

North-South BLA® (Big Lead Assembly)

Introduction

Since 2017, the award-winning BLA (Big Lead Assembly) from Shoals® has revolutionized electrical balance of system (EBOS) for utility-scale solar—enabling a faster, safer, more reliable, and more cost-effective installation. With the traditional BLA product, the trunk bus cable runs East-West, perpendicular to the torque tube and between the tracker rows, parallel to the drive line in linked row trackers.



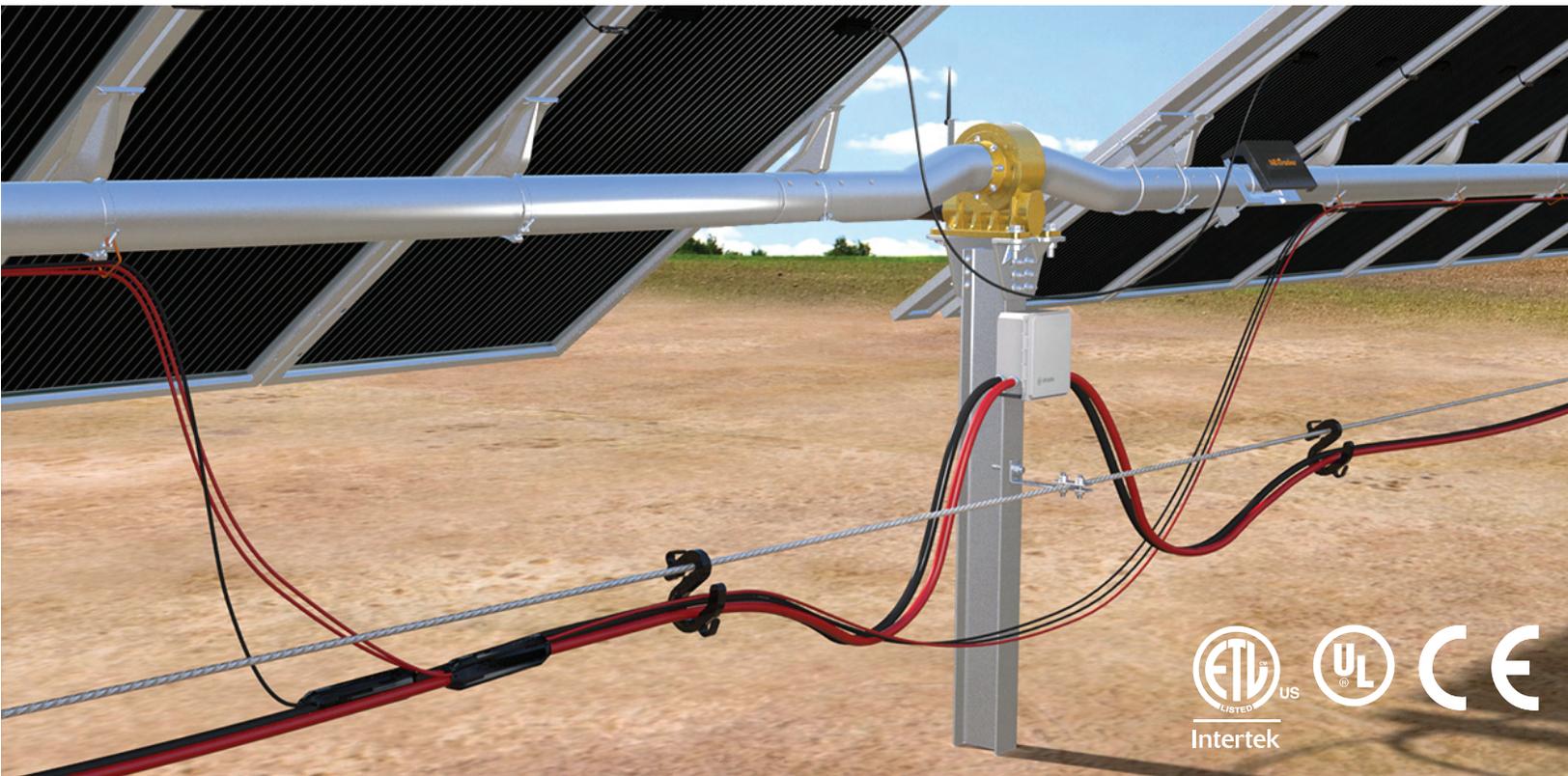
BLA and Nextracker

Nextracker's award-winning NX Horizon™ utility-scale solar tracker system features independent tracker rows, giving personnel and equipment unincumbered site access. Mowers, panel cleaning apparatus, and other service vehicles can traverse the full length of multiple tracker rows without having to stop and turn around at a drive line which impedes access. However, implementation of Shoals' traditional East-West BLA would block access to these full tracker rows.

Shoals North-South BLA Meets the Challenge

Now, Shoals introduces a special North-South version of its BLA trunk bus product which is specially designed to work optimally with Nextracker's long North-South rows. In this North-South BLA product, the trunk bus runs parallel, rather than perpendicular, to the torque tube. Transition boxes along the North-South row step down the size of the trunk bus along the tracker rows. Without any structures to impede access to the rows of modules, it's simpler and more cost-effective for O&M firms to maintain the solar array, resulting in ongoing O&M expense reductions.

Compared to conventional wiring schemes, Shoals North-South BLA delivers a 43% savings in PV wiring installation labor, a 60% savings in DC wiring O&M (due to less DC faults), and a 0.25% increase in energy yield due to less DC wiring voltage drop.



Continuing Evolution

This initial release of Shoals North-South BLA is the first step in a partnership between Shoals and Nextracker to make our leading solar ecosystems work optimally together. Future releases of North-South BLA will further optimize the architecture and installation methodologies, enabling even more savings.