

Solar Project Work Activity

Disclaimer

This list of activities below is not an offer of employment or a guarantee of work. This document merely sets forth a description of work activities developers typically need when developing solar generation projects. The descriptions below are meant to educate and inform labor groups about the types of work activities involved in developing solar generation projects. WEC Energy Group, Inc. nor any of its subsidiaries is committing to the development of any future solar projects or the hiring of any labor groups by presenting this information.

Work Activity: CIVIL GRADING AND SWPPP COMPLIANCE

Equipment operators that run standard grading equipment (bulldozers, graders, excavators, etc.) perform the bulk of this activity. There will be a smaller number of laborers involved on the civil side to install silt fencing and to do some of the manual tasks, but the majority are equipment operators. A typical 100-200MW project may have [35] FTEs performing this work.

Work Activity: PILE INSTALLATION

Specialty pile driving operators (specialized machines where operators need some familiarity or training) perform this activity. A typical 100-200MW project may have [24] total FTEs, including 8 specialty operators, 8 skid steer operators, and 8 laborers assigned to driving piles. This number may flex up or down but the 3-man crew size and the breakout of labor within that crew are pretty standard.

Work Activity: EQUIPMENT OFFLOADING AND STORAGE YARD MANAGEMENT

Managing the offloading and organization of the large number of trucks of racking and modules that arrive daily. A typical 100-200MW project may unload anywhere from 5 – 30 trucks of components every day, with [15] FTEs dedicated to offloading, roughly half of which are equipment operators running forklifts and the similar equipment.

Work Activity: RACKING ASSEMBLY AND MODULE INSTALLATION

Single largest labor requirement on site, primarily made up of trained laborers that assemble solar racking and install modules. There are no electrical technical requirements that mandate an electrician assemble a racking assembly or place a module onto the racking system. This is a low tech mechanical assembly and turning nuts and bolts and does not involve electrical connections through this point. A typical 100-200MW project may have [80] FTEs performing this work.

Work Activity: AC CABLE INSTALLATION

4-5 equipment operators and 4-5 laborers on each crew. Number of crews can vary but expect 2 or more crews on a typical 100-200MW project, meaning [8-10] FTEs. One of the crew members is a trencher

operator, the rest are in support (operators running excavators, dozers, compactors), with laborers training cable into trench, spotting, zip tying, general support.

Work Activity: DC CABLE INSTALLATION

Smaller crews and equipment doing similar work as the AC installation noted above. Smaller as working in closer proximity and between racking rows. Expected [18] FTEs comprised of 2 equipment operators and 4 laborers per crew, assuming 3 crews on a typical 100-200MW project.

Work Activity: MODULE HARNESS STRINGING

Installation of cabling along the length of racking systems and installing the above ground CAB system, expect [28] FTEs on this task in total, on site when this activity is in full swing. This is essentially laborer work, there is no plugging or terminating done during this stage. This may be performed by electricians but this is usually a better fit for trained labor

WORK Activity: DC TERMINATIONS (at modules, at harness, at LBD's and at inverters)

This is electrician work, likely to have [10-15] electricians on the typical 100-200MW jobsite performing this work. While electricians perform, the majority of the work can be accomplished by apprentices and not by journeyman. Need journeymen to lead but much of this work is clipping module terminations together and clipping string wiring and CAB wiring together. DC terminations at load banks and at inverters would be higher technical requirement that would necessitate journeymen.

Work Activity: SETTING INVERTERS

Crane Operators and electricians, a welder, and spotter (laborer) to set inverters onto pads previously built by the civil crews. Typical crew of [15] FTEs.

WORK Activity: AC SPLICING and AC TERMINATIONS

Electricians, mix of apprentices and journeymen, assume [10] FTEs on a typical 100-200MW project. Included in that 10 is a need for operators for digging/backfill & general equipment work.

Work Activity: CABLE BORING

Specialty subcontractors made up of a [2-3] operators and fusion specialists.

Work Activity: HV SUBSTATION WORK and TRANSMISSION WORK

Mix of civil work crews consisting of operators, laborers, concrete installers. Specialty contractors to do borings for T-line poles and dead-end structures. Electricians complete all above ground work. Typically includes [30] FTEs.

Work Activity: LV, MV and HV TESTING

Specialized testing subcontractors. Typically includes [8] FTEs.

Work Activity: COMMISSIONING

Typically performed by OEM personnel with assistance by electricians. Typically requires [10] electricians.