VERITONE®

Veritone iDERMS Solution

Accelerate the transition to clean energy with Veritone's intelligent distributed energy resource management system (iDERMS)

THE OPPORTUNITY

With the global energy sector shifting away from fossil-based energy production and consumption to less reliable green energy sources and new forms of energy storage, energy supply and demand imbalances are impacting grid stability, customer satisfaction, and company profitability. The influx of Distributed Energy Resources (DERs) is making grid operators and independent power producers rethink how their businesses are managed and operated. The energy sector urgently needs solutions to make green energy more predictable, reliable, and cost-effective - and **AI is the answer.**

SOLUTION OVERVIEW

Leveraging the aiWARE Enterprise platform, Veritone iDERMS solution harnesses the power of AI to revolutionize today's energy ecosystems through proprietary, intelligent, real-time energy forecasting, optimization, and control, unlocking the full potential of DERs while enhancing grid reliability in the face of the unexpected. With Veritone's iDERMS solution you can deliver renewable energy with unparalleled reliability and efficiency, while simultaneously addressing the commercial aspects of DERs to maximize your investments, as you accelerate the mission to end global dependence on fossil fuels.

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HOW IT WORKS

Veritone iDERMS solution consists of three main modules: Forecaster, Optimizer, and Controller. The modular approach to the solution allows you to tackle the challenges at your own pace, depending on your goals, timelines, or budget.

The AI-powered Forecaster allows you to continuously monitor edge devices and market conditions to make real-time decisions about resource allocation and market participation, based on current and historical demand, supply, price, weather conditions, and a host of other constantly evolving variables resulting in incredibly accurate forecasts of how these variables will impact planning and operations seconds, days, and weeks into the future.

The AI-powered Optimizer uses domain rules, highly accurate energy and price forecasts, and historical and real-time sensor data to produce the optimal dispatch model(s) and bidding and scheduling strategies at any given time. Based on internal strategy drivers and external market opportunity, the Optimizer fuses together real-time forecasting, economics, rules, and active learning to deliver autonomous renewable energy management.

The AI-powered Controller gathers information from passive and active sensor signals and generates model updates to incrementally improve the performance of connected edge devices. These include batteries, solar panels, and inverters for the purpose of optimally satisfying demand and increasing operational reliability.

KEY BENEFITS

- **IMPROVE GRID RELIABILITY**
  Confidently manage highly variable loads, and autonomous operations if isolated from the main grid, optimizing the real-time dispatch of DERs.
- **DECREASE OPERATIONAL COSTS**
  Lower spinning reserves, reduce maintenance costs, decrease generation and wholesale power purchase costs.
- **MAXIMIZE DER INVESTMENTS**
  Increase longevity of physical assets, improve competitive position in the wholesale energy market, synchronize and aggregate multiple DER types for maximum optimization
- **MEET DECARBONIZATION TARGETS**
  Confidently manage highly variable loads, and Optimize DER planning with predictability, and maximize renewable dispatch to reduce reliance on fossil fuels.

ABOUT VERITONE

Veritone (NASDAQ: VERI) is a leader in enterprise artificial intelligence (AI) software and solutions. Through its hyper-expansive Enterprise AI platform, aiWARE™, Veritone orchestrates an ever-growing ecosystem of machine learning models to transform different data sources into actionable intelligence. Through professional and managed services, as well as its robust partner ecosystem, Veritone develops and builds AI solutions that solve the problems of today and tomorrow.

THE AIWARE PLATFORM

PROVEN
1,800+ customers, 100+ partners, hundreds of AI models

SCALABLE
Ability to handle massive amounts of structured and unstructured data in real-time

OPEN & FUTURE-PROOF
Open API, single development interface, AI models continuously evaluated, with higher performing models being added without impacting the operations or triggering system upgrades

VERITONE®

THE LEADING ENTERPRISE AI PLATFORM
veritone.com/industries/energy/

WHY VERITONE iDERMS

POWER OF AI
Radically advance what is possible by enabling faster, dynamic decision-making in real-time.

CONFIGURABLE
Implement in phases or in full, to keep up with your evolving needs.

DECISIONING AT THE GRID EDGE
Autonomous decision making at the edge of the asset control system.

SEAMLESS INTEGRATION
Compatible with legacy systems, offered on-premise, in the cloud, or as a hybrid architecture.

EXPERIENCE THE AI DIFFERENCE

UNPARALLELLED ACCURACY
Predict the future using the present. Take advantage of AI-driven, multi-variable models that consider cloud density at different elevations, humidity, temperature, wind, load demand, price, and device operational parameters, to predict and optimize operations and improve competitive position in capacity markets, to maximize profit and meet future energy demands accurately and dynamically, seconds, minutes, or days ahead.

CONTINUOUS LEARNING
Using digital twin modeling to facilitate continuous learning, refine the performance of your assets toward desired outcomes in real-time, while incorporating strategic goals and compliance rules. As models constantly consume large amounts of real-time and historical data, they continue to adapt to changing conditions, learning from previous outcomes, resulting in more accurate and optimal decisions.

ACTIVE DEVICE SYNCHRONIZATION
Achieve performance that optimizes for environmental and strategic goals that consider local demand, asset reliability, and resiliency objectives by constantly synchronizing and optimizing each controlled asset with each other and with the network. Maximize your DER investments with value stacking by combining use cases to unlock additional revenue streams.

DISTRIBUTED DECISION MAKING
Ensure safe and reliable use of energy assets by enabling real-time, autonomous decision-making at the edge of the asset control system. Solving problems locally results in increased speed of action and a higher level of situational awareness, which can lead to increased reliability, lower operational cost, and more effective asset performance monitoring.

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