



# ENGINEERING

## POWER SYMPOSIUM

# AGENDA

May 4 – 5, 2021



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Register at [www.Generac.com/Industrial/Symposium](http://www.Generac.com/Industrial/Symposium)

# Engineering Power Symposium Speakers and Presenters

## Michael Kirchner

*Sr. Sales Training Manager, Generac Industrial Power*

After graduating from the University of Wisconsin with an Electrical Engineering degree, Michael did a short stint as a field engineer in the oil fields of Saudi Arabia. Michael began his career in the electric power industry as a system engineer and project manager for Woodward Governor Company, a major manufacturer of prime mover controls. At Woodward, Michael designed hydro turbine and plant control systems for the electric power industry. After leaving Woodward, Michael earned his MBA from the University of Wisconsin before joining Marathon Electric, an independent manufacturer of electrical power generators. At Marathon Electric, Michael performed marketing and application engineering duties. In 1999, Michael joined Generac as an applications engineer. Michael is the author of Generac's Professional Development Seminar Series™ and Power Design Pro™ sizing software.

## James McFarland, PhD

*Senior Engineer, Electrical, Generac Industrial Power*

James has been working at Generac for the past four years designing wound-field synchronous machines as a Senior Electrical Engineer. He holds a Bachelor's in Electrical Engineering from University of Nebraska – Lincoln as well as a Master's and PhD in Electrical Engineering from the University of Wisconsin – Madison with a focus in the design of rotating electrical machines. James graduated with his PhD in 2015.

## John Sharpe

*National Power Solutions Manager, Generac Industrial Power*

John is a graduate of Virginia Tech in Industrial and Systems Engineering. He spent the first 20 years of his career working in the Caterpillar dealer network in Virginia, North Carolina, and Arizona. With power generation as the basis for his work, John has filled many roles within the dealerships including Project Manager, Sales Engineer, Rental Manager, and Operations Manager. He's also a certified Six Sigma Black Belt for process improvement. John joined Generac in 2012 and is the Power Solutions Manager for the East Coast. He is a member of ASHE as well as the North Carolina and Florida Healthcare Engineering Associations.

## Richard Lincoln, PE

*Senior Director Sales Engineering & Product Management, Generac Industrial Power*

Richard graduated from Marquette University with a BS in Electrical Engineering and started his career as a Systems Engineer at Commonwealth Edison. There he performed power system analysis, including fault calculations and protective device coordination, as well as predictive maintenance analysis and system upgrades. He later worked designing gas turbine power plants for Siemens Power Corporation. He joined Generac in 1998 to lead the paralleling switchgear development engineering team. Since then, he has managed various engineering teams as the Director of New Product Development. In 2015, Richard moved out of Engineering and is currently the Senior Director of Sales Engineering and Product Management. Richard has been a licensed Professional Engineer in WI since 1995.

## Brandon Bassler

*Director of Sales, Generac Industrial Power*

Brandon, has his marketing degree from the University of Wisconsin La Crosse. He has 15 years of work experience with Generac starting his career as an Inside Sales Representative in 2005. He held various other roles over his time here including Regional Business Manager, National Account Manager, Sr. Manager of Sales Operations and Sr. Sales Engineering Manager. He is now currently leading the TX Series Transfer Switch Initiative as the Director of Sales.

## Todd Meyer

*Technical Engineering Manager, Generac Industrial Power*

Having been at Generac for a little over 25 years, Todd has touched gas and diesel projects from 10 kW to 2 MW. Todd has worked on platform projects for industrial and commercial and had a good stint working on engineering projects for telecom.

## Joel DeWall

*Sr. Director of Engineering, Generac Industrial Power*

A graduate of the University of Iowa, Joel holds a Bachelor's in Management Information Systems. He has worked at Generac for more than 16 years and was a key leader in the development of our innovative Power Zone® controllers found on our gaseous units.

