CZECH TECHNICAL UNIVERSITY IN PRAGUE
Faculty of electrical engineering
Department of electrical power engineering
Technická 2, 166 27 Prague 6, Czech Republic

Master thesis opponent's review

Master thesis:	**Series Arc Fault Detection in the Presence of Household Electrical Loads**
Author:	**Bc. Amna Farooq Husain**
Thesis supervisor:	**Doc. Dr. Ing. Jan Kyncl**
Thesis opponent:	**Ing. Jan Bryscejn**

Rating (1 – 5)
(1 = best; 5 = worst):

	Rating
1. Fulfillment of assignment requirements:	1
2. Systematic solutions of individual tasks:	1
3. Ability to apply knowledge and to use literature:	1
4. Thesis formal and language level:	1
5. Thesis readability and structuring:	1
6. Thesis professional level:	1
7. Conclusions and their formulation:	1
8. Final mark evaluation (A, B, C, D, E, F):	A
verbal:	Excellent

Brief summary evaluation of the thesis (compulsory):

Fires caused by serial arcs cause considerable damage even to human lives, so the topic is current and important. The thesis deals with the analysis of the problem, the basic standardized methods of measurement are described. The main focus of the work is the processing of the high frequency component of the current by means of FFT and CWT. I consider CWT a progressive method, but the question remains the arc recognition from the resulting data.

Questions:
1. In the resulting images, a person recognizes whether or not an arc occurs. What AI methods does the author propose to use for machine recognition?

Date: 6. 6. 2017   Signature: