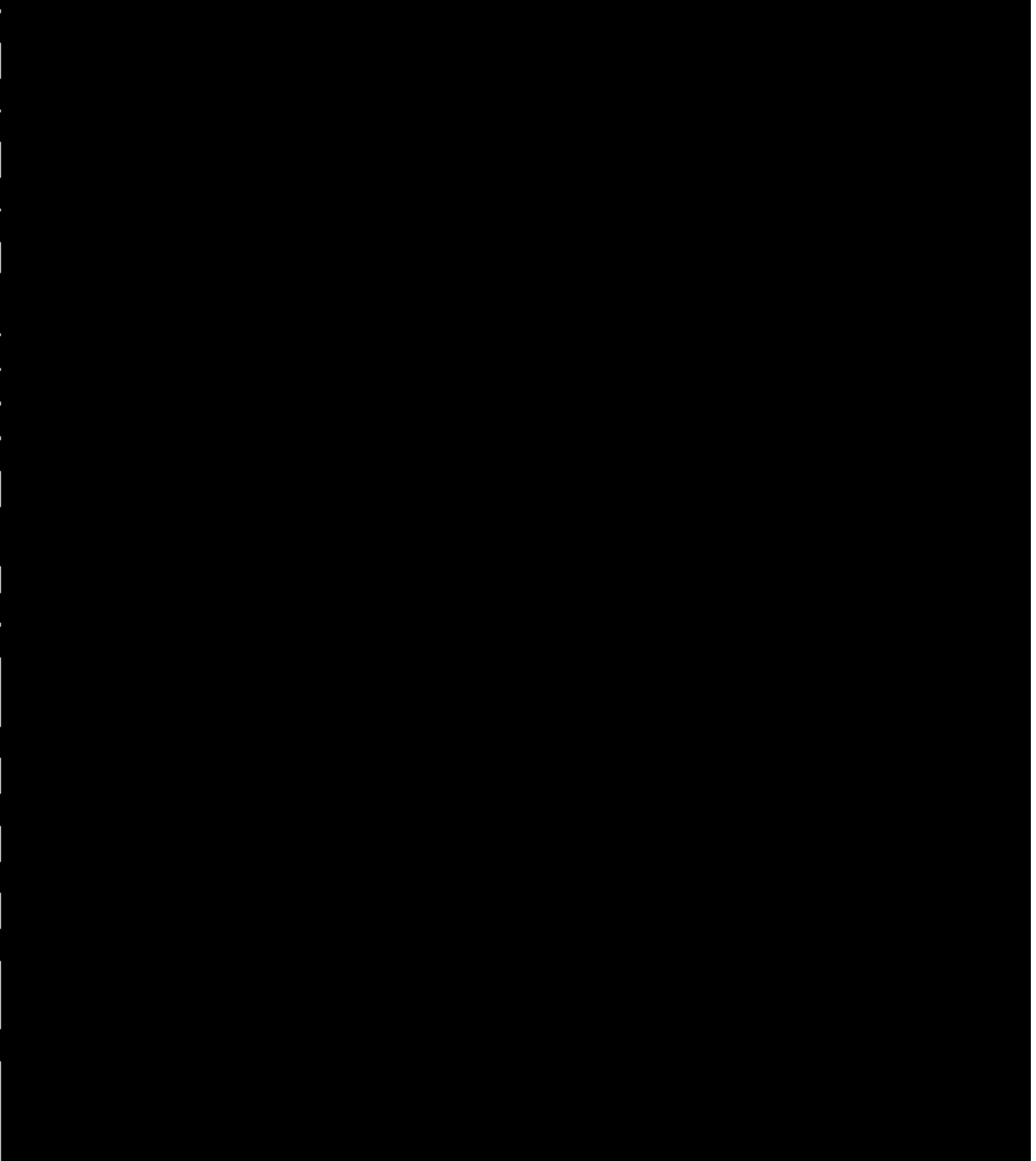
2003 – 2015

System Dispatch Coordinator II, Rappahannock Electric Cooperative (REC), Fredericksburg, VA – Monitor REC's electric system, using NMS, SCADA, AMI, and Automation systems. Dispatch crews and coordinate outage restoration while following safety rules. Provide training and leadership to the System Dispatch Coordinator I position.

