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## Business Impact

"A CTRM system isn't a luxury; it is an essential business tool - a 'must have' piece of software to help effectively manage the complexities of a rapidly changing business."

*Value Study: Investing in E/CTRM in Turbulent Times, Gary Vasey ComTech Advisory, 2015*



## Challenges

- **Lack of enterprisewide data aggregation.** An incomplete view of data limits the ability to perform ad hoc risk analysis, accurate risk reporting and timely regulatory compliance.
- **Unstructured data.** Combining tables of nonstandard data across business departments makes computation and analysis inefficient and error-prone.
- **Analytic silos.** Siloed information hampers the use of risk officer expertise as a competitive differentiator in enterprise analytics.
- **Poor data quality.** Business users must consult with IT to articulate business rules needed to cleanse the data.

## Aggregate your risk data across geographies and portfolios to enable better business decisions

### The Issue

Commodity price fluctuations, increased regulatory scrutiny, and shifting power generation and consumption models have led energy and utility companies to re-evaluate how they measure and monitor risk. These factors accentuate the need to capitalize on market movements and monitor corporate exposure, and to build increasingly sophisticated risk models and more precise mitigation plans. But many organizations struggle to aggregate internal and external data and transform it into useful information quickly. The challenge of fully capturing risk exposures requires energy companies to find better ways to identify known risks and integrate nontraditional exposures into their risk profile, in real time.

Being unaware of compounded risks created in multiple data systems or across business units - or even among key trading partners - can substantially alter your risk profile. This could expose your firm to greater market, credit, regulatory and even reputational risk than anticipated. What's needed is a more accurate understanding of net exposure, including risks produced by market dynamics and the often hidden risks and offsetting positions inside your operations. To prevent complacency from obscuring a severe threat, you should continually test fundamental assumptions about your risk profile. This requires investing in systems that regularly measure and account for internal and external exposures while producing real-time guidance on risk.

### Our Approach

A holistic view can uncover opportunities to manage market, credit and other commodity risks. SAS software and services can help you:

- **Gain accurate information about trading opportunities and risk** by integrating internal and external data sources from dispersed operations to improve netted risk assessment.
- **Develop better processes** for determining proper trading responses by modeling market, credit and operational risks based on customized attributes.
- **Uncover trading opportunities** previously misunderstood or untapped, using analytics to model and assess aggregated risks.
- **Manage multicommodity portfolios** of any size or complexity using market and credit risk analytics to monitor overall exposure and an array of reporting options to share information with decision makers.

Through its field-tested energy commodity risk aggregation, measurement and advanced analytics solutions, SAS provides greater confidence in your data and a better understanding of the risks you face.

## The SAS® Difference: Support for timely, confident business decisions

SAS combines sophisticated commodity capture and seamless, multisystem data integration with world-class modeling capabilities to enable accurate position management, easy model building and comprehensive scenario analysis. With SAS, you get:

- **Superior data management capabilities** that ease access to trusted data from any platform or location, and transport data seamlessly between a centralized data store and any external source (general ledger, logistics, price quotes, credit ratings, treasury system, operations, swap data repositories, etc.).
- **Advanced modeling functions** that let you measure and monitor risk metrics associated with physical or financial energy assets and contracts – e.g., value at risk (VaR), cash flow at risk (CFaR), potential future exposure (PFE) and many more – and run risk factor sensitivity, pre-deal “what if” trade analytics and portfolio stress testing with a market-leading simulation engine.
- **Trade capture excellence** with a complete solution for deal capture (any energy commodity and transaction types, trading in any region) and physical and financial position reporting.
- **Award-winning advanced business analytics**, reporting and visualization capabilities that help you get the most out of your data.

SAS has long-term domain expertise and proven, sophisticated technology solutions that are trusted by utility and energy companies around the world. Our solutions can help you manage the impact of the next worldwide credit crunch, commodity price drop, liquidity squeeze and many other unforeseen events.

## Case Study: A large US electricity and natural gas company

### Situation

The company needed to better quantify financial threats associated with market, credit, commodity, environmental, plant and operating safety risk exposures. It wanted to improve its ability to simulate market changes so it could adopt proactive management techniques and visually communicate results to senior executives and board members.

### Solution

SAS provided a complete energy commodity risk aggregation and analytics solution that enabled the company to:

- Adopt and deploy a sophisticated risk grid that spread risk identification across the enterprise.
- Engage in quarterly risk management meetings and the use of questionnaires, interviews, etc., to identify and capture risks across the enterprise.
- Use familiar stoplight and dashboard metaphors to highlight projected duration, earnings impact and severity of various risks.

### Results

- The CFO and senior managers use the SAS risk solution for planning and decision making, and executives gain greater support for informed capital spending and build/buy decisions.
- An aggregated risk report provides a level of clarity and accuracy about risk identification that was not previously possible using a top-down approach.

### What if you could ...

#### Simplify data access

What if you could make it easy to access standard, trusted data through automatic data integration, reducing human intervention and improving data quality and timeliness?

#### Stay abreast of trading events

What if you could automatically manage positions and credit limits across the enterprise to keep pace with trading events?

#### Accurately identify risks

What if you could operate confidently across borders by accurately identifying risks associated with multicommodity, multicurrency exposures?

#### Improve credit analytics

What if you could better determine risk tolerances for multiple-party trades in time to have a positive effect on the deal?

**You can. SAS gives you  
THE POWER TO KNOW®.**

### SAS Facts

- SAS helps customers at more than 75,000 sites improve performance and deliver value by making better decisions faster.
- SAS works with more than 500 energy customers worldwide, including 160 North American investor-owned utilities.
- SAS consistently ranks among the market leaders in analyst surveys of ETRM solution providers.

Learn more about SAS software and services for energy and utility firms at [sas.com/utilities](http://sas.com/utilities)