

Apt Energy Trading Simulations

Active hands-on training in European Energy Markets

Forward Trades

Time	Message
11:58	Message from analytics team. New Met models data shows small reduction in wind speed forecast: new output being calculated - won't be available before the auction deadline. Should be about 3% lower than last forecast.
11:58	Message from Analytics Team. Negative prices expected during the night! Watch out for CFD NPPs! Should be great for batteries.
11:58	Message from analytics team. Its windy out there tomorrow - hang on to your hats!
11:58	OH trading will start at SP 33, hours 1 to 16 will be in the DAH auction
11:01	EPEX Auction (DAH) has opened

Forecast Price

Price (€/MWh) vs. Time (Hours)

Energy Forecast

Hour	Total
1	0
2	0
3	0
4	0
5	0
6	-800
7	-800
8	-800
9	-800
10	-800
11	-800
12	-800
13	-800
14	-800
15	-800
16	-800
17	-800
18	-800
19	-800
20	-800
21	-800
22	-800
23	-800
24	-800

Bid Depth

Ref	C'Party	Volume	Bid
571377	SSE	120	75.00
571376	MER	150	74.50
571375	EON	150	73.99

Active Counterparty

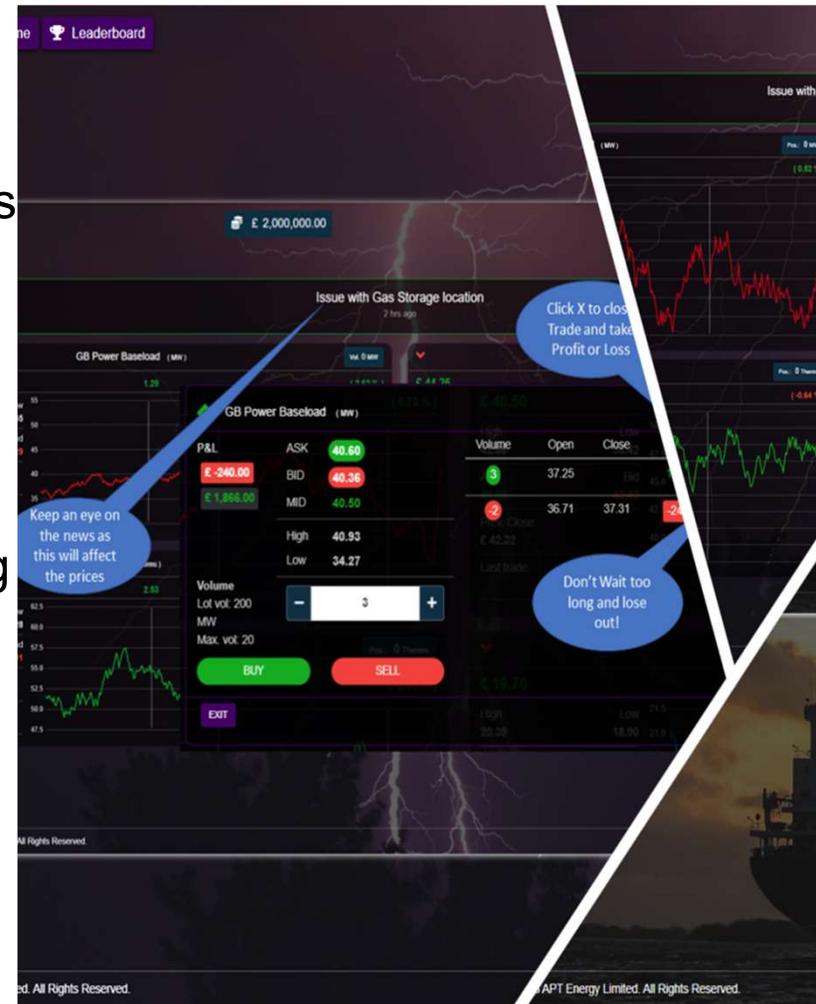
Counterparty	Credits	Debits
SSE	60,000,000 €	0 €
EON	65,000,000 €	0 €
MER	70,000,000 €	0 €

Map of Europe

Power generation icons and labels: 0 MW, 800 MW, 100 MW, -1000 MW, 100 MW, 400 MW, 0 MW.

Interactive Simulations

- Realistic representation of various trading activities
- Working under time pressure to make the correct trading decisions
- Competition between the participants
- Effective learning by doing rather than listening
- Scenarios become more progressively challenging
- Motivated learning through having fun.



