



Lectures plan

„Power System Economics and Special Topics“

Location: Building. 22A – Room 2.17

Time: 09.00-11.00 O'clock

Teacher: Dr. Ing. Pio Lombardi (E.mail: pio.lombardi@iff.fraunhofer.de)

Content

- Basics of economy and overview of markets
- Electric market architecture
- Economic electric dispatch
- Market for ancillary Services
- Planning of investment in transmission and generation sectors
- Kyoto Protocol and other environmental mechanisms
- Smart Grids and other special topics

Nr.	Date	Topic
1	11.10.2016	Basics concepts from economics I
2	18.10.2016	Basics concepts from economics II
3	25.10.2016	Markets for electrical energy
4	01.11.2016	Participation to the electricity market
5	08.11.2016	System Security and Ancillary Services
6	15.11.2016	Network reliability
7	22.11.2016	Transmission network and electricity market
8	29.11.2016	Power station scheduling
9	06.12.2016	Locational pricing, PTFD
10	13.12.2016	Investing in Generation and Transmission
11	20.12.2016	Carbon emissions Trading and technology
12	10.01.2017	New concept
13	24.01.2017	Summary and training for the examination



Exercises plan

„Power System Economics and Special Topics“

Location: Building. 22A – Room 1.11

Time: 09:00-11:00 O'clock

Teachers: Dr. Ing. Pio Lombardi/ M.Sc. M.Sc. Przemyslaw Trojan

Nr.	Date	Topic
1	20.10.2016	Financial Mathematics
2	03.10.2016	Costs of Generating Electrical Energy: modelling of the cost-rate curves
3	17.11.2016	Evaluation of the power generation costs: Levelized Unit Energy Cost approach
4	01.12.2016	Electricity trading in market: profit and costs evaluation
5	15.12.2016	Economics of electricity generation: the economic dispatch problem
6	12.01.2017	Congestion pricing and nodal pricing