



"Assessment of Power System Reliability - Methods and Applications"

Visiting Professor: prof. Marko Čepin (University of Ljubljana, Faculty of Electrical Engineering - Ljubljana, Slovenia)

Short description of the lecture:

Review of power system features: hydro, thermal, nuclear, sun, wind, power plants and their characteristics. Renewable energy characteristics. Methods to assess reliability of power systems. Application of the methods on practical examples.

Syllabus of the lecture subjects (enlisted):

The lectures summarize:

- probability theory, which represents the background for reliability calculations.
- fault tree analysis, which is essential reliability method in air and space industry and nuclear industry.
- event tree analysis, which is a method for evaluation of scenarios.
- reliability block diagram, which is the least abstract of the reliability methods.
- common cause failures, which represent the evaluation of dependent events.
- selected blackouts, which are some of the main issues with which the power system reliability has to face.
- generating capacity methods including practical examples (loss of load probability, loss of load expectation).
- reliability and performance parameters of selected power plants, which gives information about their successful operation from various points of view.
- distribution system reliability measures.
- safety of nuclear power plants in relation to power system reliability



TERMIN WYKŁADU			
Data	Dzień tygodnia	Godzina	Sala
2015-01-19	Pn	9.15-12.00	EiA E28
2015-01-20	Wt	9.15-12.00	EiA E28
2015-01-21	Śr	9.15-12.00	EiA E28
2015-01-22	Cz	9.15-12.00	EiA E28
2015-01-23	Pt	9.15-12.00	EiA E28