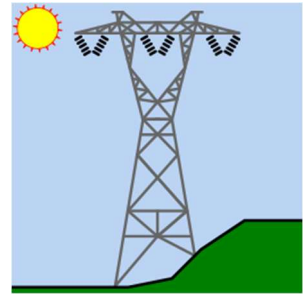


2026 PLS-CADD Advanced Training and User Group Meeting

What's New in TOWER™



Summary of changes since June 2024 User Group. Covers versions 20.01 – 21.15

Projects saved in version 21.15 are readable in version 20.01 and newer unless:

- Version 20.14 and newer when using lambda insulators with a non-zero compression capacity
- Version 20.17 and newer when using set numbers greater than 60
- Version 21.08 and newer when using an inset report view linked to a CSV file
- Version 21.14 and newer when using foundation footprints

New Commands

1. **Export** added to context menu in report windows to provide the available export options for all schemas in the report in one dialog.
2. Lambda, Double Pin, and Double Suspension added to the "**Add insulator**" button in the **Add/Move/Delete Toolbar**.
3. **Geometry/PLS-CADD/Foundation Footprint...** to define a circular or rectangular region around foundation joints that PLS-CADD can check against.
4. **File/New/Geometry Wizard...** interactive feature to create geometry of a new tower model

Engineering & Reports

1. Now support insulator set numbers up to 999 and up to 100 separate insulator sets per structure.
2. Member split now correctly processes the 'Auto Adjust' unbraced lengths option by simplifying the calculation to factoring the original RL* by the ratio of old length to new length.
3. Added a **Decomposed Assemblies Parts Table** option to **Geometry/PLS-CADD/Material Options...** which provides part counts per assembly used for Bill of Material reports.

4. Now require a minimum weight of 5 lbs./22.2 N for tension-only 2-part, lambda, and double suspension insulators within their respective properties tables.
5. No longer constrain the rotation of double pin insulator tip joints.
6. Now allow lambda insulators to have a non-zero compression capacity.
7. Improved the double pin insulator cantilever load/usage calculation.
8. Increased the maximum number of members in the model to 100,000 from the previous limit of 36,000.
9. Added the JSON file format to schema report "Export" options as an alternative to XML.
10. Now give a warning when the long edge distance is less than the short edge distance, as this is impossible.
11. Fixed Groups Summary Super Set which was omitting climbing load check results for groups with redundant members that are not included in the FE analysis that are only used in non-active BLE configurations.
12. Fixed the reported 'Design Compression Capacity' in 'Detailed Angle Member Uprating' report for crossing diagonal members that trigger the CDC for one load case which controls previous load cases, but that is then controlled by a subsequent load case that does not trigger the CDC
13. **Loads/Batch Import or Edit Concentrated Loads...** now provides 32000 blank rows in addition to the number it starts with.

Standards and Codes

1. Made the EN50341-1:2012 EN93 "long joint" shear capacity reduction factor less conservative when there are multiple rows of connectors (this also applies to the NL, PN and UK NNA's)
2. Now report an error when calculating compression capacity as per SP 16.13330.2011 and the restraint| coefficient is ≤ 0

General Additions

1. Added an option to **General/Post Processor** for "output file name" that allows for the legacy behavior, a user specified name, or two different unique name options.
2. Added **Model/Check** warning for double pin insulator properties if tension, compression, and cantilever capacities are all zero and removed **Model/Check** warning for double pin insulator properties that required tension capacity be greater than zero to more closely match post insulator properties' behavior.
3. Added a **Hilite Material in Model** button to the **Parts Editor** and **Assemblies Editor** dialogs
4. Added note to Summary of Double Pin Capacities and Usages table in the **Model/Run Analysis Results** report about max cantilever force deriving from only one side of a double pin insulator.

5. Added **File/Preferences** setting **Use system default PDF reader to fill help requests instead of Adobe Acrobat**. User will probably have to manually go to the correct page number, but the page number will be copied to the clipboard and an explanation.
6. Added new context menu commands, **Hide Column(s)** and **Customize Column Visibility** to hide and show columns in dialog tables.
7. Added buttons for **Edit Angle Groups**, **Edit Angle Properties**, and **Edit Bolt Properties** to **Geometry/Members/Table Edit** and added a button for **Edit Angle Properties** to **Geometry/Groups/Table Edit**.
8. Added the **File/Batch Modify...** option **Consolidate Components Files** that applies the source model's component files to all selected models while adding any missing (or different) referenced properties from the target models to those component files.
9. Updated **Help/Tips of the Day** with new and improved tips.
10. Added **Panel Library** to **File/Preferences...** to specify where patterns used by the Geometry Wizard are stored.
11. Added warning icon to title bar in table dialogs if any columns have been hidden. You can click on the icon to restore any hidden columns.
12. Updated clipboard information to include colors and text style when doing a Copy of any table so it can be pasted, with color, into a different program such as Excel.

Performance

1. Improved performance of certain types of calculations. Can result in up to 10% faster overall analysis.

Drafting and Graphics

1. Added a new annotation view type of **Sheet Range to Drafting/Annotations** (User-Input & Program Generated) which displays annotations on a user selected subset of sheet pages.
2. Added an option to **File/Export/DXF...** to use the model coordinate system instead of positioning the model to lie in the XY plane.
3. Improved exported DXF files to support solid fill hatches.
4. Improved Digital Ink drawing (accessed through 'F2' key) to support different line widths, colors, and shapes.
5. Use the **Digits of precision to use for Dimension Annotation** setting in **File/Preferences...** with both **Drafting/Annotation (Program-Generated)/Auto Add Dimension Lines** and **Drafting/Annotation (User-Input)/Add/Dimension Snap...**

6. Improved graphics for dash and dot line styles when using larger pen widths.
7. For several of the **Drafting/Lines and Annotation/Add/** and **Drafting/Lines and Annotation/Move** commands, changed the behavior of the <ctrl> and <space> keys to be toggles instead of requiring the user to hold them down. This addresses some slow drawing performance.
8. Renamed **Drafting/Inset Views/Build Inset Report View...** to **Drafting/Inset Views/Build Inset Report View/Build Manually...**
9. Added new command, **Drafting/Inset Views/Build Inset Report View/Link CSV File...** which adds the specified CSV to the Reference Manager and builds an inset report view with the contents of that CSV which can update as the CSV file is updated.
10. Now support printing of solid fill hatches which previously only worked when displaying to the screen.
11. Added **View/Display Options/Show Foundation Footprint** to show any foundation footprints within the structure geometry.

Family Manager & Optimum Body and Leg Extension Selection

1. When exporting models, the Family Manager now converts machine generated parts from body and leg extensions into user generated parts so they are preserved.
2. Fixed a potential issue with overlapping Z elevations in Family Manager extensions.

Web, Components, & Examples

- 1) Technical Notes
 - a. Connection and Anchor Elements (CAN) in PLS-POLE and TOWER [Updated] - <https://www.powline.com/technotes/CAN Elements in PLS-POLE and TOWER.pdf>
 - b. Structural Advantage of Using V-Strings [Updated] - <https://www.powline.com/technotes/StructuralAdvantageOfUsingVStrings.pdf>