

EMarketOffer 3.0

The complete visualisation and half-hourly simulation system for the New Zealand electricity market

The Market at your Fingertips ...

EMarketOffer is designed for middle office electricity market and transmission analysts who are dissatisfied with the disparate array of historical and forecast market data currently available for analysis. It is a unique half-hourly market analysis and scenario modelling system that provides an unparalleled view of the interaction between market and transmission system. Unlike PSSE and other powerflow analysers, **EMarketOffer** uses a fast and intuitive market clearance algorithm to accurately replicate the operation of SPD. We have developed a fully-featured graphical simulation and analysis environment that operates standalone or fully integrated with em6 and COMIT sourced data and in-house databases.

"A fast, effective market clearance engine and grid analyser on my desktop"

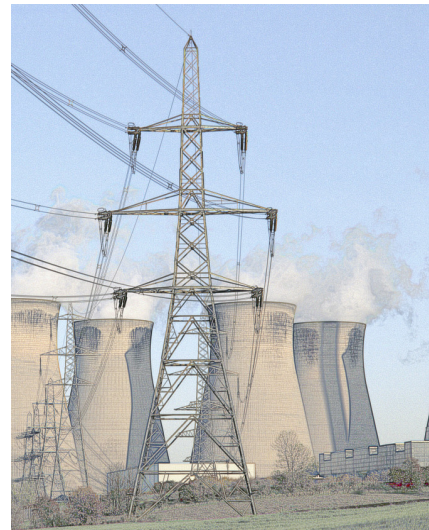
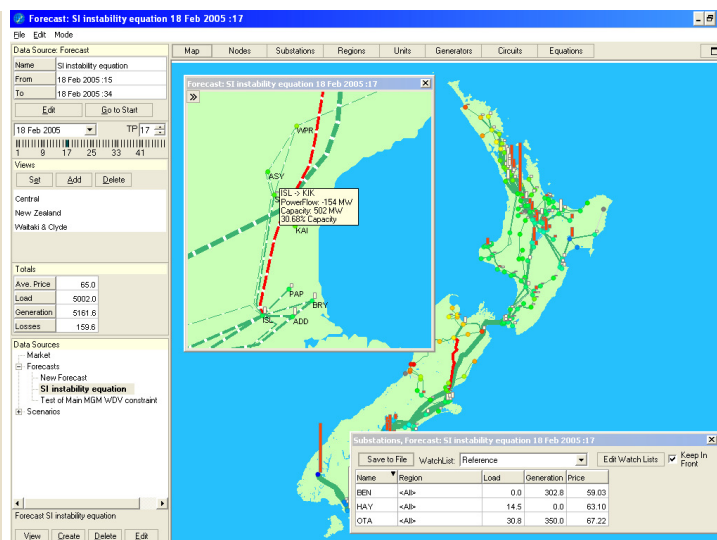
New Zealand's transmission system affects our electricity market profoundly. We have one of the lowest population densities of all developed nations. We also have one of the most challenging of geographic terrains and our main source of low cost hydro energy is separated from the highest demand by the Cook Strait. Managing the system to meet our daily energy needs is a challenging task indeed. In recent years growing demand and a fall off in the rate of new line investment have added to the difficulty. Today a dynamic approach to system operation is required. Take line constraints for example, in the latter part of 2005, on any one day there may have been more than 400 active line re-ratings and in any one week an average of 130 re-rating events occurred. In any one trading period as many as 40 equation constraints may have been active.

An increasingly dynamic distribution system creates a complex picture for market participants who, concerned with business performance and continuity, need to understand how system operation influences market conditions.

This is where **EMarketOffer** can help. With a powerful analysis and simulation tools:

- **Schedulers and transmission analysts** can rapidly recreate historical events in full detail and then conduct instant what-if analysis by manipulating key dispatch variables.
- **Wholesale traders** can forecast the market in the near future as well as develop fast response policy for reoccurring events
- **Business analysts, risk managers and hedge traders** can evaluate the potential impact of system events and competitor actions on retail and hedge contracts
- **Strategic planners** can model and evaluate possible market scenarios such as new generation or additional circuits

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Now in its third generation, **EMarketOffer** is highly adapted to the New Zealand context. By using data published by the market and system operators the highest levels of accuracy can be obtained. It's flexible interface presents a 'market view' of the system using animated maps, charts and data tables to simplify the interpretation of complex data.

