Alpha Trader for Merchant Renewable Operators from GE Digital

Accelerate the energy transition by increasing the profitable operation of your merchant power plant and manage downside risk by leveraging AI/ML informed recommendations for day-ahead energy market participation.

Does your risk management strategy often lead to curtailing and missed opportunities?
Confidently participate in the day-ahead market with reliable daily recommendations to increase project returns for the wholesale market.

Key Features:
- Advises the MW/hour to offer for each plant
- Probabilistic insight into generation and price predictions
- Aggregate multiple sites into a single view for performance monitoring
- Risk management for tuning recommendations to match your profile
- Easily access daily recommendations via UI, email or API

Benefits:
- Increase your Capacity Factor by 30% or more
- Hedge exposure to negative real-time prices
- Understand the distribution of possibilities, not just a single number
- Reduce the down time of perfectly good assets
- Automate the gathering and synthesis of various datastreams to provide actionable intelligence

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
- Operational constraints

Merchant Renewable Operator Advisor
A 150MW wind farm using GE turbines with no PPA in ERCOT (Texas) using Alpha Trader Merchant Operator Advisor

BEFORE
Customer turned off its wind farm whenever real-time price dropped under its O&M cost, reducing their annual capacity factor.
Current process leverages only real-time price.

AFTER
Daily recommendations of day-ahead production commitment accounting for O&M cost and risk profile were provided.
Each day, Alpha Trader’s recommendations were entered into their market interface platform.

1. Passive day-ahead – Plant offers predicted output into the day-ahead market, without consideration of DART spread. No operation during negative real-time when not committed day-ahead.
2. Alpha Trader day-ahead – Plant offers predicted output into the day-ahead market at recommended hours. No operation during negative real-time when not committed day-ahead.

This chart illustrates the results of each approach over the 10-month period

- Alpha Trader day-ahead
- Passive day-ahead
- Real-time only
### How GE Digital stacks up compared to the competition

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### 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

**Alpha Trader Foundation**

**ProcessLink**

**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 product line**

**Base Solutions**

**Add-on**

### Implementation*

- **Project Kickoff**
- **Software Configuration**
- **Data Integration**
- **Test & Validation**
- **Go Live**

- **2 weeks** to finalize data integration
- **2 months**

*Does not include outage odometer or Capacity Dispatch Optimizer / Capacity Trader installation times

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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