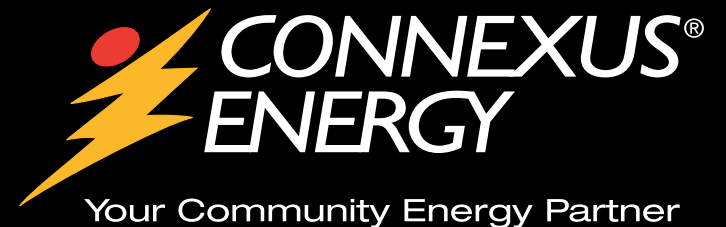




CONTRACTOR  
**SAFETY**  
ORIENTATION  
CABLE TESTING



# CABLE TESTING

## Nominal voltage of lines and equipment

- **7.3kV phase-to-ground, 12.7kV phase-to-phase**

## Maximum switching transient voltage

- **25.6kV (3.5 x phase-to-ground)**

## Presence of hazardous induced voltages

- **Possible on underbuilt lines or adjacent to transmission lines**

## Protective grounds & equipment grounding

- **Ground wire on poles, equipment in subs, etc.**
- **If you find ground wires cut or missing notify Connexus immediately**



# CABLE TESTING

## Location of electric circuits & equipment

- Refer to Connexus circuit maps
- Ask for details if uncertain

## Condition of poles and structures

- Visually inspect before climbing. Unsafe poles are marked with red tag

## Environmental conditions

- Outdoors, uneven terrain, possible buried utilities, adjacent to busy roads

## Permit required to enter enclosed spaces?

- Very Limited – will be advised if work involves enclosed spaces



# CABLE TESTING

## Minimum Approach Distance (MAD)

- **5.1-15.0 kV = 2' - 2"**

## Are employees exposed to hazards from flames or electric arc?

- **Yes, minimum 8 cal/cm<sup>2</sup> Flame Resistant clothing required if working within the minimum approach distance (MAD)**
- **Use 8 ft. insulated hot line tools when working in energized primary cabinets**

## Estimated incident energy from electric arc

- **Connexus has developed an Arc Flash Safety Quick Reference**
- **\*\*\*insert Arc Flash Chart here \*\*\***



# CABLE TESTING

**Are devices designed to open/close circuits under load?**

- **Yes - fuses, cutouts, reclosers, etc. Ask for specific information if you are unsure**

**Known sources of electric energy**

- **OH /UG circuits originating from substations supply power. Customer-owned distributed generation (specifics will be provided) may have potential to backfeed if protective switches fail.**

**Do protective grounds have adequate current carrying capacity?**

- **Yes, minimum 1/0 for personal grounds**

**Possible hazardous transfer of potential if fault occurs?**

- **Yes, less than 10kA**



# CABLE TESTING

**Contractors may request other information about the design and operation of the Connexus electrical system that is known and related to the protection of the contractor employees**

