



OCTOBER 2023

# TOOLBOX TALKS

## Making Assumptions Can Hurt

We have all made some assumptions at some point in our careers. Whether we make the assumptions based on our training, knowledge, or experience, it can come with grave consequences.



During the late stages of commissioning a solar facility there were still a few inverters that had yet to be fully commissioned. The OEM (Original Equipment Manufacturers) had technicians working weekends trying to meet the Commercial Operation Date (COD). Since the project was finished, there was no one on site when the OEM technician arrived intending to commission the final inverters. During the commissioning, the inverter failed to start and had several fault codes. To troubleshoot the inverter, the OEM technician had the combiner boxes for that inverter turned off so he could assess the inverter and replace components as needed.

While the OEM technician was working, the lead Technician for the O&M Organization stopped by the site to check on things. Since it was a sunny day, the O&M technician was simply driving the site and looking for any issues or combiner boxes offline. Without knowing there was anyone else on site, the technicians saw a few rows of combiner boxes that were off and decided to turn those combiners back on.

The OEM technician was in the DC (Direct Current) cabinets of the inverter and heard some arcing noises from some loose wiring he was replacing and immediately jumped out of the cabinet.

There were multiple points of assumptions and human performance errors that could have led to a severe injury or fatality if it had not been for luck:



- Both technicians assumed no one else was on site.
- The OEM technician did not utilize proper Lock-Out Tag Out, Hazardous Energy Control that would have prevented any inadvertent operation of the combiner boxes.
- The O&M Technician did not investigate the reason for the combiner boxes being turned off and assumed they should be turned on without checking the status of the inverter.

**Have you made assumptions while performing work?**

**What assumptions did you make?**

**How did those put you or others at risk?**