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Features

- Accurate recreation of historical periods including powerflow calculations
- Flexible forecast definition allowing synthetic and historical input data to be loaded and modified
- Energy and reserve markets (all classes) modelled
- HVDC modelling
- Extremely fast dispatch algorithm (~1 second for an unconstrained period)
- Powerful graphical interface with dynamic maps, charts and data tables
- Instant 'what-if' analysis for a selected period
- Retail and hedge contract modelling
- Generation cost and total revenue modelling
- Easy identification of significant events in forecasts and historical periods
- User-defined regions and sub-regions for reports
- Automatically updated watch windows to keep an eye on the most important information
- Importing of EM6 and COMIT data in native formats
 - Grid configuration
 - Branch and equation constraints
 - Historical offers, demand, price and generation
- Configurable interface to in-house databases
- Easy export of forecast results for post-processing with in-house applications
- Forecast results can be stored, reviewed and shared with other **EMarketOffer** users
- Local data cache for stand alone operation

Want to know more?

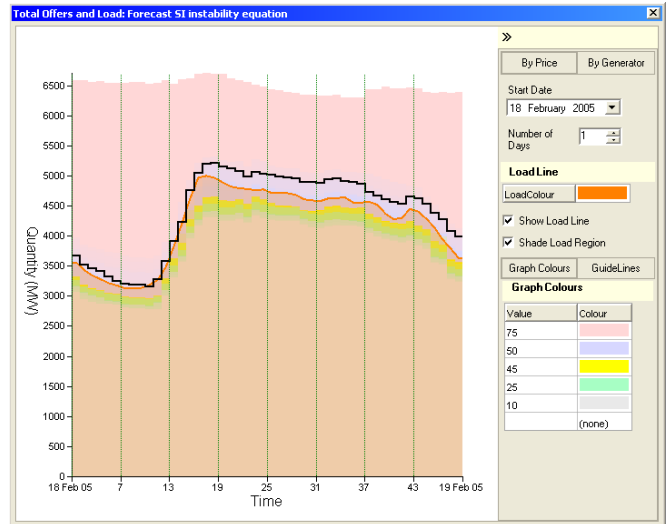
You can learn more about **EMarketOffer** by contacting our helpdesk by phone : **03 477 3572** or email : info@energylink.co.nz

Our expert staff are on hand to answer your questions and organise a software demonstration at a time and place of your preference. A trial installation can also be arranged should you want to see how **EMarketOffer** can work for you in your own environment.

Energy Link provide full training and support for users of **EMarketOffer**.

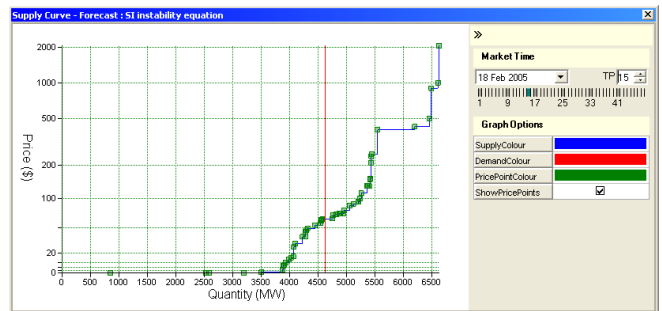


Thinking Ahead

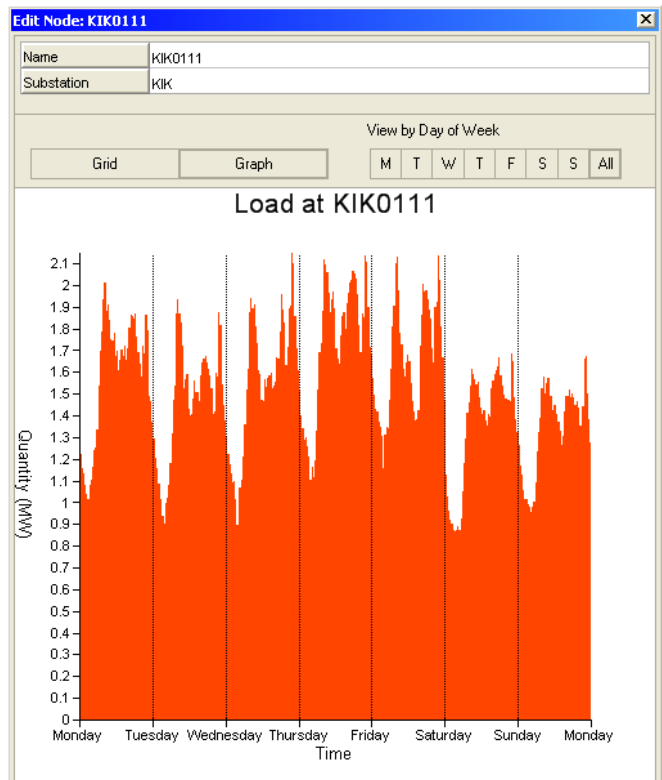


Total offers chart

EMarketOffer simulates the operation of the market by reproducing the functions of the SPD dispatch program to a high level of accuracy. Its dispatch algorithm is so fast it takes only minutes to complete a full week's simulation, giving you the flexibility to create and modify forecasts with vastly reduced set up times.



Supply curve chart



Nodal Demand chart