Typical Training Day

Theory

- Presentation of the theory of the energy market, tailored to the main areas of the respective Simulation

Practise

- Tutor led walkthrough of the Simulation to teach the participants how the application works

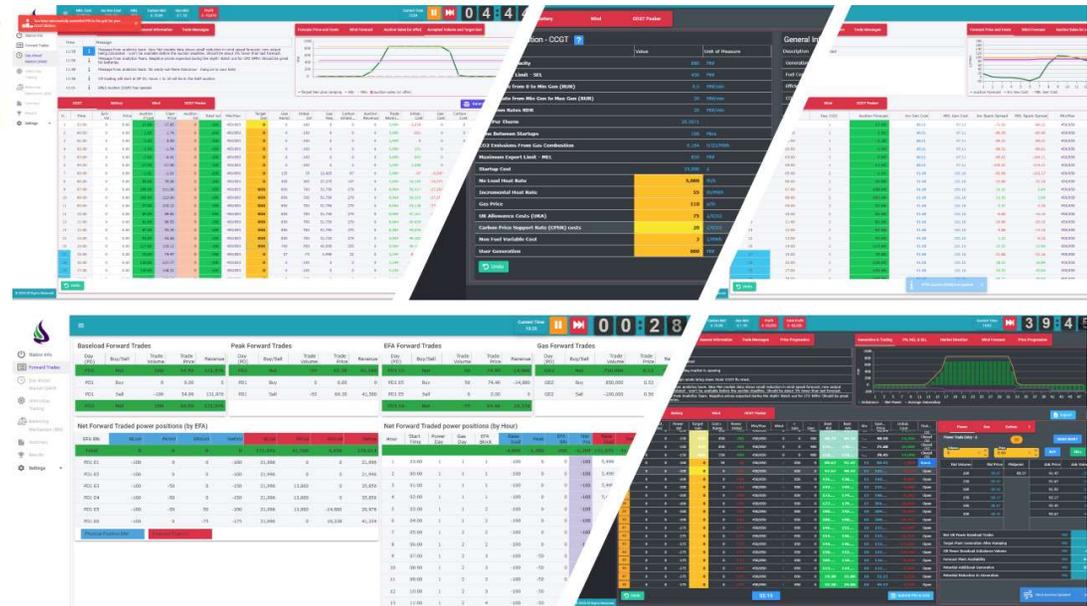
Competition Mode

- Competition mode where the teams compete to make the largest profit
- Participants use their gained knowledge to compete in tougher scenarios

Short Term Simulation

Contents

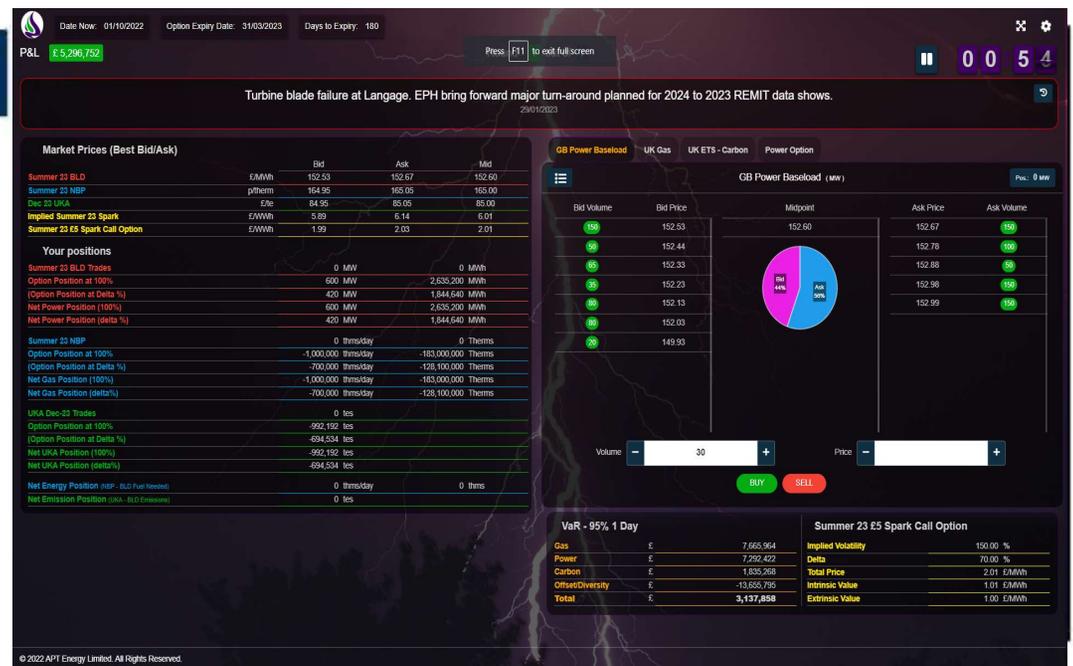
- Trading in the GB Market.
- Buy and Sell in the EPEX Auction
- Submit plant data to the system operator to reflect intended generation
- Regularly calculate cost of generation based on the changing market conditions
- Buy and Sell in the Intraday Market.
- Manage a CCGT, Wind Farm, Peaker, Pump Storage and Battery plants
- Use Balancing Mechanism to manage position and increase profits
- Find profitable opportunities and trade to create profit.



