

# Christopher Jackson's challenge details for challenge: [Solar Prize Round 6](#)

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## Explanation

### CRITICAL FAILURE POINTS

Access to data to build a high resolution digital twin is a critical success factor. During our market discovery we have identified data sources that will allow us to infer house-hold level asset registers of PV systems. We will require access to the following data sources and failure to obtain these datasets will require data inference mitigations

PV deployment data (locations, capacities, installation dates)

PV generation sample data (from pilot or from SMA)

Numerical Weather Predictions (NWP) - either publicly available data (ECMWF) for testing or operational data (e.g. MeteoGroup)

Locations of any transmission network assets

Optionional data sources are:

Orientations and tilts of deployed systems to be modelled (yield can be modelled more accurately)

More PV generation sample data (more data leads to more accurate spatial interpolation)

Location of sub-transmission network assets and topology data (leads to more accurate data aggregation of PV generation)

Our system is designed to allow the Pilot to add additional layers of data over time to increase the accuracy of their forecast

This means Pilots and testing can be conducted in an iterative manner. As part of our deployment, we have already established the exact data types which will give the most accurate forecast

## Key Needs

- Utility Scale (5 / 5): *No explanation*
- Technical Analysis (3 / 5): *No explanation*

## Matches

1. [University of North Dakota Energy and Environmental Research Center \(EERC\)](#): 87.51%
2. [Larta Institute](#): 87.50%
3. [Sunrise Technologies LLC](#): 87.50%
4. [EST Venturi Systems LLC](#): 87.50%
5. [Mendiak Systems](#): 87.50%
6. [NAVIA ENERGY INC](#): 82.81%
7. [NextEnergy](#): 82.81%
8. [Dynamhex Inc.](#): 82.81%
9. [Grid Catalyst](#): 82.81%
10. [Wallbox Chargers](#): 82.81%