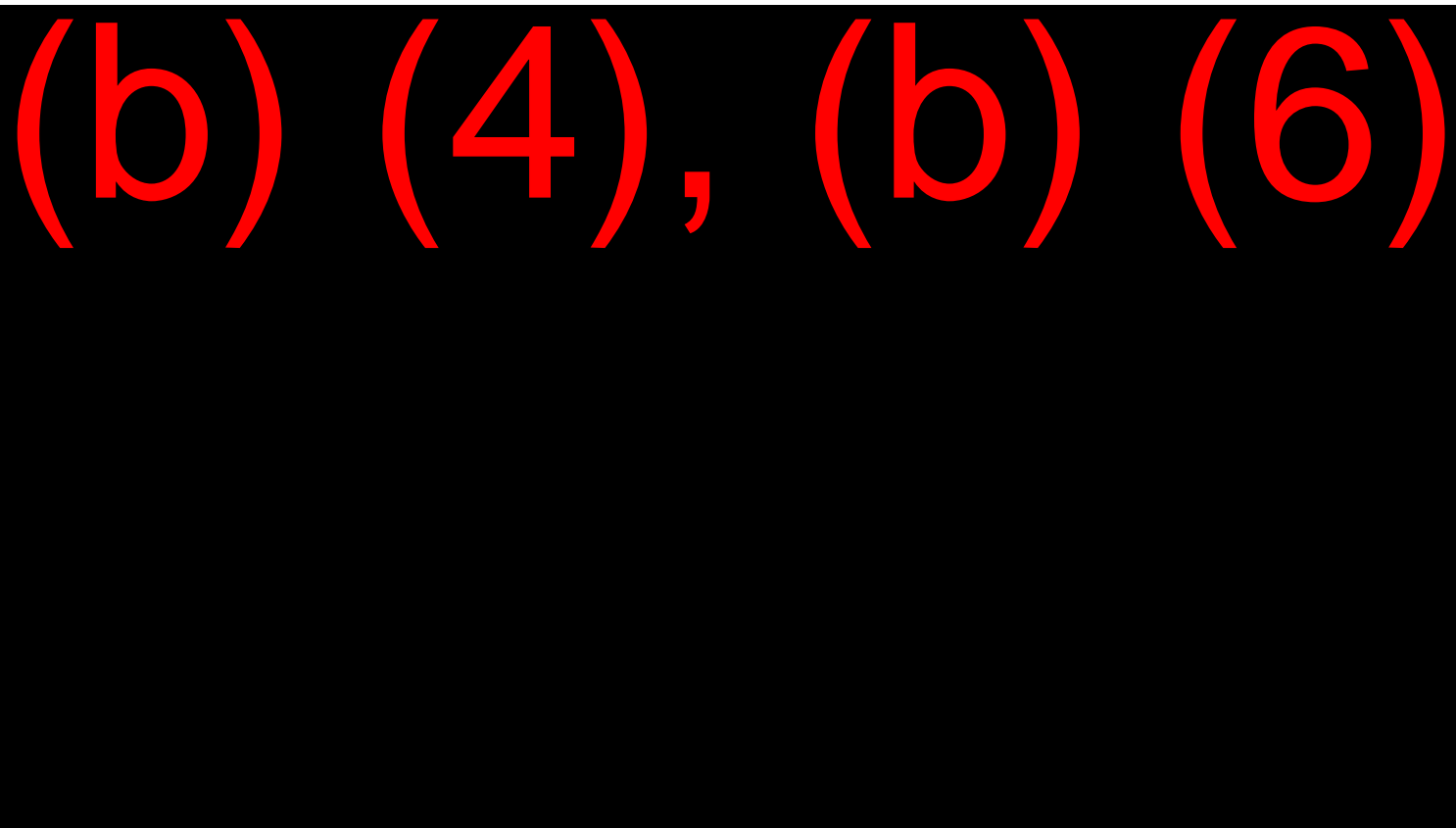
1998 – 2003

System Dispatch Coordinator I, Rappahannock Electric Cooperative (REC), Fredericksburg, VA – Monitor REC's electric system, using NMS, SCADA, AMI, and Automation systems. Dispatch crews and coordinate outage restoration while following safety rules.

