

# DEDICATED POWER MARKET SEMINARS AND TRAINING

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**Nord Pool Consulting has resources and experience which we, for a number of years, have used to provide clients with customized seminars, sharing in-depth knowledge of the successful working of Europe's leading power exchange, the integrated power markets and the financial derivative market.**

## **MINI SEMINAR "THE WORLD LARGEST POWER MARKET"**

Half-day presentation where the client is introduced to the main principles of the European power market, and how it evolved from its Nordic origin to become the world's largest power market.

The objective is to provide the client with an understanding of the complementary roles of the TSOs, the physical and the financial power market, and briefly cover the regulation of the markets.

## **ONE-DAY SEMINAR "POWER MARKET CONCEPTS"**

One-day seminar providing a solid introduction to the main principles and concepts of the power market model as implemented in Europe.

The seminar includes an introduction to the roles of the different markets, regulation, price determination, congestion management, imbalance management, reference price, area prices, risk management, hedging and trading with derivatives.

The objective is to understand the most important features of the power market and the role of the Power Exchange.

We can offer seminars lasting from half a day to four weeks, as well as specialised shorter presentations. All seminars are designed in close cooperation with the client. Our seminars are based on the nice listed modules below, but other modules can be added or removed in line with the specific requirements of each client.

## **TWO-TO-FIVE DAYS COMBINED SEMINAR AND WORKSHOP "POWER MARKET CONCEPTS"**

This combined seminar and workshop covers all the key issues related to a competitive power market and includes detailed case studies that aim to add value for a deeper understanding.

The client also has the opportunity, on a simplified basis, to simulate day-ahead market and derivatives trading.

The objective is to enable the client to actively participate in decision making about market design, developments, regulations and framework. The seminar also aims to enable the client to discuss power market issues on a professional level after attending.

## **MULTIPLE DAYS COMBINED SEMINAR AND WORKSHOP "COMPREHENSIVE POWER MARKET CONCEPTS"**

This seminar, lasting from six to 20 days, is based on our popular five-day combined seminar and workshop. However, depending on the number of seminar days desired by the individual

Seminars can be held at the clients' premises or in Oslo, Norway. Seminars in Oslo include a tour of the Nord Pool trading desk and the financial trading desk of NASDAQ Commodities' derivative market.

**Seminar participants all receive certificates.**

client, there is also time for in-depth-training, introduction of other topics, practical exercises, decision making processes and discussions, as well as visits to major market participants.

In most cases the seminar will also include business visits to the regulator, some of the major companies trading at Nord Pool, the Norwegian Ministry of Petroleum and Energy and to at least one hydro power plant.

The seminar will normally also include one-to-two days in the premises of a Nordic TSO and to the Norwegian Centre of Excellence (NCE) in Halden, with a focus on future Smart Energy Markets. The objective is to provide the client with a comprehensive and detailed understanding of the integrated electricity markets and their price mechanisms.

The integrated power markets and market coupling in a European context, with an introduction to other European power markets, will also be presented and discussed.

# POTENTIAL SEMINAR MODULES

## 1. THE POWER MARKET

- Introduction to Power Market concept and its development
- Trading in a Day-Ahead Market
- Bidding strategy and principles
- Day-Ahead congestion management
- The role of the Intraday Market
- Reserve markets by TSOs
- Regional market integration
- Security of supply
- Demand Side Response
- Coexistence of bilateral contracts and Day-Ahead contracts
- European and global power market development

## 2. TRADING ELECTRICITY DERIVATIVES

- Product structure in power derivatives based on experiences from the Nordic and other European Markets. Standardised futures and options
- Role of market makers
- How the hedging mechanism works
- Settlement and “delivery settlements”
- Discussion of difference between wheeling of traditional “physical” contracts and trade in derivatives.
- OTC traded derivatives
- Comparison of trade volumes in spot, derivatives against total generation or consumption based on European experiences

## 3. CLEARING AND SETTLEMENT OF ELECTRICITY CONTRACTS

- What is the benefit of clearing?
- The tasks and risks involved for a clearing house
- Rules and requirements for users of clearing services
- Daily procedures for clearing and settlement
- Calculation of collateral requirements
- Settlement and auditing
- Information related to clearing
- Report system used by the clearing house
- Use of multiple currencies
- Numerical example

## 4. PARTICIPANT VIEW

- Bidding and trading strategies
- Risk management
- Agreements
- Visit to market participants
- Portfolio management
- Client Representative role

## 5. RISK AND PORTFOLIO MANAGEMENT

- Determination of risk policy
- Monitoring of risk
- Organisation of trade, analyses and risk
- Monitoring
- Analysis
- Reporting

## 6. LEGISLATION, GOVERNANCE, MARKET SURVEILLANCE AND OWNERSHIP OF POWER EXCHANGES

- Market Surveillance methodology in Day-ahead market (spot), Intraday Market, derivatives and interaction between the markets.
- Definition of abuse of market power in Market Conduct Rules and REMIT: Market manipulation and insider trading
- UMM and REMIT reporting systems
- Roles and responsibilities of PX and TSOs
- Organization and ownership of PX and TSOs
- Interfaces and legal agreement between PX, TSOs, market participants and national regulatory authorities
- Centralised and decentralised organization of PX
- Principles for collection and distribution of neutral market information

## 7. TRANSMISSION TARIFFS AND SYSTEM OPERATION

- Design of a tariff structure where charges are independent of location of trade counterparts
- Management of losses in the grids
- Congestion rent
- Models for transit charges
- System operations
- Reserves market Imbalance management

- Capacity market
- New HV/DC interconnectors

## 8. ENVIRONMENTAL CHALLENGES AND TRADE OF ENERGY CERTIFICATES

- Sustainability and renewable energy resources (RES)
- Impact of RES on market and systems
- Environmental incentives and global trends
- Kyoto and Paris agreement - CDM and JI projects
- Trade of green, white, black and red certificates

## 9. MARKET MODELLING AND SIMULATIONS

- Modelling of the fundamental data of a region – price projections
- Market modelling, price formation
- Simulation of a day-ahead market using a real market system
- Hands-on training
- Market play
- Exercises

## 10. TRADING AND REPORTING SYSTEMS

- Nord Pool Intraday Web
- Nord Pool Day-ahead
- Urgent Market Message (UMM)
- REMIT transaction reporting service

### TO BOOK YOUR SEMINAR

OR DISCUSS  
CUSTOMIZED OPTIONS,  
CONTACT

NORD POOL ACADEMY:

EMAIL:

[academy@nordpoolgroup.com](mailto:academy@nordpoolgroup.com)

MOBILE:

+47 6710 9100

WEBSITE:

[www.nordpoolgroup.com/academy](http://www.nordpoolgroup.com/academy)