Options Trading

Contents

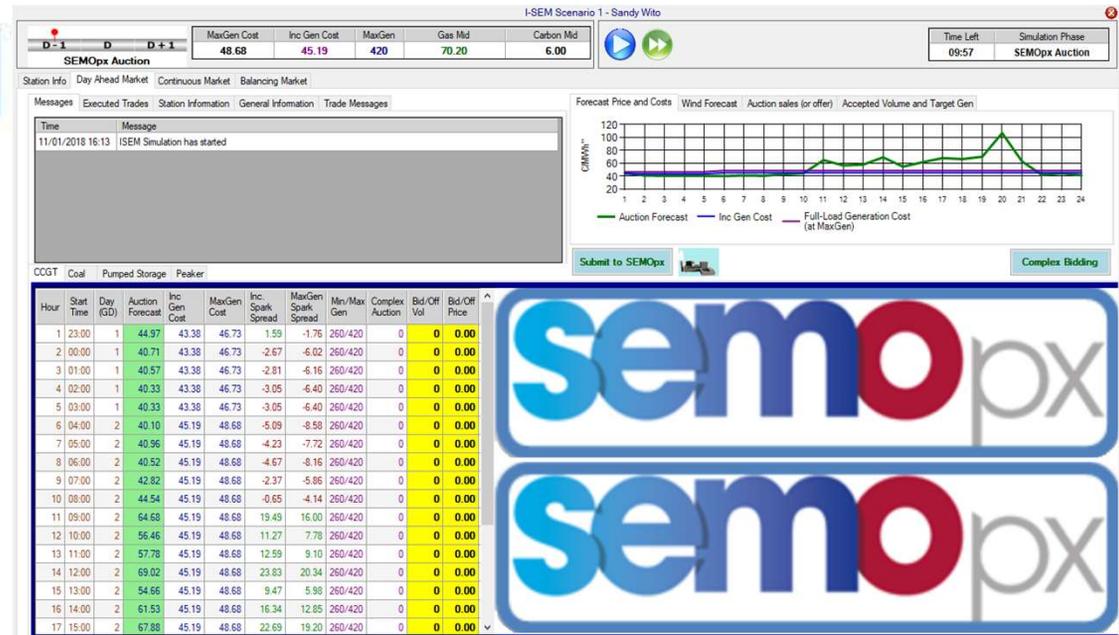
- Trading a 6-month Spark Call.
- Use of options for hedging and for optimization of trading strategy.
- Learn Delta Hedging and VaR
- Analyse data to estimate market development.
- Rapidly changing trading opportunities.
- Prices change according to changing Forecast values.
- Market news may change the prices.
- Find profitable opportunities.



ISEM Simulation

Contents

- Trading in the Irish ISEM Market.
- Buy and Sell Power in the DAM for a portfolio of generation plants.
- Submit plant data to the system operator to reflect intended generation
- Optimise plant to benefit from the Balancing Market
- Balance Gas and Carbon for the portfolio.
- React to Events according to market changes
- Find commercial opportunities and lock in profit.



Long Term Simulation

Contents

- Long-term trading of electricity, coal and emissions
- Hedging of open positions
- Commit the generation
- Stock, credit and emissions Management
- Credit limits and credit risk
- Arbitrage opportunities
- Find profitable opportunity and sell the power
- Watch out for market messages



Cross Border Simulation

Contents

- Cross-border trade within Europe
- Power plant scheduling.
- Operating the power plants respective to the merit order
- Asset back transactions and balancing
- Identification and use of arbitrage opportunities
- Buying capacity with other countries
- Flowing power cross border
- Arbitrage opportunities between countries

