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: **Technical Analyse of Microgrids**

Author: **Ahmad Alshammari**

Thesis supervisor: **Ing. František Vybíralík, Csc.**

Thesis opponent: **Prof. Ing. Josef Tlustý, CSc.**

Rating (1 – 5)
(1 = best; 5 = worst):

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

verbal:

very good

Brief summary evaluation of the thesis (compulsory):

The student fulfilled all the essential assignment requirements. Master's thesis is focused on the description of generation and distribution infrastructure in microgrids.The thesis has a good structure going from theoretical chapters to calculation parts and conclusions. The worse quality of some figures or a non-standard referencing are formal mistakes. General chapters are devoted to projects of microgrids in Europe. The author focuses on network architecture, protection and control. The core of thesis is a case study of the microgrids with small solar power plants connected to LV distribution network. The final calculations are very well organized and informative. The work has a logical sequence of chapters and its graphical layout is very good The thesis includes many interesting information and could be used as educational material.

Questions:

1. I would like to explain the benefits of microgrids compared to the classic distribution grids.

Recommendation to the defense: **I recommend**

Date: 5.6.2018   Signature:

Notes:
1) The total thesis evaluation needn't be determined by the partial evaluations average.
2) The total evaluation (item 8) should be from the following scale:

excellent	very good	good	satisfactory	sufficient	insufficient
A	B	C	D	E	F