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(b) (4), (b) (6)



Rebecca Messerle

rmesserle@myrec.coop | 540-891-5887

Education:

1985-1988	University of Northern Iowa, Bachelor of Arts, Accounting, Minor, Sociology
1982–1985	University of Iowa

Training and Other Distinctions:

2022-Present	Board Member, NSAC ECC
2017-Present	Member, NISC Large Utility Committee
2017-2018	REC Leadership Development Program
2017-2019	NRECA Supervisor and Manager Development Program
2014	RUS Borrower Accounting (Electric) – Graduate School, USA
2009	NRECA Work Order and Plant Accounting Procedures
1996	Certified Public Accountant, Texas

Professional Experience:

2022 – Present	Director of Accounting and Internal Control, Rappahannock Electric Cooperative (REC), Fredericksburg, VA - Oversee areas of Accounting, including General Ledger, Utility Plant, Work Orders and Miscellaneous Receivables. Coordinate annual financial statement audits and tax returns. Develop and review policies and procedures to ensure accurate reporting and internal controls for the cooperative.
2017-2022	Supervisor of Accounting, REC, and Fredericksburg, VA – Oversee General Ledger, Utility Plant, Work Orders and Miscellaneous Receivables. Coordinate annual financial statement audits and tax returns. Led Internal Control Assessment project and Depreciation study.
2009-2017	Accountant/Analyst, REC Fredericksburg, VA – Prepared various monthly journal entries and reconciliations. Administrator of Miscellaneous

Receivable system. Financial lead on the over \$31 million Smart Grid Investment Grant. Tasks included monthly report submission to DOE for payment, quarterly report required by DOE and compiling data for the yearly single audits and the Cost verification audit performed by the DOE independent auditors. Key role in the implementation of NISC ABS modules.

2002-2009

Accounting Specialist, REC, Fredericksburg, VA – Implementation and personnel training of the Miscellaneous Receivable system. Responsible for general plant asset accounting.

Lawrence G. Andrews

landrews@myrec.coop | 540-891-5891

Education:

- 2005 – 2011 **University of Mary Washington;** Master of Business Administration,
Concentration in Accounting
- 1983 – 1987 **Virginia Polytechnic Institute & State University (Virginia Tech);**
Bachelor of Science, Business Management

Training and Other Distinctions:

- 2022 – Present **Board Member,** Rappahannock United Way
- 2003 – Present **Certified Treasury Professional,** Association for Financial Professionals
- 2011 – 2022 **Board Member,** National Society of Accountants for Cooperatives (NSAC)
Electric Cooperative Chapter (Vice President 2019-2022)
- 2011 – 2020 **Member,** REC Toastmasters, (President 2012-2013)
- 2007 – 2016 **Member,** Virginia, Maryland, Delaware Association of Electric
Cooperative's FAMIS Conference Planning Committee

Professional Experience:

