

**PRIMARY DEPARTMENT AFFECTED:**

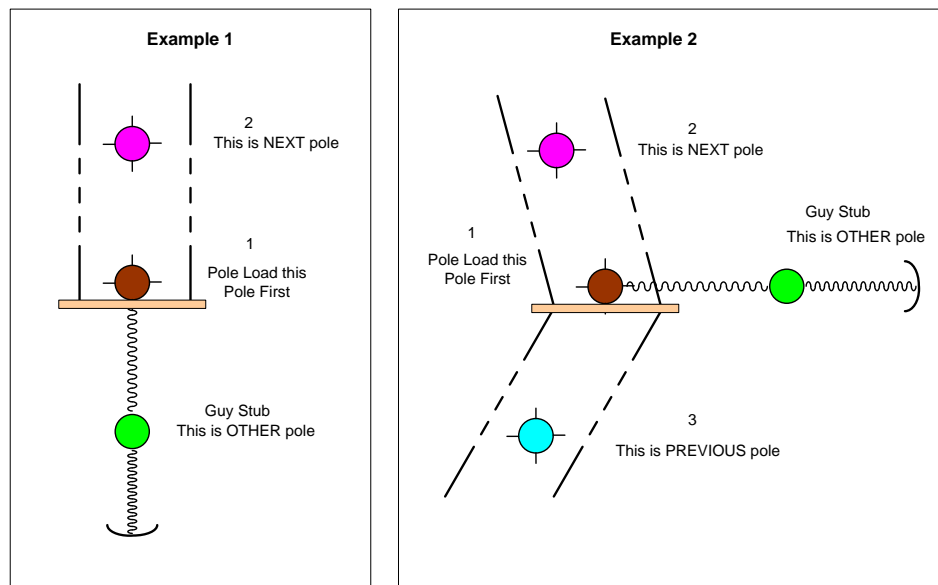
- Design Organization
- Edison Carrier Solutions (ECS)
- Transmission
- Joint Pole Organization (JPO)
- Field Accounting Organization (FAO)
- Maintenance & Inspection

**BACKGROUND**

SPIDA Calc has the capability to pole load a guy stub pole utilizing the pole load inputs from the pole it is supporting. This will allow for accuracy in assessment of the actual loads being placed on the guy stub pole by bringing over the tension end points.

**PURPOSE**

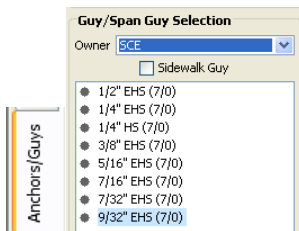
The following will outline how to input information in a flow that allows for proper pole loading of a guy stub pole. Here are a couple of configurations a guy stub pole may be involved in.



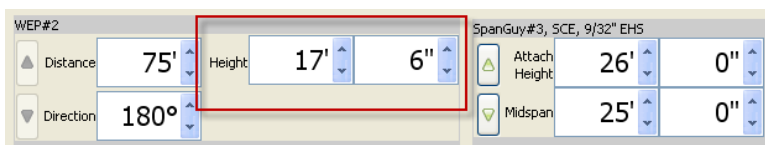
*Note: The #1 pole will be the first pole you will load. Use "Other" for the guy pole. Pole #2 and #3 are for reference only and will not be pole loaded for these examples.*

1. Create a new project and start by setting your wire end points ("Next" Pole and "Other" Pole for guy stub. Add a "Previous" if performing an angle pole such as shown in example #2.

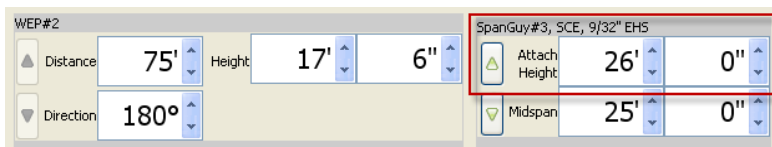
2. Rename your Location to the Pole Number and Rename the Design to As-Is (if not the default name).
3. Enter all wires attached to your #1 Pole but exclude the span guys to the guy stub for now (they will be entered in the next step).
4. To add the span guys to the guy stub, first select (highlight) the “Other” pole (guy stub) in your top view.
5. Next, while the guy stub is highlighted, you’ll be dragging and dropping span guys to your Pole #1 at the correct height. Important, make sure you are selecting them from the Anchors/Guy tab—shown below (do not use the guys on the wires tab):