# Agenda

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## Tuesday, May 4th

11:00-11:10 AM CST	Event Information & Welcome	Laura Unger & Erik Wilde
11:10-11:55 AM CST	Generator Sizing (Part 1)	John Sharpe
11:55-12:10 PM CST	BREAK	
12:10-12:55 PM CST	GPS-305: Generator Sizing (Part 2)	John Sharpe
12:55-1:10 PM CST	Q&A Session	John Sharpe
1:10-1:20 PM CST	BREAK	
1:20-1:35 PM CST	Alternators	James McFarland
1:35-1:40 PM CST	BREAK	
1:40-1:55 PM CST	Transfer Switches	Brandon Bassler
1:55-2:00 PM CST	End of Day Wrap Up	Laura Unger

## Wednesday, May 5th

11:00-11:05 AM CST	Day 2 Welcome	Laura Unger
11:05-11:50 AM CST	GPS-340: National Electrical Code® (Part 1)	Michael Kirchner
11:50-12:05 PM CST	BREAK	
12:05-12:50 PM CST	GPS-345: National Electrical Code® (Part 2)	Michael Kirchner
12:50-1:05 PM CST	Q&A Session	Michael Kirchner
1:05-1:20 PM CST	BREAK	
1:20-1:45 PM CST	Generac Product Launch Presentation	Todd Meyer, Joel DeWall, Rick Lincoln
1:45-2:00 PM CST	Event Wrap Up/Credit Instructions	Laura Unger

*Note: You must attend all sessions in order to be eligible to earn continuing education credits.*

## Curriculum Abstracts

**GPS – 300 Generator Sizing (Part 1)** | *Presenter: John Sharpe, National Power Solutions Manager, Generac Industrial Power*  
Discusses various elements of generator sizing associated with powering an entire building while also exploring the impact motor starting has on generator size. Participants will learn how to use measurement and billing history data, size based on NEC® requirements, impacts of load sequencing, and the difference between instantaneous voltage dip and 90% sustained.

**GPS – 305 Generator Sizing (Part 2)** | *Presenter: John Sharpe, National Power Solutions Manager, Generac Industrial Power*  
Explores isolating loads onto a generator where the unique characteristics of the load become very important. Loads of particular interest are non-linear harmonic producing loads, uninterruptable power supplies (UPS), variable frequency drive (VFD), soft starters, and older technology electromechanical starters (wye / delta). For each of these loads, participants will learn the resulting load transient and harmonic issues and their impact on generator sizing

**GPS – 340 National Electrical Code® (Part 1)** | *Presenter: Mike Kirchner, Sr. Sales Training Manager, Generac Industrial Power*  
Part 1 of our exploration of the National Electric Code, investigates the code with a generator overview focus. The course examines ten questions that cover various topics: defining the generator and its cabling, generator sizing, start-up and transfer, transient limitations, alarming and instrumentation, signage, emergency shutdown, and output breakers.

**GPS – 345 National Electrical Code® (Part 2)** | *Presenter: Mike Kirchner, Sr. Sales Training Manager, Generac Industrial Power*  
Part 2 of our exploration of the National Electric Code, scrutinizes the code with a focus on application and integration. The course examines ten questions that cover various topics: disconnect at point of entry, cabling, separation of circuits, selective coordination, grounding, fire pumps, transfer switches and docking stations

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## More **power** for more applications.

No two facilities are alike. Each one has unique power requirements. But every enterprise has one standby power need in common. Stay up and running, no matter what. And one company does the job, no matter how small, or big.



## Awarding Continuing Education Units (CEU's)

The Milwaukee School of Engineering (MSOE), which sponsors the CEU/PDH units, accredited the Generac Power Systems Professional Development Series. MSOE was founded in 1903 on the basis of an educational philosophy that integrates two basic elements of learning; theory and practice. MSOE offers 20 bachelors degrees and 10 masters degree programs in areas related to engineering, business, nursing, and construction management. MSOE is well known for its close association with business and industry. U.S. News & World Report has ranked MSOE among the top colleges in Engineering Programs and Engineering Specialties. The purpose of the Continuing Education Unit is to provide a permanent record of the educational accomplishment of the individual who has attained certain competencies as a result of one or more significant non-credit educational experiences. One CEU is defined as 10 contact hours of student participation in an organized educational experience under responsible leadership, capable direction, and qualified instruction.

### MSOE requirements for earning CEU's include:

- A minimum acceptable attendance requirement
- Active class participation
- Pre-determined outcome(s) using student assessment tool(s)
- Proof of accomplishment

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