- 2020 – Present **Chief Administrative & Finance Officer,** Rappahannock Electric
Cooperative (REC), Fredericksburg, VA – Oversee the areas of finance and
accounting; procurement; human resources; facilities; rates and
regulatory affairs; compliance; warehouses and mail services.
- 2016 – 2020 **Manager of Administrative Services/Controller,** Rappahannock Electric
Cooperative (REC), Fredericksburg, VA – Oversee the areas of finance and
accounting; procurement; facilities; warehouses and mail services.
- 2010 – 2016 **Director of Finance and Accounting,** Rappahannock Electric Cooperative
(REC), Fredericksburg, VA – Oversee the areas of finance and accounting.
Oversee policies and procedures to ensure the proper utilization and
internal control of the Cooperative's assets. Ensure that policies, rates,
and margins are appropriate to maintain a continued sound financial
position and provide for adequate financial ratios to secure both short-
term and long-term financing.
- 2001 – 2010 **Treasury & Financial Services Specialist,** Rappahannock Electric
Cooperative (REC), Fredericksburg, VA -- Manage cash and cash
equivalents, facilitate corporate liquidity, assist in obtaining short-term
and long-term financing, manage investment risk, assist in the
development of products and services, forecast and monitor cash flows,
prepare schedules for audit purposes, manage relationships with financial
institutions, assist business units with projects, budgets and analysis,

prepare subsidiary financial statements, prepare monthly journal entries,
and reconcile general ledger accounts.

Tracey Steiner, J.D.

tsteiner@myrec.coop | 540-308-5255

Education:

1993 – 1997	George Washington University, School of Law; Juris Doctor
1988 – 1990	University of Maryland, College of Journalism; Bachelor of Science
1986 – 1988	Hagerstown Community College, Associate of Arts

Training and Other Distinctions:

2018 – 2021	Board Member, Consumer Federation of America
2015 – 2022	Member, American Society of Association Executives
2019 – 2021	Member, National Association of Corporate Directors
2007 – 2012	Member, Association of Corporate Counsel
2010 – 2012	Chair, Energy Committee, Association of Corporate Counsel (Most Improved Committee of the Year Award)
1997 – 2022	Member, American Bar Association
1997 – Present	Published more than 100 articles and gave more than 100 presentations on various topics of interest to electric cooperatives

Professional Experience:

2021 – Present	Chief Engagement & Consumer Officer, Rappahannock Electric Cooperative (REC), Fredericksburg, VA – Oversees design, development and execution of the member services, communications and public relations, and government affairs and economic development functions of the Cooperative.
2012 – 2021	Senior Vice President, Education, Training & Events, National Rural Electric Cooperative Association, Arlington, VA – Led 29-member team responsible for designing, planning, and executing a wide portfolio of in-person and online education programs, member meetings and conferences.
2005 – 2012	Senior Corporate Counsel, National Rural Electric Cooperative Association, Arlington, VA – Provided legal advice to senior and mid-level management staff of NRECA and its affiliate and served as primary subject matter expert on governance, intellectual property, consumer protection and privacy, and record retention matters; Led or supported various regulatory policy efforts.
1999 – 2005	Corporate Counsel, National Rural Electric Cooperative Association, Arlington, VA – Conducted legal research and provided advice to NRECA staff; Drafted, reviewed and assisted in the negotiation of various contracts and licenses; Led or supported various regulatory policy efforts.

1997 – 1998

Legal Assistant, National Rural Electric Cooperative Association, Arlington, VA – Provided paralegal and legal-intern level assistance to NRECA attorneys such as tracking federal regulations, assisting with pleadings, and conducting legal research while also performing marketing role (50 percent of time) to transition to corporate counsel role.

1992 – 1998

Manager, Publications & Special Projects Marketing, National Rural Electric Cooperative Association, Arlington, VA – Designed and executed a variety of marketing campaigns and member retention efforts promoting NRECA publications, programs and special initiatives.

John D. Hewa, P.E., Dr. Eng.

jhewa@myrec.coop | 540-940-3092

Education:

2020	George Washington University; Doctor of Engineering
2003	University of Tennessee; Master of Science, Engineering Management
1995	University of Tennessee; Bachelor of Science, Electrical Engineering

Training and Other Distinctions:

