

Good Afternoon,  
You are invited to attend our weekly ECE Graduate Seminar.

**Old Dominion University  
College of Engineering and Technology  
Department of Electrical and Computer Engineering**

All lectures to be held at 3:00pm on Fridays online at  
[https://vs.prod.odu.edu/kvs/interface\\_webex/?cid=202010\\_ECE7831VS\\_91606](https://vs.prod.odu.edu/kvs/interface_webex/?cid=202010_ECE7831VS_91606).

For more information, contact Dr. Chung Hao Chen at (757) 683-3475 or email [cxchen@odu.edu](mailto:cxchen@odu.edu).

**Friday, October 23rd Seminar Topic:**

**MEETING THE CHALLENGES AND SEIZING THE OPPORTUNITIES OF A CHANGING ENERGY LANDSCAPE by Mr. J. Kevin Curtis, Vice President-Electric Transmission, Power Delivery Group at Dominion Energy and Dr. Matthew Gardner, Ph.D., P.E., Director-System Protection, Power Delivery Group at Dominion Energy.**

**Abstract:**

Mr. Curtis and Dr. Gardner will discuss how the energy landscape has changed rapidly since 2000 and how the changes and challenges are accelerating as far into the future as we can see – at least out to 2050. Starting with the notorious northeast blackout in 2003, they will walk through a sampling of challenges to energy infrastructure and how our industry has adapted to transform these challenges into opportunities. They will also cover the integration of renewables into our system and what changes high-penetration, intermittent, inverter-based generation will bring to our infrastructure and our industry. They will wrap up the presentation by focusing in on practical actions we can take today to meet the challenges and seize the opportunities.

**Bio:**



J. Kevin Curtis is vice president–Transmission, Power Delivery Group. He is responsible for over 6700 miles of electric transmission lines and more than 800 substation assets providing service to the company’s 2.6 million customers. These responsibilities include transmission and substation planning, engineering, project development, construction, operations and maintenance, compliance, and the Electric Transmission System Operations Center.

Curtis joined the company in 1986 as an associate engineer. He held management positions in Electric Distribution in System Reliability and System Planning and became manager-Electric Transmission on July 1, 2006. He was promoted to director-Electric Transmission Planning & Marketing on April 1, 2007 and became director-Electric Transmission SOC & Planning on April 1, 2010. Curtis became director-Electric Transmission Planning & Strategic Initiatives on Jan. 1, 2013, and vice president–Technical Solutions, Power Delivery Group on Sept. 1, 2015. He assumed his current post in July 2018.

He serves on the board of the Virginia Early Childhood Foundation and the Industry Advisory Board for the Electrical and Computer Engineering department at Old Dominion University. He is a registered professional engineer in Virginia and North Carolina.

Curtis received his bachelor’s degree in electrical engineering from North Carolina State University and a Master of Business Administration degree from Virginia Commonwealth University.



Dr. R. Matthew Gardner (“Matt”) is Director, System Protection with the Power Delivery Group. In this role, Matt oversees the System Protection organization, including both engineering and field operations responsibilities. His organization also includes Electric Transmission’s Protection and Control Standards, Data Engineering, and Operations Engineering Studies groups. Since joining Dominion in 2008, Matt has held engineering roles in Electric Transmission Planning and Electric Transmission Operations Engineering. Before assuming his present role, Matt held leadership roles in Electric Transmission Field Operations and Operations Engineering.

Experiences outside Dominion Energy include positions with Tennessee Valley Authority, ABB Corporate Research Switzerland, Grenoble Institute of Technology in Grenoble, France, and event analysis consulting for the North American Electric Reliability Corporation (NERC) through Lawrence Berkeley National Lab (LBNL).

He has served as a lead engineer in key projects that involve public funding such as Department of Energy (DOE) stimulus and R&D investments. As an industry recognized power engineering and organizational expert, Matt has served on the Leadership Team of North American Synchrophasor Initiative (NASPI) as a liaison to the broader research community. Matt is a talented speaker and has delivered talks on subjects ranging from grid resiliency to career development at venues across North America, Europe, Asia, and Africa.

Matt has served on several industry advisory boards including the University of Tennessee, Knoxville’s Center for Ultra-Wide-Area Resilient Electric Energy Transmission Networks (as chair and past vice-chair) and Virginia Tech’s Bradley Department of Electrical and Computer Engineering. Matt is active as a Senior Member of IEEE’s Power and Energy Society (PES) and served in various planning committee and working group leadership roles. He holds patents on topics related to pattern recognition for power systems and has published his work in various industry trade magazines, conferences proceedings, journals and books.

Matt received his Ph.D. degree in Electrical Engineering from Virginia Tech where he was a Bradley Fellow. He also holds B.S. and M.S. degrees in Electrical Engineering from Virginia Tech. Matt is a licensed Professional Engineer in the Commonwealth of Virginia and a Six Sigma Black Belt with a diversity of experiences spanning utilities, academia, regulators, and manufacturers.