# TRAINING DATES

7 – 11 March 2016 **(JHB)** 20 – 24 June 2016 **(CPT)** 15 – 19 August 2016 **(DBN)** 7 – 11 November 2016 **(JHB)** 

Trans-Africa Projects

# PLS CADD, PLS TOWER, PLS POLE

5 DAY COURSE (5 CPD CREDITS)

Presented by leading TAP professionals



AUTHORISED TECHNICAL SUPPORT AND SALES AGENT FOR





# COURSE DESCRIPTION

This 5 day course is aimed at teaching line designers how to use the industry standard line design programmes developed by Power Line Systems (PLS) in order to create accurate, efficient and optimal designs.

The course begins with two days of structural analysis, during which attendees are led through the steps to define and analyze both transmission **pole** and **lattice tower** structures in the structural modules PLS Pole and PLS Tower.

The final 3 days of the course are dedicated to line profiling and design using the line design programme PLS CADD. Using a worked example of a basic line profile, the course covers all steps required to utilise the software from creating survey data and structure seed files, stringing conductor, performing design checks and finally creating plan and profile sheets.

The final module covers many of the more useful and advanced features of PLS CADD are covered.

### COURSE CURRICULLUM

Day 1 : PLS Pole

- Design of Steel Transmission Poles
- Defining component libraries
- Creating pole geometries
- Defining loads
- Model checking and analysis + Optimising elements

### Day 2 : PLS Tower

- Design of Lattice transmission tower
- Defining component libraries
- Defining joints/nodes, adding members, copying and transposing sections to build complex modular
- structure geometries
- Defining loads
- Model checking and analysis + Optimising elements

### Day 3 – 5 :

### PLS CADD I

- Overview of PLS Modelling Process
- Creating and Understanding Survey Points
- Defining Weather Load Cases
- Setting up conductor swing, templating, and mechanical criteria
- Creating and editing Method 1 Structures
- Manual Templating
- Automatic Spotting
- Generating .pfl profiles

Setting up of profile sheets, drafting & annotation

### PLS CADD II

This module will enable the user to maximize the capabilities of PLS CADD.

- Use of PLS CADD / Lite and the link between PLS Pole /Tower
- Using Method 4 Structures (Finite Element Modelling)
- Overview of line optimisation process
- Optimum Spotting
- Management of preferences, backups and user defined libraries
- Advanced Display Options
- Inspect Design Check Reports
- Importation of digitised drawings
- Importation of data & data filtering
- Generating 3D .xyz profiles and TIN model functionality
- Guy and leg extension reports
- Investigating conductor swing
- Generation of 3D mpegs and Images (Virtual Line inspection)
- Generation of Stringing Charts
- Generation of Staking Tables
- Exporting & Viewing the line in Google Earth

# COURSE MATERIAL

Delegates will receive a set of electronic notes and writing material. Videos illustrating examples and experiences of the topics discussed will be shown where necessary. Practical work examples will be explained and discussed.

All Delegates are required to bring their own laptop to the training session.

# **REGISTRATION INFORMATION**

Delegates are responsible for their own travel and accommodation arrangements. The names of nearby accommodation will be provided if requested.

Registration material will be available at 08:00 on the first day of the course. The formal programme will commence at 08:30 and end at approximately 17:00 every day

Location:

- TAP Office Jhb, 400 16<sup>th</sup> Road, Central Park, Block Q, Midrand
- TAP Office Durban, 9/11 Imperial Park, University Rd, Westville
- TAP Office Cape Town, 163 Uys Krige Drive, Tygerberg Office Park, Uitzicht Building, Plattekloof

(Map will be supplied upon registration)

Individual registration – Full Course (excluding VAT)

R15 500

Group discount (five or more delegates from the same company)

10%

Note: Registration will be accepted on a first come, first served basis. Enrolment for each course is limited to a maximum 10 delegates, and advance registration is required. The registration fee covers the five-day course, course materials, and refreshments during all course breaks. The registration and payment/purchase order deadline is 10 business days prior to the course start date. To register, please complete the attached form and return it to: training@taprojects.co.za

\*Attendance will only be confirmed once the registration form and payment/purchase order has been received.

# **BOOKING FORM**

# PLS CADD, PLS Tower, PLS Pole Course

Individual Registration:	Group Registration:
	(Please provide names of all delegates)
*Session Date	
*Company Trading Name	
*Country	
*Name of delegate	
*Surname of delegate	
*ID / Passport number	
*Position held by delegate	
ECSA registration number	
SAIEE registration number	
*Telephone	
*Cellphone	
*E-mail	
*Special Dietary requirement	
*Manager's Name	
*Manager's Position (i.e. Exec Man 765kV Projects)	
*Manager's E-mail	
Purchase Order No	
*Send Invoice To	
*Cellphone	
* E-mail	
*Postal Address	
*Vat Registration (if applicable)	
*Company Registration Number	
*I have read and agreed to the terms and conditions below (please mark with an x)	

### TERMS AND CONDITIONS

The responsible person booking or authorising the attendance of the training event will be liable to adhere to these Terms and Conditions.

### 1. Course Bookings

The booking form needs to be provided by means of the following method: E-mail to training@taprojects.co.za

The delegate is responsible to ensure that the course outcomes will meet the delegate's training needs before submitting the booking form.

#### 2. Payment Terms

Payment needs to be made within 7 working days from date of invoice or prior to the training course date, whichever is sooner.

The delegate is responsible to ensure Trans-Africa Projects (Pty) Ltd. is notified via the booking form if a Purchase Order or Vendor Application is required before payment can be authorised by the delegate's principal.

In the instance of Eskom or Fluor delegates where payment before the training course date is not possible, the following applies: Purchase Order to be forwarded via e-mail to <u>training@taprojects.co.za</u> prior to the start of the course.

### 3. Rescheduling of booking

Rescheduling of a booking will be allowed if there is an available seat at the next training course. Rescheduling of a booking will only be allowed once. The delegate is still liable for payment of the original invoice associated with the original booking. There will be no credit notes issued for rescheduling of the training course.

The request to reschedule a booking needs to be provided in writing to <u>training@taprojects.co.za</u> within 14 working days prior to the start date of the training course. Failing to do so will automatically be treated as a cancellation

TAP cannot estimate the waiting period before the next training course date is scheduled, therefore TAP cannot accept responsibility for the waiting period.

### 4. Cancellation of booking

Notification of cancellation of attendance must be made in writing to <u>training@taprojects.co.za</u>; notifying TAP of your intention to cancel.

Cancellation request received less than 7 workings days prior to the start date of the training course will incur the full cost of the training course.

Cancellation request received between 8 to 14 days prior to the start date of the training course will incur a cancellation fee of 50% of the total cost of the total course fee.

### 5. Substitution of booking

Delegates will be allowed one substitution for the training course. TAP must be notified in writing at least three days prior to the training course is scheduled to commence.

### 6. Non-attendance of booked training intervention

No refund for non-attendance.

### 7. General

TAP reserves the right to cancel the course, change course location, change instructors or change course content. In the event that the course must be cancelled, the delegate will be informed 7 days prior to the commencement of the training course.

#### 8. VAT

All training course fees are subject to the current RSA VAT.