Long-span hanging roof construction with two-way cables with small heliostats

A plan study around 120ft/36.5m diameter has around 234 small heliostats on a hanging roof. Additional heliostats are on the donut shape rim-platform. There is one elevated receiver. Adjusting nuts are at the threaded ends of each cable.

Heliostat mounting (related to gear-box and control capacity) options include:

An angle T bracket three bolted to holes in the grouted gap to anchor the heliostat post, and every small heliostat post is inclined (around 60-89 degrees from horizontal) to the east, west, north or south aligned with the two way cables;

and a new study considers a horizontal bolt plate cast into the grout gap at the two way cables intersection for all vertical posts.

Building Integrated Concentrating Solar Power (BI-CSP) research program initiative

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