

FAQs – Value-at-Risk

In this fact sheet, we present the answers to some of the questions we are frequently asked about how Lacima's VaR software solution works to significantly extend your risk management capabilities.

Q My ETRM system does not handle the complexities of my portfolio so as a work-around, I use a spreadsheet based VaR solution that I plug into my ETRM system. As my portfolio grows in size this spreadsheet is becoming increasingly slow to operate. If I don't want to replace my ETRM system, what can I do to just replace the spreadsheet?

A Our flagship application Lacima Analytics is designed to work seamlessly with existing systems (deal capture etc). At last, you can augment your risk capabilities without the need to replace existing ETRM systems. Lacima's VaR solution, which resides within Lacima Analytics, provides the ability to calculate and report the full range of VaR metrics sought by the energy industry within a flexible application framework that meets regulatory requirements.

Q It is important for me to use my own valuation models for some contract types in the VaR engine – can I plug my own models into Lacima Analytics?

A Yes, Lacima Analytics has a flexible framework where you can use a combination of Lacima's models as well as your own internally developed models.

Q I currently use 3 different ETRM systems to handle my oil, power, and gas trades. Management is not looking to change this, but I want to be able to report a single and consistent 'truth' in my risk calculations – can I do this with Lacima Analytics?

A Yes, Lacima Analytics is designed to work alongside ETRM systems and doesn't differentiate between them. All the relevant information for risk calculations (deal types, historical data, forward curves, volatility information, etc.) is automatically uploaded into Lacima Analytics – the sources of this information can be one or many ETRM or other systems.

Whether you plan to use best of breed ETRM systems for each individual commodity or you are undergoing a merger and it is not clear which ETRM systems will be used by the merged entity, Lacima Analytics can provide a timely and cost effective solution – consolidating risk metrics into a single metric from multiple sources.

Q Until now my company has only traded very plain vanilla products (mainly futures and swaps), but recently we have received a mandate to trade a wider range of power and gas options (including heat rate options and daily gas options). Should management still be comfortable that the VaR metrics that are currently reported are an accurate picture of our risk exposure?

A It depends on your current VaR calculation. You now will need to ensure that your VaR calculation is able to handle non-linear instruments like options and strips of options, and also to be relevant for modelling power and gas prices. If you currently use a simple delta, or analytical VaR calculation then management should be concerned as you will certainly be misrepresenting the level of risk when you start to trade these new instruments.

Q I have been told that it is sufficient to run fifty simulations for my VaR calculations (and even then it takes hours to run). Is this an adequate number of simulations to give me an accurate picture of my risk exposure?

A No. Fifty simulations are insufficient for meaningful VaR exposure results in any market. Typically, you need to be able to run thousands of simulations to get an accurate picture of risk exposure. If a software provider is telling you that you only need fifty simulations for any valuation or risk evaluation, then speed is likely to be an issue for that provider, and you should probably re-evaluate using their solutions for risk. Lacima Analytics' strong batch processing capabilities allows you to run thousands of simulations.

Q I would like the ability to calculate and report cashflow based risk metrics in addition to VaR. Can Lacima help me with both of these types of metrics?

A Yes, Lacima Analytics' Risk Suite provides the ability to calculate and report the full range of relevant energy market risk metrics including: MtM, VaR, EaR, RaR, GMaR, CFaR and PFE. Our cash flow based risk metrics specifically address portfolios of physical assets, which can include power plants and gas storage facilities.

Furthermore, portfolios of financial contracts and assets can be easily combined for joint risk exposure analysis. All these risk calculations derive all their data (forward curves, volatilities, trade data, etc) directly from your ETRM system thus avoiding the need for any system replacements, or the need to re-key any data.

About Lacima

Lacima is a specialist provider of software and advisory services dedicated to valuation, optimisation and risk management for global energy markets. We help you to maximise your profit potential and make more informed decisions by providing tools that yield more accurate valuations, hedging analysis and risk exposure analysis for portfolios of financial contracts and physical assets.

Clients of our software and services include structuring, valuation and risk teams in vertically integrated energy companies, energy retailers, financial institutions and large energy consumers in Europe, North America and Australasia.

Our software solutions have been developed and implemented by peer-recognised experts in energy analytics, offering an unparalleled level of expertise and personalised support.

For further information, visit www.lacimagroup.com
or email info@lacimagroup.com