2004	Professional Engineer License, Tennessee
2022 – Present	Board Member, Virginia Economic Development Partnership
2022 – Present	Board Member, Fredericksburg Regional Chamber of Commerce
2020 – Present	Board Member, Old Dominion Electric Cooperative
2020 – Present	Board Member, Virginia, Maryland, Delaware Association of Electric Cooperatives
2020 – Present	Board Member, Virginia Chamber of Commerce
2019 – Present	Board Member, Fredericksburg Regional Alliance
2017 – 2018	Member, NRECA Governance Task Force
2013 – 2020	Board Member, Smart Electric Power Alliance
2006 – 2011	Board Member, Florida Electric Cooperative Association
2006 – 2011	Board Member, Seminole Electric Cooperative
2018 – 2021	Board Chair, U.S. Energy Storage Association

Professional Experience:

2020 – Present	President and CEO, Rappahannock Electric Cooperative (REC), Fredericksburg, VA – Strategically lead a large Virginia electric cooperative with over \$1B in assets, serving 170,000 consumers across 22 counties employing a dedicated workforce of 430 employees. Develop organizational Strategic Plan, Business Plan, Governance Plan, Enterprise Risk Management Plan and implement strategy execution processes.
2020 – Present	President and CEO, Rappahannock Electric Communications (RE Comm), Fredericksburg, VA – Strategically lead two business lines: BrilliT – an IT, cybersecurity, and data analytics services provider, and Vividly Brighter: a suite of energy solutions that provide consumers with better ways to utilize their energy consumption.
2019 – 2020	Chief Operating Officer, Rappahannock Electric Cooperative (REC), Fredericksburg, VA – Strategically lead the financial, technological, safety/security, risk, IT, fiber telecom, and human resource divisions of a

	large Virginia electric cooperative with over \$1B in assets, serving 170,000 consumers across 22 counties employing a dedicated workforce of 425 employees. Develop organizational Business Plan, Governance Plan, Enterprise Risk Management Plan and implement strategy execution processes.
2017 – 2018	Vice President, Corporate Services , Rappahannock Electric Cooperative (REC), Fredericksburg, VA
2013 – 2017	CEO , Pedernales Electric Cooperative, Johnson City, TX – Led the nation’s largest, fastest-growing electric cooperative serving 290,000 accounts over an 8,100-square mile rural territory including high-density regions bordering Austin and San Antonio. Optimized \$600M in revenue and managed \$1.5B in assets featuring 21,000 miles of T&D infrastructure. Introduced operational initiatives recognizing over \$12M in annual savings. Implemented energy management capabilities reducing market power expense and securing favorable negotiations with primary wholesale provider resulting in \$220M contract savings. Deployed smart renewable programs. Achieved seven consecutive rate reductions. Affirmed AA- Fitch Ratings. Achieved JD Power 15th highest national score and recognized as one of the most improved utilities in 2016.
2011 – 2013	Vice President of Research, Engineering & Technical Services , National Rural Electric Cooperative Association (NRECA), Arlington, VA – Led NRECA’s technical interest and influenced policy on behalf of 900 cooperative utilities bringing the benefits of innovative technology to consumers. Managed Energy and Power Division addressing cooperative interests regarding bulk power, fuel supply, emerging market issues, reliability standards, energy efficiency, renewable energy, and their impacts on rates and reliability. Collaborated with federal regulatory agencies. Managed \$60M DOE Smart Grid Demonstration Project. Secured DOE grants totaling \$10M for emerging tech through programs such as SunShot, Green Button, and others.
2006 – 2011	General Manager , Talquin Electric Cooperative, Inc., Quincy, FL – Managed Florida electric cooperative and subsidiary water utility providing electric, water, and wastewater services in a 2,600-square mile storm-frequented service area surrounding Tallahassee. Implemented emergency preparation and operational improvements such as outage management platform and hurricane-hardened storm center. Deployed grid modernization investments including AMI and utility broadband.
2005 – 2006	Director of Utilities , City of Manassas, Manassas, VA
2003 – 2005	Assistant Director of Electric Utility , City of Manassas, Manassas, VA
2000 – 2003	Director of Engineering , Bristol Tennessee Electric System, Bristol, TN
1998 – 2000	Supervisor of Engineering , Bristol Tennessee Electric System, Bristol, TN
1995 – 1998	System Engineer , Bristol Tennessee Electric System, Bristol, TN