TOWER Online Seminar

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

November 16 – 20, 2026

Monday thru Friday

8:00 AM to 12:00 PM

(Central Standard Time)

Location:

Held Online via Teams Meeting

POWER LINE® SYSTEMS

Part of Bentley Systems

Power Line Systems
5400 King James Way, Suite 300
Madison, Wisconsin 53719, USA
Phone: (608) 238 - 2171
https://www.powerlinesystems.com
training@powerlinesystems.com

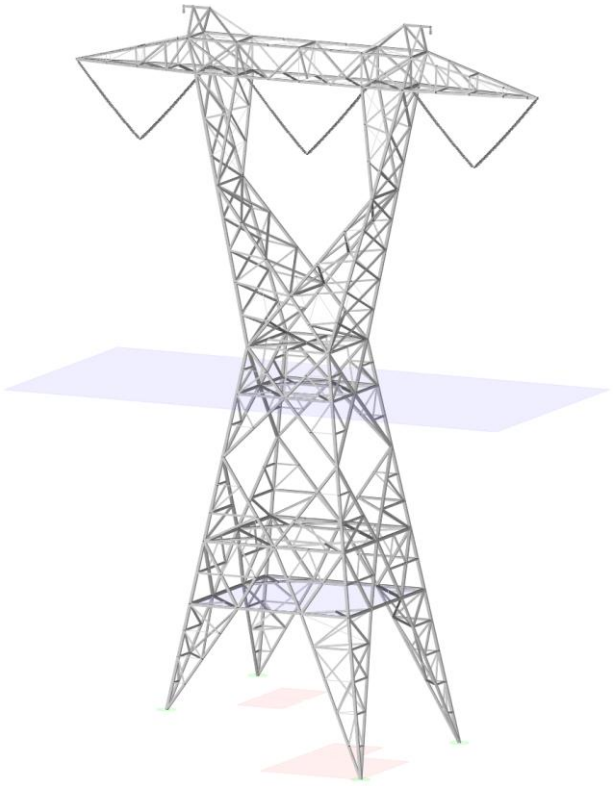
Improve Your Knowledge and Proficiency with the Industry Standard in Overhead Line Design Software

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 covers the basics of modeling steel lattice structures in TOWER. Attendees will learn how to use TOWER for the design and analysis of new or existing lattice structures. 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
- Member types
  - Truss, beams, crossing diagonals, redundants, tension only
- Wind and wire loads
- ASCE 10 design strength checks
  - Compression, tension, bolt shear, bearing & rupture
- Structure analysis
- Body and leg extension design and management
  - using Family Manager
- Understanding and interpreting results
- 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 or are interested in purchasing TOWER. The course is intended for new or less experienced users of TOWER or individuals who are looking to expand their knowledge of TOWER and lattice tower design concepts. The attendees should have a basic understanding of structural design concepts. Previous experience with TOWER is not required but is recommended.

Cost

The class costs $2000 per person.

More Information

The course registration form is included at the end this brochure. Seats are limited to the first 30 registrants. We must receive payment and your registration form in order to reserve your seat.

Please see our website for other classes:

https://www.powerlinesystems.com/onlinetraining

https://www.powerlinesystems.com/classes

The course will be led by Tim Cashman, P.E., Power Line Systems along with the help of other technical support staff. He has more than 37 years of experience in overhead line design ranging from 69kV through 500kV as well as extensive experience using the PLS software suite. Tim is a registered Professional Engineer, is an active member of ASCE and is a member of the ASCE 10 *Design of Latticed Steel Structures* standard committee. He is extremely knowledgeable in the use of TOWER and its real-world application.

Details

- The class will be held from 8:00 AM to approx. 12:00 PM (Central Standard Time Zone UTC-6) Monday through Friday via a Teams web conference meeting.

- This online variant of our in-person introductory course is streamlined to focus on the core concepts and mechanics of TOWER. It will be a lecture and assignment style format as opposed to the hands-on approach our in-person course offers but will still give students the opportunity to learn the software with hands-on project assignments and guidance by the PLS Support Staff.

- Each day the course will start with a short QA session to recap the previous day, followed by a 4-hour lecture covering the various topics listed on the previous page as well as detailed example walkthroughs using actual project data. After the lectures on Monday through Thursday, the class will be given an assignment that represents the topics covered that day. Students can at their own pace complete the assignment and submit their results to the Power Line Systems Support Staff for review and comment. If students have questions or require any assistance in completing the assignments, they can submit their models and ask questions to PLS Support Staff via email or phone where they will be given priority assistance.

- The PLS Support Staff will also hold a 1-hour video conference call from 4:00 PM to 5:00 PM Tuesday, Wednesday and Thursday to offer face-face assistance and answer any questions in an open forum format. This is an optional session but provides an opportunity to interact with the PLS staff and hear other student questions and input.

- Upon completion of the course students will be given a certificate of completion good for 20 professional development hours. (20 PDH's)

Requirements

- Access to Teams for the sessions.
- A web camera must be installed and used to access the Teams meeting.
- Ability to download the latest software and connect to our PLS-GRID server.
- A copy of ASCE 10-15 is recommended

Computers and Software Provided

This is a 'hands-on' class where attendees will learn by actually using the software. The latest PLS software and software licenses 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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TOWER Online Class Registration Form

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Registration

Registration for the course can be made by sending the Attendee Information or a completed copy of this from to training@powerlinesystems.com.

Attendee Information

Name (First/Last) _____ Phone _____

Company _____

Address _____ E-Mail _____

_____

City _____ State ____ Postal Code _____

Country _____

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 30 people.

Payments are made exclusively online using the Bentley Virtuosity system at https://en.virtuosity.com/power-line-systems. Once on the webpage, select the appropriate PLS-CADD or TOWER class from the pulldown menu, select the quantity and add to your cart. Then check out and pay from your cart.

Payments cannot be made via a purchase order. Payment is only made via the Virtuosity system.

Cancellation Policy

Confirmed registrants who do not participate or who cancel after November 2, 2026, 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.