

Alpha Trader for Renewable Energy Offtake Risk Managers from GE Digital



Accelerate the energy transition with insights to manage risk and reduce uncertainty to improve portfolio results.

Increase the value of your renewable offtake agreements with AI/ML informed recommendations for energy market participation.

Shift day-ahead market participation from a guessing game to a risk management decision. Variable generation and volatile pricing have traditionally kept Renewable market participants out of the day-ahead market. Gain confidence knowing how to best hedge your risks with proven insights into next day generation, nodal and hub level pricing. Get recommendations that combine an understanding of your offtake contract and risk profile with those insights.

Key Features:

- Advises the megawatts (MW) to commit each hour for each plant
- Aggregate multiple offtakes into a single view for performance monitoring
- Energy Predictions for visibility on outputs (MWs) for Wind or Solar Farms
- Digital Twin models for each renewable generation facility
- AI/ML model for all relevant market prices that affect your portfolio economics
- Risk management for tuning risk to match your target
- Flexible data delivery to fit your business process – UI, API or emailed CSV

01

Maximize your revenue at the lowest possible risk with insights based on your generation and pricing

02

Provides not just a single number, but a highly accurate understanding of the probability distribution

03

Propel the transition to clean energy by increasing value of renewable assets

Requirements:

- Site operational data needs to be provided by customer
 - Already connected to GE
 - Customer hosted service for GE to query
 - GE hardware or VM on site
- Nodes and hubs of interest
- Offtake details

PERFORMANCE

\$2⁺/MWh

Increased value of your offtake

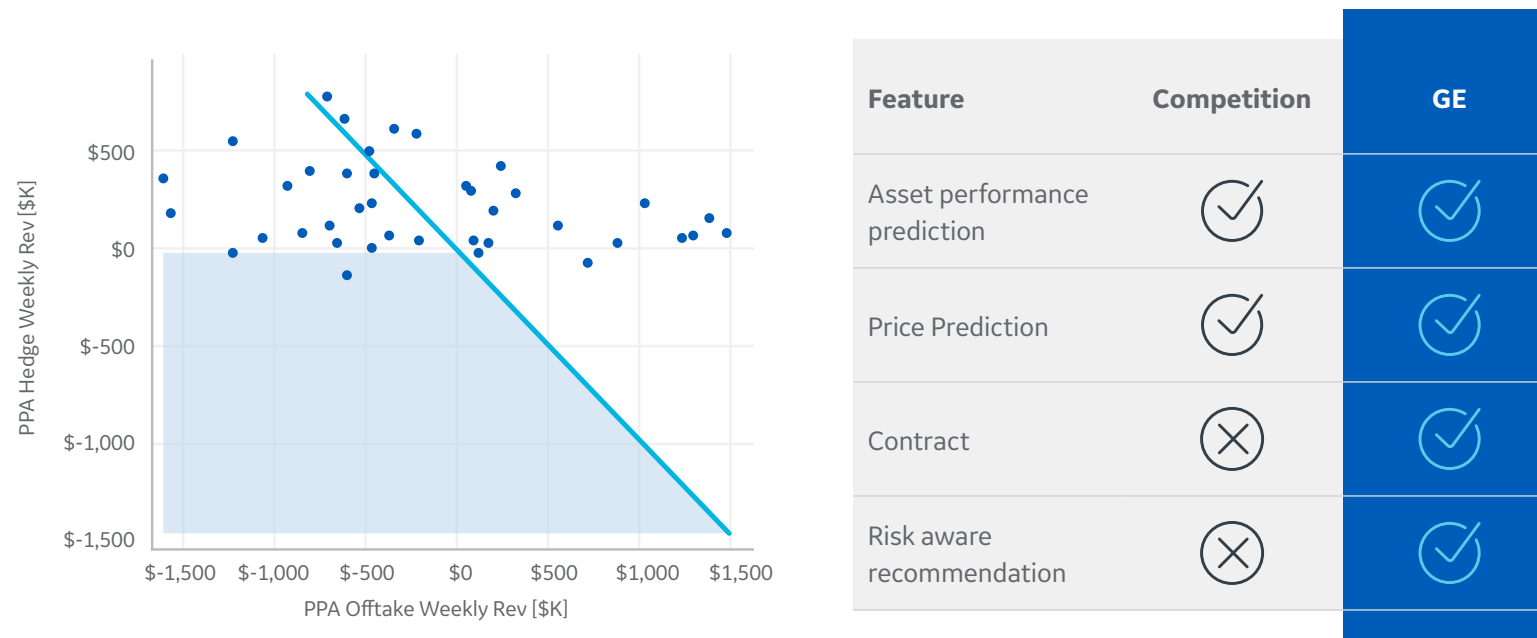
+\$1.3M Annual revenue increase

*Assuming 250MW @ 30% capacity factor and \$2/MWh increase.



