The problem: Variable performance across inverters in a utility-scale solar power plant creates operational challenges that prohibit solar flexibility, dispatchability, and control.



Our solution: Our ALICE software provides precise PHL estimations and control optimizations to enable flexibility of utility-scale solar, replacing thermal generation and decreasing system-wide cost. This is done is three steps:



Estimate Potential High Limit (PHL)

ALICE's robust machine learning algorithms use real-time inverter current and voltage data to continuously estimate PHL for inverters operating below maximum power point.



Optimize Inverter Setpoints

Respond to Grid

Signals

ALICE's proprietary control structure optimizes inverter active power setpoints in order for the system to fulfill the desired global power generation level.



ALICE allows solar assets to run on Automatic Generation Control (AGC), respond to fast frequency response signals, and provide other essential grid services with high precision.

What we provide for a generation fleet:

Flexibility

Move beyond solar as simply an energy source, and unlock solar as a tool to provide grid services

Cost Savings

Increase renewable penetration and reduce dependence on thermal generation for grid support

Interoperability

Vendor agnostic, offering seamless integration with existing SCADA and plant control solutions