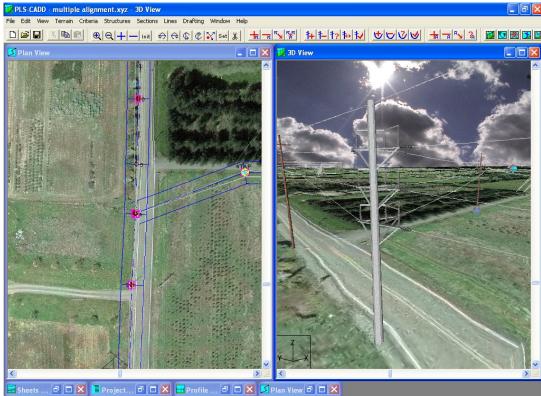
Advanced PLS-CADD Training

Using PLS-CADD with LiDAR Data to Meet NERC FAC-008 Requirements



Etructure Modify (Left or Middle click on structure): Struct #Undefined (#16 in line) 'c:\projects\newhorizon\tsid-4aa 095 ld1.pol' S=10824.96 Strength=Pending ??



January 29 - 30, 2013

8:30 AM to 4:30 PM Tues.-Wed.

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at
Power Line Systems, Inc.
610 N. Whitney Way
Suite 160
Madison, WI 53705
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Power Line Systems, Inc. 610 N. Whitney Way Suite 160 Madison, WI 53705 Phone: (608) 238-2171 Fax: (608) 238-9241 http://www.powline.com

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Learn how the Industry Leading Line Design Software helps you meet NERC FAC-008 This course is designed for the North American electric power transmission line industry.

NERC issued a <u>Facility Ratings Methodology Alert to Industry</u> that lists PLS-CADD as a solution to meet the requirements of reviewing current facilities rating methodologies to verify that they are based on actual field conditions, and the use of Li-

DAR to identify possible discrepancies between the design data and the actual field conditions of transmission facilities. This course will teach the attendee how to use PLS-CADD to develop line rating methods for NERC compliance reporting including: importing LiDAR, criteria development, structure definition, conductor sag matching, conductor movement prediction, thermal rating and violation reporting, and violation mitigation. PLS-CADD is the Industry Standard in overhead line design and analysis software. You will see why at this course.

Topics Covered

- General Overview
- LiDAR Data
 - Accuracy and Classification LiDAR Importing
- Terrain Model Development
- Criteria Requirements
- Structure Modeling
- Sagging of Conductors to Match Actual Field Conditions
 - Conductor Temperature

Ruling Span approximation vs. Finite Element accuracy

- Conductor Behavior Movement and Prediction
- Generation of Reports
 - **Thermal Rating**
 - Exporting Violations for Use in Other Applications (Google Earth or GIS)
- Various Methods for Rerating and Uprating Existing Lines
 - **Traditional Methods**

Nontraditional Methods

Who Should Attend?

This course is intended for engineers, technicians, and managers who are involved in transmission line ratings and whose companies currently use PLS-CADD or are considering purchasing it. The attendee should have some basic understanding of overhead line design concepts and already be familiar with PLS-CADD as the class focuses on advanced use of the software and not on the fundamentals of line design or PLS-CADD.

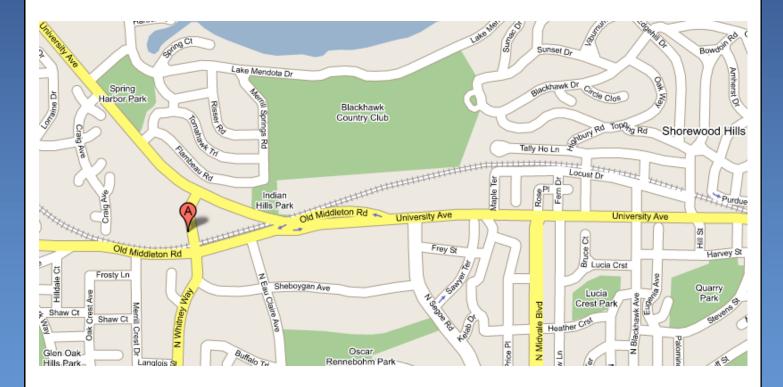


Instructor

The course will be conducted by Otto J. Lynch, P.E., Vice President of Engineering at Power Line Systems Inc. He has more than 20 years of experience in transmission line design and has used PLS-CADD since its inception. Otto pioneered the use of LiDAR data for transmission line modeling. Otto is a registered Professional Engineer and an active member of many ASCE and IEEE technical committees, including serving as the current Chair of the ASCE Structural Engineering Institute Electrical Transmission Structures Committee. He is also a member of Subcommittee 5 of the National Electric Safety Code.

Details

The class will be held from 8:30 AM to 4:30 PM Tuesday and Wednesday (training room opens 15 minutes before class start each day). The course will be conducted at Power Line Systems headquarters in Madison, Wisconsin (point A in the map below). Lunch will be provided Tuesday and Wednesday. Attendees are responsible for all other costs incurred including lodging.



Please see <u>http://www.powline.com/visiting.html</u> for information on traveling to Madison and for listings of other area hotels. A registration form is on the back of this brochure. Seats are limited, so don't miss out. We must receive payment and your registration form in order to reserve your seat.



610 N. Whitney Way, Suite 160 Madison, Wisconsin 53705, USA Phone: (608) 238 2171 Fax: (608) 238-9241 http://www.powline.com info@powline.com

NERC Class Registration Form

January 29 - 30, 2013 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 44 people.

Check No.

I authorize Power Line Systems, Inc. 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 a computer, the PLS-CADD software and hardware key to use during the class.

Cardholder Name	Signature		
Card No	Expiration Date		
Credit Card Billing Address		-	
(if different than above)		-	
City	State	Zip	

Cancellation Policy

Confirmed registrants who do not participate or who cancel after January 1, 2013, will forfeit their entire registration fee. Power Line Systems, Inc. reserves the right to cancel the training session and will refund the entire class registration fee in the unlikely event this happens