

# TOWER Seminar

## Analysis and Design of Transmission Towers Using the TOWER Software - A Hands-On Class

April 14 - 18, 2025

1:00 PM to 5:30 PM Monday  
8:30 AM to 4:30 PM Tues.- Thur.  
8:30 AM to 11:30 AM Friday

at

Power Line Systems  
5400 King James Way  
Suite 300  
Madison, WI 53719

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5400 King James Way  
Suite 300  
Madison, WI 53719  
Phone: (608) 238-2171  
Fax: (608) 238-9241  
<https://www.powerlinesystems.com>

**POWER LINE**<sup>®</sup>  
S Y S T E M S

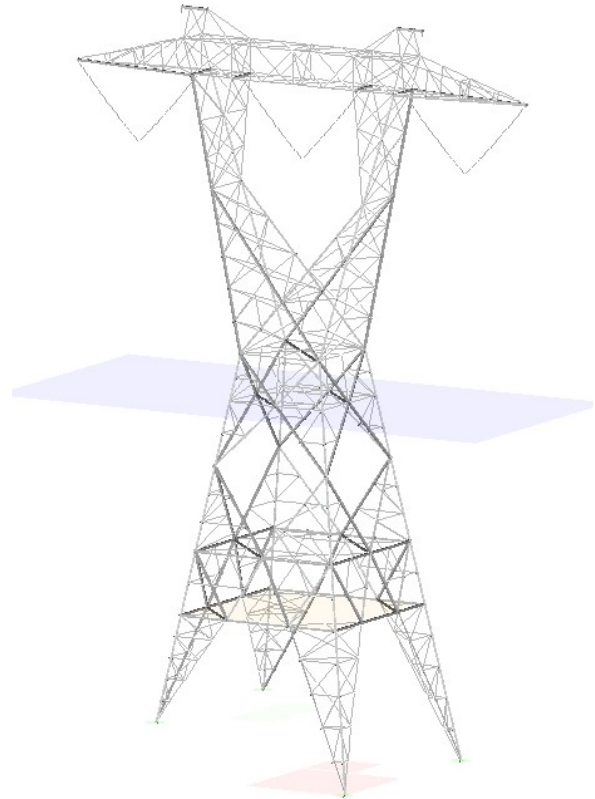
**Learn the Industry  
Standard in Overhead Line  
Design Software**

TOWER is the most widely used lattice tower analysis and design program in the world. Its ability to link directly with PLS-CADD, the industry standard in overhead line design and drafting software, makes it the tool of choice for tower designers and overhead line designers.

This course will teach attendees how to use TOWER to model steel lattice structures, whether for construction of new lattice tower lines, analysis of existing towers or upgrading of existing towers. The course examples will utilize real life structure fabrication drawings and cover implementing provisions of the ASCE 10-15 design standard.

### Topics Covered

- General Lattice Tower Modeling Concepts
- Reading Fabrication and Erection Drawings
- Building a TOWER Model
  - Joints, Members, Connections & Insulators
- Wind and Wire Loads
- ASCE 10-15 Design Strength Checks
  - Compression, Tension, Shear, Bearing and Rupture
- Analysis and Convergence Issues
- Design Functions
- Understanding and Interpreting Results
- Body and Leg Extension Design and Management using Family Manager
- Structure and Member Optimization
- Common Modeling Errors and Pitfalls
- Using TOWER models efficiently in PLS-CADD



### Who Should Attend?

This course is open to all engineers and technicians whose companies currently use TOWER and/or PLS-CADD or are considering purchasing it. The attendee should have a basic understanding of structural design concepts. Previous experience with TOWER is not required but is recommended.

### Cost

The class costs \$2200 per person.

### More Information

A registration form is on the back of this brochure. Seats are limited to the first 25 registrants. We must receive payment and your registration form in order to reserve your seat.

Please see our web site at <https://www.powerlinesystems.com/classes> for other classes.



