



SUNGARD ALIGNE FRONT OFFICE

Integrated energy transaction solutions.
Data | Understanding | Action

FRONT OFFICE SOLUTIONS

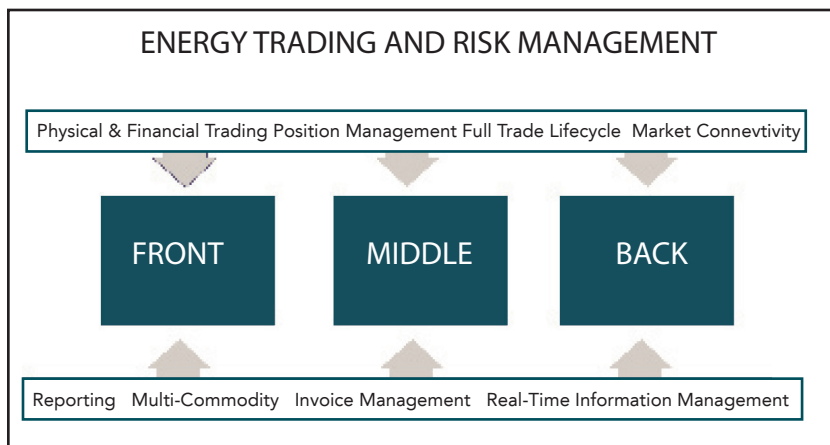
Energy is risky business. How effectively are you managing risk while controlling costs, complying with regulatory requirements and achieving growth?

Energy markets are becoming more competitive everyday. Emerging economies demand an ever greater share of limited fossils fuels, environmental concerns place additional constraints on production in an already supply challenged business, and regulators demand more transparency, more accountability, and more open markets. Adding highly volatile prices to the mix only increases the risks.

Although some energy market participants are in the business of managing risk, many directly hold physical energy assets and are in business to maximize the return on the use of these assets. In either case, you are under pressure to manage costs or grow the business while maintaining operational controls. Increasing regulatory complexities and compliance issues further magnify the problem.

At the same time, the nature of energy markets is changing through mergers and acquisitions, greater participation of financial institutions in both the financial and physical transactions, and global concerns about emissions. All of this makes streamlining the operations, getting a timely view of the consolidated risks, and having ready access to the information for good decision-making vital. *So, how do you achieve this?*

To effectively trade and manage energy transactions, energy companies realize the need for an integrated solution that supports front-to-back office trading for a wide range of energy commodities in addition to physical and financial traded instruments and associated risks. With the increase in regulatory requirements it would be ideal if such an integrated solution can also offer cost effective compliance.



Aligne Front Office helps energy market participants to effectively deal with the complexities brought about by liberalisation of regional gas markets, supporting the trading of power, natural gas, oil, emissions and weather for both physical and financial instruments. It enables energy companies to efficiently manage risk by integrating all the data from front-to-back office trading operations.

FACTS

- Two hundred energy companies rely on SunGard's energy solutions to help them trade, produce, transport, account for, and manage a range of business risks associated with gas, liquid and solid energy commodities.
- Five of the top 10 energy companies in Europe and North America use SunGard's Energy Solutions to help manage contracts, trades, schedules, fuels, risk and accounting.
- Four of the top 10 global integrated energy companies use front office solution for their European trading operations.
- Three of the top six European energy companies ranked by generation capacity use Aligne Front Office for their trading operations.
- Sixty percent of the top twenty gas marketers in North America manage the sales of over 81 billion cubic feet of natural gas per day using SunGard's energy solutions for trading, scheduling and risk management.





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FRONT OFFICE & RISK

Aligne Front Office helps you:

Capture and Report Multi-Commodity Deals

Aligne Front Office supports gas, power, oil, coal, emissions, foreign exchange and weather for both physical and financial transactions where applicable. It also supports a variety of instrument types, including spot, forwards, listed futures and options, swaps, swaptions, transmission capacity, nominated/actual volumes, and a variety of complex or structured contracts.

Manage Multiple Option Types and Pricing Models

Aligne Front Office enables capture, price, analysis and report functionality on Standard American and European options including exotic options such as Chooser, Asian, Basket Spread, Barrier, Rainbow and Swing. In addition to returning the option value, these models return a variety of Greeks to help you determine how much to hedge your portfolio and measure option sensitivities.

Quantify Risk Factors Across an Entire Portfolio

You can separate different risk exposures embedded in portfolios for an intuitive representation of potential hedging/netting and analysis for your positions allowing short-term and long-term hedging strategies to be put in place.

Measure Market Risks and Define Trading Strategies

Aligne Front Office helps measure and assess both performance and accuracy of VaR. *What-if* VaR analysis helps determine the incremental effect on VaR by adding a new asset or trade to a portfolio. Credit related metrics including current and potential future exposure, expected and unexpected losses and credit VaR can be calculated and reported. It assists your trading decisions and assesses the impact of commodity market fluctuations. Monte-Carlo or historic models help build trading controls and strategies.

Value & Optimize Structured Contracts & Asset Portfolios

Aligne Front Office enables you to value, optimize, report and efficiently manage the embedded optionality in non-standard and long-term structured contracts and

physical assets including swing contracts, spread options, gas storage, power generation, hydro assets and rainbow options. Plus, it also provides the flexibility to incorporate proprietary in-house valuation and optimization models.

