

ESIC CURRENTS

January 16, 2025



ENERGY SYSTEMS INNOVATION CENTER

**An Energy Center Focused
On Education, Outreach,
and Research**

CONTACT US

Jake Baumgartner, ESIC Industry
Relations Coordinator
PO Box 642752, Washington State
University
Pullman, WA 99164-2752
Phone: 509-335-6456
Email: jacob.baumgartner1@wsu.edu
Website: esic.wsu.edu

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**ESIC Research Excellence Partnership
Membership (REP)** – Enabling
excellence in research

**ESIC Power Education Partnership
Membership (PEP)** – Supporting
power education

UPCOMING EVENTS ...

RESUMING ESIC/AGI SEMINARS, WEDNESDAY, 1/22/25

ESIC/AGI seminars will now take place every Wednesday from 10 am – 11 am throughout the Spring Semester and will resume **Wednesday, Jan. 22 10am-11am**, with a **PSERC Webinar** featuring our own **Anamika Dubey**, EECS Associate Professor. (See attached announcement). To access the webinar, follow this link: [PSERC Webinar](#). A schedule of upcoming PSERC Webinars is also posted on this site.

Additionally, you can access the PSERC Webinar by joining via the [ESIC Seminar TEAMS Link](#), as we will be making the webinar available for ESIC faculty, students, staff, and industry partners.

Missed out on a seminar? All ESIC seminars are recorded and posted to our website, click [HERE](#) to go back and watch videos from earlier seminars.

ESIC FACULTY NEWS ...

SCHULZ ELECTED TO THE IEEE BOARD OF DIRECTORS

Professor Noel Schulz was recently elected to the Institute of Electrical and Electronics Engineers (IEEE) Board of Directors. The IEEE is the world's largest technical professional organization known for bringing together engineers, scientists, and professionals to promote the development of technology and its applications worldwide. Schulz, Bob Ferguson Endowed Professor, will serve as the Division VII Director-Elect for



2025 and Division VII Director for 2026 and 2027. She will steer IEEE initiatives and policies that enhance the organization's mission to foster technological innovation for the benefit of humanity.

"I am deeply honored to join the IEEE Board of Directors," Schulz said. "This role represents an opportunity to collaborate with global leaders in engineering and technology, ensuring IEEE continues to be at the forefront of innovation and professional development."

ESIC is proud of Noel's accomplishment and would like to congratulate her on her ongoing leadership in Power Engineering. Please see [this article](#) for more details on Noel's election to the IEEE Board.

STUDENT ENGAGEMENT ...

ANNOUNCING OUR NEXT “STUDENT SPOTLIGHT” FEATURE ON LINKEDIN

We invite you to view our [Student Spotlight on LinkedIn](#). Each week, Pearl Miglani, our intrepid communications coordinator, interviews ESIC students to provide a glimpse into their experiences, goals, and personal insights on the future of power engineering! This week’s featured student is **Jacob Hastings**.



GUIDING STUDENTS TO POWER ENGINEERING

As academics, fellow students, and industry stakeholders, you all have the potential to guide and mentor high school students and college undergraduates interested in working towards a power engineering degree. If you know of such a student, please encourage them to visit our [ESIC website](#) to find out more or ask them to contact us at esic.center@wsu.edu.

FOLLOW US ON LINKEDIN

To stay up-to-date on all things concerning ESIC and power engineering, follow us on our [LinkedIn](#) page where we post seminar updates, scholarships, job openings, and so much more!



PSERC WEBINAR

Weather-grid impact model: Gas-Fired Generators Under Extreme Winter Weather

Dr. Anamika Dubey
Washington State University

Quantifying power grid resilience to extreme weather events necessitates the development of robust and accurate weather-grid impact models. These models are critical not only for predicting how grids will perform under future extreme weather conditions, but also for informing strategic planning, operational decision-making, and assessing the costs and potential for effective risk mitigation. In this presentation, we specifically focus on advancing weather-grid impact models for gas-fired power plants during extreme winter conditions, an increasingly important concern as climate variability intensifies. We introduce a data-driven approach to model the net available capacity of gas-fired generators (and the associated uncertainty) under extreme winter conditions, considering ambient temperature and total demand as key exogenous variables. We utilize extensive datasets, including those from GADS, NOAA, and demand information from NYISO and ISO-New England, to develop a comprehensive understanding of generator behavior during these events. Our findings emphasize the critical role of data-driven approaches in developing accurate predictive models and enhancing grid preparedness for extreme weather events.

JANUARY 22, 2025

[LINK TO WEBINAR](#)

1:00-2:00 P.M. ET

(10:00-11:00 A.M. PT)

Anamika Dubey received her Ph.D. degree in Electrical and Computer Engineering from the University of Texas at Austin in Dec 2015. She is currently Huie-Rogers Endowed Chair Associate Professor of Electrical Engineering in the School of EECS at Washington State University (WSU), Pullman. She also holds a joint appointment as a Research Scientist at the Pacific Northwest National Laboratory (PNNL) and currently serves as the Co-director for the WSU-PNNL Advanced Grid Institute. Her research focuses on the scalable integration of cross-domain models and data to provide better decision support for increasingly complex electric power grids. Currently, her lab is actively working on climate change adaptation solutions for the power grid via hazard modeling, risk-averse planning, and distributed operations. She is a recipient of the National Science Foundation CAREER Award (2019) and the IEEE PES Outstanding Young Engineer Award (2023).

