Photovoltaic support foundation vibration method

Considering the effects of fluid forces and vortex interactions on the vibration behavior of photovoltaic support components, this study investigates the wind-induced response characteristics of ...

In this study, the wind-induced vibration characteristics and the suppression measures of a 35-meter-span cable-truss support photovoltaic module system array are studied. Firstly, based on ...

For single-row, single-layer flexible PV support structures, a recommended wind vibration coefficient range of 1.85-1.99 is proposed. The structural design should consider both the vertical ...

An analysis of the wind-induced vibration responses of the flexible PV support structures was conducted. The results indicated that the mid-span displacements and the axial forces in the ...

This study employs a vision-based displacement analyzer and three-dimensional digital image correlation method to obtain high-accuracy flexible PV support structures 3D displacement ...

Secondly, the wind-induced vibration of PV supports is studied. Finally, the calculation method of the wind load on PV supports is summarized.

Therefore, an innovative aerodynamic method involving a spoiler is proposed to mitigate the excessive vibration of a cable-supported PV array under wind action.

Aeroelastic model wind tunnel testsThe wind-induced vibration response of flexible PV support structure under different cases was studied by using aeroelastic model for wind tunnel test,including different ...

Liu[9] investigated two types of flexible PV support with elastic wind-resistant cables, exploring vari-ous parameters affecting wind vibration coefficients.

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