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Lecture:

- grade of knowledge and skills indicated on exams with problem character,
- continous grading knowledge and skills on each lecture by disscussion regarding actual problems related to proper methods of loading.

Laboraty:

- tests verifying needed knowledge to realisation indicated problems in some field of laboratory tasks,
- grade of knowledge and skills related to realisation of laboratory tasks, grade of report,
- collection of extra points of collaboration in frame of team realising laboratory tasks.

Course description

Fundamental loading definition. Loading principles of devices. Utility of power block in various states. Work of producing devices in transition states, caused by failure or planned transition states. Changes of load, Work of power plant in electric power system - economic distribution of load. Dyspozytory of power plants. Problems of reliability. Repairs. Collection and analysis of load data. Diagnostics of basic kinds of failures. Recognotion of possibilities, limitations of diagnostics methods used in high voltage insulating systems of power devices.

Basic bibliography:

- 1. R.Janiczek ? Loading of power steam power plants, WNT W-wa 1990
- 2. Florkowska B., Diagnostics of high voltage insulating systems of power devices, Wydawnictwa AGH, Kraków, 2009

Additional bibliography:

- 1. Gładyś H., Matla R.: Work of power plant in electric power system. WNT. W-wa 1995
- 2. D.Laudyn, M.Pawlik, F.Strzelczyk ? Power plants, WNT W-wa 2000
- 3. M.Pawlik, J.Skierski ? Systems and devices of power station internal load. WNT W-wa 1986
- 4. Gacek Z., Structure of high voltage insulating systems used in electric power engineering, Wydawnictwo Politechniki Śląskiej, Gliwice, 2002

5. Florkowska B. i inni, Mechanisms, measurements and analysis partial discharges in diagnostics of high voltage insulating systems, Uczelniane Wydawnictwo Naukowo ? Dydaktyczne AGH, Kraków, 2001

Result of average student's workload	
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Activity	Time (working hours)			
1. participations on lectures	60			
2. participations in laboratory	30			
3. preparation to laboratory tasks	28			
4. preparation of laboratory reports	28			
5. particiaption in consulations related to laboratory	5			
6. preparation to test	20			
7. participation during test	3			
Student's workload				

Source of workload	hours	ECTS
Total workload	174	5
Contact hours	98	4
Practical activities	91	2