Trade Environmental Instruments

Complying with emissions and renewables obligations, legislation represents a sizeable risk factor for liable power producers, refiners and industrials. You can manage the price and operational risks associated with environmental trading, with support for a variety of schemes such as the US ARP and EU ETS, and in renewables schemes involving GOOs, ROCs, LECs, CERs, RECs, and REGOs. It also provides full position reporting on tradable environmental instruments.

Trade and Manage Logistics

A major challenge for companies involved in power generation today is to capture risks and costs associated with coal fuel stocks. Aligne Front Office allows capture of physical and financial fixed, index and complex formula coal trading deals, quality specifications, contractual penalty and fees associated with the delivered coal product. It also helps you track and report on all scheduled and unscheduled volumes. Working together with Aligne Fuels Management, it can offer a full coal logistics solution, covering inventory management, delivery, and quality assurance.

PHYSICAL TRADING

Power Scheduling

Scheduling power across multiple grids poses many challenges for operators, such as complying with multiple aggregation rules, formats, connectivity standards, integration and audit/control issues. The power scheduling capability helps address these challenges and ease the complexities of cross border transactions in real-time.

Gas Scheduling

The ability to perform gas scheduling with various European gas networks both directly and via third party systems such as GMSL is also available.



FEATURE HIGHLIGHT - REPORTING

The advanced reporting capabilities allow you to closely monitor your business performance, enabling you to make decisions in a timely manner. By automating several processes which are time consuming and costly, the front office module improves your overall competitive edge. The reporting tool offers the flexibility to customize the data for operations, management, analysis and compliance as needed. Other benefits includes:

- Position and P&L reporting and drill down by virtually any attribute captured in the system
- Risk disaggregation for discovering and monitoring exposures
- Quick information insights in real-time, on-demand or end-of-day as needed
- Limit monitoring and exception notification

REAL-TIME BUSINESS INTELLIGENCE & “DASHBOARDS”

The flexible Report Designer provides customers with the ability to create customized real-time reports and dashboards in addition to the extensive report library. This enables you to gain in-depth business intelligence in a variety of highly presentable formats and to monitor business performance closely such that decisions can be made in a timely manner. Standard reports include real-time position, P&L, option valuation, credit/collateral and cash-flow across all commodities and instruments. Real-time message alerts via email and screen messages allow business process exception and limit reporting.

MARKET CONNECTIVITY

SunGard Energy offers seamless integration between its energy solutions and 3rd party systems to enable true end-to-end business processes and Straight-Through Processing (STP). This results in a more efficient front office, a more accurate trade capture process, and a more complete view of trading activity. SunGard Energy provides specific interfaces from the front office to the following:

- Exchanges - APX, NordPool, ICE, NYMEX, EEX
- Brokers: Trayport (e.g. Spectron, ICAP, Prebon, GFI)
- Physical Operators: Gemini (UK Gas), ESS (German/Austrian power), Producer/Shipper
- Requests and Offtakes via Email, EDI Gas

The interfaces are designed to allow executed deals to electronically flow into the front office application for full reporting, valuation, and risk analysis. Additional interfaces to similar organizations can easily be created using Align Integration.

BACK OFFICE FUNCTIONALITY

SunGard's integrated back-office suite helps streamline day-to-day functions, supporting back office personnel with invoicing, settlement and adjustments in the currency of the transaction. The automation of back office processes helps significantly reduce manual reporting efforts, redundancy of important trade information and transaction data. This helps staff increase productivity, reduce errors and improve decision-making in several key areas:

- Invoice management
- Data administration and exposure management
- Compliance and hedge accounting - adhering to IAS 39, FAS 133, and other international regulatory standards
- Audit tracking
- Trade confirmations - manual, or via automated matching services like EFETnet and ICE
- Integration with 3rd party systems e.g. accounting and exchanges

CASE STUDY

Business Wide Turnaround in Risk Management

Situation

An integrated energy company active in 70 countries is engaged in the production, transportation, and marketing of oil and gas. The company conducts approximately 500 trades per day across European markets around long-term complex contracts such as oil, gas, power and financial derivatives and trading.

Background and Problem

The need for an energy trading and risk management system was driven by the company's shareholders, who sought more transparency in the company's risk management process. The company's objective was to achieve a consolidated view of risk across all their business units.

Solution and Benefits

Aligne Front Office continues to help achieve a controlled process for managing risk. The traders base their hedging decision on the official VaR value provided by the application to each business unit on a daily basis. These VaR figures are comparable for all business units for consistent risk reporting. An overall VaR figure is generated for the group to gain a netting position for all business units in order to achieve a consolidated view of risk.

Some business units also have limits imposed on their VaR, so they know not to exceed it. Each VaR is split into different breakdown levels related to book, market component, or even type of deal such as swaps or physicals, for detailed analysis. The deal deconstruction functionality is particularly valuable to the company as it allows them to breakdown volumes according to different market components or formulae and to analyse their individual contributions to the overall portfolio. Today, **Aligne Front Office** is used across six individual business units of the company to monitor positions, P&L and measure market risk.

ABOUT SUNGARD ENERGY SOLUTIONS

SunGard's energy solutions help energy companies, industrials and financial services, to efficiently compete in global energy markets by streamlining and integrating the trading, risk management and operations of physical commodities and their associated financial instruments. These solutions provide front to back-office support for capturing deals, delivering market data for valuation, clearing and reconciliation of transactions, invoicing and accounting for transactions, analysis and management of risk, and physical transmission or delivery of commodities. SunGard Energy Solutions also support the logistics and inventory of fuels used in producing power and industrial products.

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