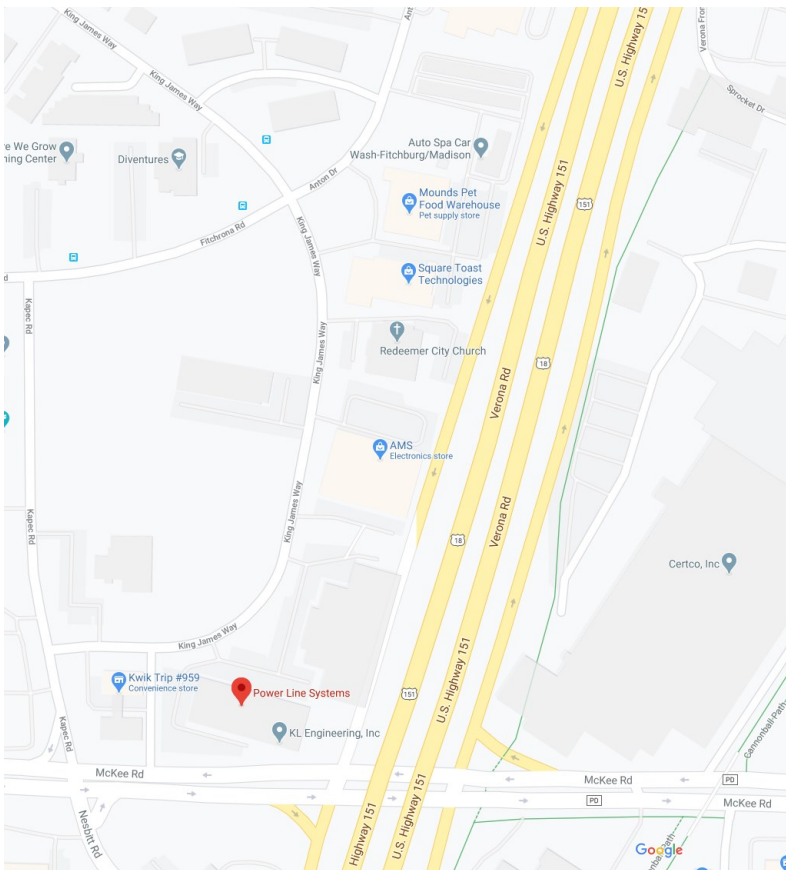


## Instructor

The course will be conducted by Tim Cashman, P.E. of Power Line Systems. He has more than 30 years of experience in transmission line design ranging from voltages of 69kV through 500kV as well as extensive experience using the PLS software suite. Tim is an active member of the ASCE 10 *Design of Latticed Steel Transmission Structures* committee and is extremely knowledgeable in the use of TOWER and its real world application.

## Details

The class will be held from 1:00 PM to 5:30 PM Monday, 8:30 AM to 4:30 PM Tuesday through Thursday and from 8:00 AM to 11:30 AM on Friday (training room opens 15 minutes before class start each day). The course will be conducted at Power Line Systems headquarters in Madison, Wisconsin (see map below). Lunch will be provided Tuesday through Thursday. Attendees are responsible for all other costs incurred including lodging. Please see <https://www.powline.com/visiting.html> for a detailed map of Power Line Systems location and listings of area hotels.



## Computers and Software Provided

This is a 'hands-on' class where attendees will be learning by actually using PLS-CADD. A computer and the latest PLS-CADD software will be provided by Power Line Systems for each attendee for the duration of the class.

*Any audio or video recording of the class is strictly prohibited.*



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Madison, Wisconsin 53719, USA  
Phone: (608) 238 2171 Fax: (608) 238-9241  
<https://www.powerlinesystems.com>  
info@powerlinesystems.com

# TOWER Seminar Registration Form

April 14 - 18, 2025 in Madison, Wisconsin, USA

*Each attendee must submit a completed form to register – please print.*

## Attendee Information

Name (First/Last) \_\_\_\_\_ Phone \_\_\_\_\_  
Company \_\_\_\_\_ Fax \_\_\_\_\_  
Address \_\_\_\_\_ E-Mail \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

## Payment Information

Full payment is required prior to the class and must be received in order to reserve a seat. Seats are reserved on a first-paid first-reserved basis and are limited to 25 people.

Check No. \_\_\_\_\_

I authorize Power Line Systems to charge my \_\_\_MasterCard \_\_\_Visa for the amount of \$2200. Note that Power Line Systems can only accept MasterCard or VISA credit cards. All attendees will be supplied with a computer, the TOWER software, and a training license of the software to use during the class.

Cardholder Name \_\_\_\_\_ Signature \_\_\_\_\_  
Card No. \_\_\_\_\_ Expiration Date \_\_\_\_\_  
CVC No. \_\_\_\_\_  
Credit Card Billing Address \_\_\_\_\_  
(if different than above) \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

## Cancellation Policy

Confirmed registrants who do not participate or who cancel after March 28, 2025, will forfeit their entire registration fee. Power Line Systems reserves the right to cancel the training session and will refund the entire class registration fee in the unlikely event this happens.