Use Case

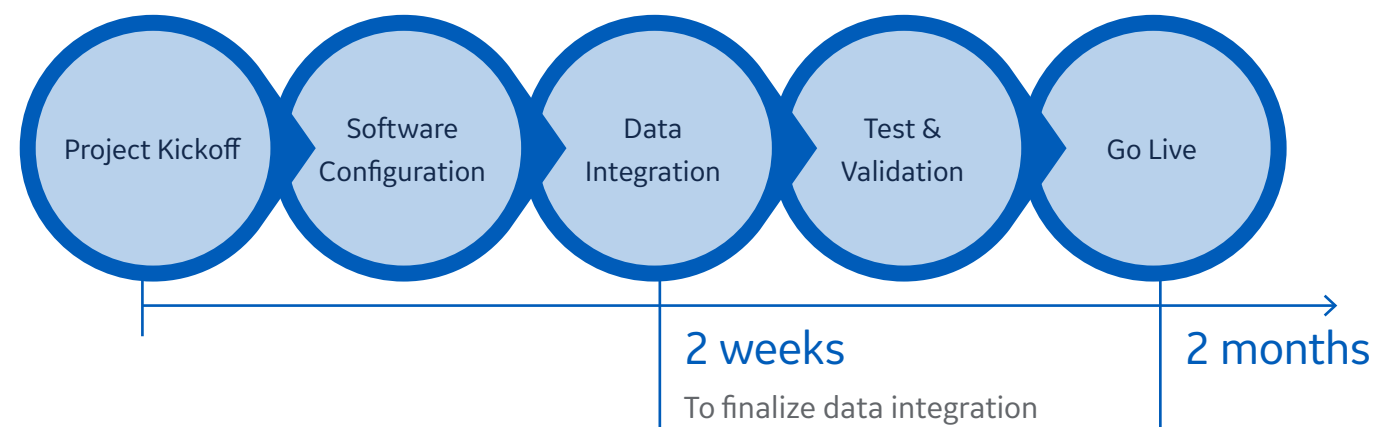
To test the effectiveness of the AI/ML recommendations, a wind farm with a vPPA in N. America was selected. The offtaker experienced an \$8.6M loss over 9 months of operation due to negative real-time pricing when the project generated electricity. As seen in the chart below, Alpha Trader's recommended hedge was accretive to real-time only participation 36 of the 38 weeks. **Results:** Over the course of 38 weeks, the AI/ML recommendations were effective in improving portfolio performance in the day-ahead market. Alpha Trader turned an \$8.6M loss into a \$1.3M gain, a swing of +\$9.9M.



Deployment

On cloud with configurable data delivery.

Implementation



Alpha Trader utilizes the following

Optimize the balance between portfolio risk and revenue, leveraging our proprietary predictions of asset performance and market prices.



Digital twin models for each facility in your portfolio continuously updating based on actual performance



AI/ML models for all relevant market prices that affect your portfolio economics



Easy-to-access software user interface that provides actionable recommendations

Alpha Trader product line

■ Base Solutions ■ Add-on

Performance Predictions

- Operating Envelope Advisor for the thermal plants
- Energy Predictions for Renewables (Solar/Wind)

Thermal

- Fuel Noms
- Offer Curve Analysis
- Outage Scheduling Advice

Renewable

- Offtake Risk Advisor
- Merchant Operation Risk Advisor
- Deviation Settlement Risk Advisor

Financial

- Energy Trader - DART Spread

Alpha Trader Foundation

ProcessLink analytics environment



Stop missing opportunities.

Trusting a recommendation takes time. See how you can reduce risk and optimize your portfolio. Request a free consultation for a discounted trial.

[REQUEST TRIAL](#)