6. For each Span Guy entered, you’ll need to adjust the attachment heights for both ends of the span guy; one for the dead end (or angle pole) and one for the guy stub. First, adjust the height on the left section of the wire end point (shown below)—this will be the height the span guy is attached to the guy stub:



7. Next, adjust the “Attach Height” on the right section of the wire end point screen (shown below)—this will be the height the span guy is on your dead end or angle pole (no need to change the default midspan value):

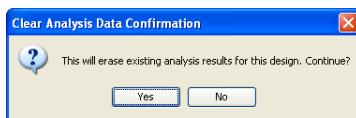


8. Once all wires, span guys, and equipment (if applicable) are entered on your dead end or angle pole, you’ll need to analyze the pole by clicking Analyze.
9. Once your dead end (or angle pole) has been analyzed, you’ll have to create a second Location. Do so by clicking Add Location (you can click the icon button or use the right click shortcut).
10. Rename the 2nd location to the pole number (for this example, we’ve renamed it to Guy Pole).

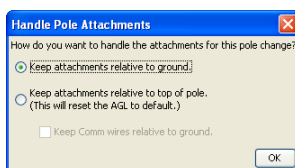
11. Then rename this Design to As-Designed (if not defaulted). (Remember, for this example, we'll assume the guy stub was hit by a car and you are installing a new pole—if you were pole loading an existing pole, you can skip to step 17).
12. For the As-Designed guy stub, you'll need to change the way SPIDA is going to run its analysis—currently it is set to compare the safety factor for an As-Is pole, but we are assuming this is a new pole and thus have to change the wind and loading indicator. To do this, make sure the Guy Pole is selected in the hierarchy view (left side of screen), then select the Design icon at the top of the screen:



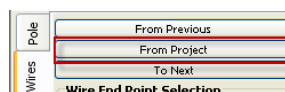
13. The Design Loading screen will open and you will need to Edit the In Service wind zone to New wind zone (for this example) so the system can apply the different passing safety factors.
14. Edit the height and class of the new guy pole (if needed).
15. Note: if a pole has already been analyzed, Select Yes if you get this message:



16. If you get the pop up screen in step 15, you'll also get the pop up shown below: select Keep Attachments Relative to Ground.

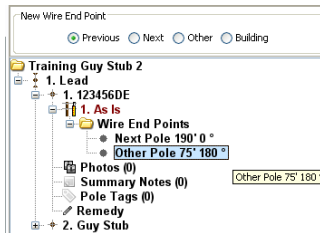


17. While the Guy Stub design in hierarchy view is highlighted (meaning you are currently seeing the guy stub pole in your main screen), select the Graphics view tab, then the Wires Tab, then click From Project:

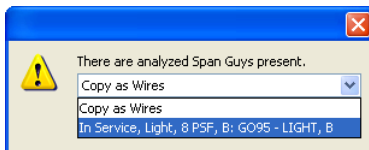


18. See the screen shot below and follow these steps: Select the "plus" (+) sign next to your lead, then select the (+) to open the dead end pole (or angle pole), then the (+) next to the As-Is (or As-Designed, depending on your design). Finally, click the (+) for Wire End Points, then select the "Other" Pole. In case you have more than

one "Other" pole, be sure to check the footage and angles are for your guy stub (notice 75' 180 degrees are those matching the guy stub location).



19. You will receive a pop up screen (shown below). Select the drop down and choose the analyzed value (not the Copy as Wires), then select OK. The analyzed value is listed because you analyzed your dead end Pole (or angle pole). If you forgot to run this analysis, you'll have to go back and analyze pole #1 and repeat steps beginning with #17.



20. A "Next" pole will display in your Top View with Tension End points (derived from your pole #1) displayed on your guy pole. The tension end points will display as small green diamonds on your guy pole. Behind the scenes, the application is automatically bringing the tension values from Pole #1 and attaching them to your guy stub for pole load calculations. This is what step #19 did for you.
21. Add anchor(s) and down guys as required.
22. Analyze the guy pole—Finished.