TOWER 101
Online Class

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

May 17 - 20, 2021

Time: 8:00 AM to 12:00 PM

Monday—Thursday

Held Online via Zoom Meeting

POWER LINE®
S Y S T E M S

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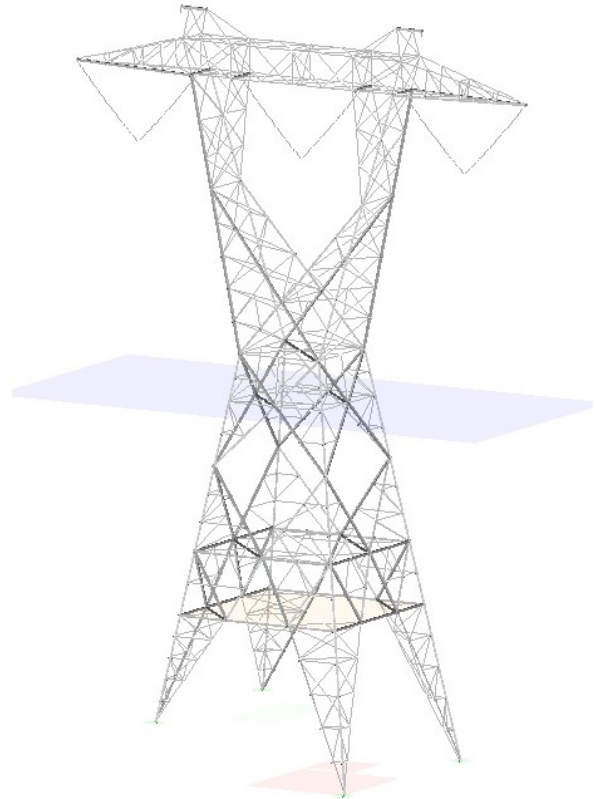Fax: (608) 238-9241
https://www.powerlinesystems.com

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
- Wind and Wire Loads
- ASCE 10-15 Design Strength Checks
    - Compression, Tension, Shear, Bearing and Rupture
- Analysis
- Understanding and Interpreting Results
- 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. The course is intended for new or less experienced users of TOWER. The attendee should have a basic understanding of structural design concepts. Previous experience with TOWER is not required but is recommended.

Experienced users of TOWER may find our upcoming TOWER 201 course more beneficial for more theory of lattice steel design and advanced modelling techniques.

Please see our website for other classes:
https://www.powerlinesystems.com/onlinetraining
https://www.powerlinesystems.com/classes

Cost

The class costs $1200 per person.

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 8:00 AM to 12:00 PM (Central Time Zone UTC-6) Monday through Thursday via a Zoom 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 3-4 hour lecture covering the various topics listed on the previous page as well as detailed example walkthroughs using actual project data. After the lecture on Monday through Wednesday, 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. Additionally Power Line Systems Support Staff will hold a 1 hour video conference call from 4:00 PM to 5:00 PM to offer face-face assistance and answer any questions in an open forum format. This is also an excellent time to hear other student questions and input. Thursday will comprise solely of a lecture.
- Upon completion of the course students will be given a certificate of completion good for 16 professional development hours. (16 PDH's)

Requirements

- Create a Zoom account and supply the account name/email address to Power Line Systems.
- A web camera must be installed and used to access the Zoom meeting.
- Ability to access a Google Drive link to download example files and course material.
- A copy of ASCE 10-15 is recommended

Software & Training Material Provided

This is a 'hands-on' class where attendees will be learning by actually using TOWER. The latest PLS software will be provided by Power Line Systems for each attendee for the duration of the class. If the attendee wishes to use their own software they must be using the latest version and it is recommended to have the following programs/modules; PLS-CADD and TOWER, otherwise it is recommended to use the provided training software.

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

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TOWER 101 Online Class Registration Form
May 17 - 20, 2021
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 $1200. Note that Power Line Systems can only accept MasterCard or VISA credit cards. All attendees will be supplied with the TOWER software to use during the class and a Google Drive download link for other course materials and files.

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 April 30, 2021, 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.