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

Bachelor thesis opponent's review

Master thesis:	**Future integration of photovoltaic power plants to the grid: a case study Azerbaijan**
Author:	**Farid Abidov**
Thesis supervisor:	**Ing. Ghaeth Fandi, Ph.D.**
Thesis opponent:	**Ing. Martin Čerňan**

	Rating (1 – 5) (1 = best; 5 = worst):
1. Fulfillment of assignment requirements:	2
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:	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 work is focused on the overview and development of renewable energy technologies. The work focuses in more detail on photovoltaic systems and the possibilities of their use in Azerbaijan. The research part of the work consisting of chapters 2 and 3 is processed at a high level using relevant references. These chapters focus on renewables in general and then in more detail on photovoltaic technologies. The practical part of the work (Chapter 4) is focused on the use of photovoltaic power plants in selected regions of Azerbaijan. Within this chapter, one pilot project of a floating photovoltaic power plant is described and at the end of the chapter a simplified case study for a selected region is created. This case study deserves more attention. It would be appropriate to indicate the production / consumption of energy in the area and to assess whether the local electricity system is able to absorb the power supplied by the considered photovoltaic system. The work was solved systematically and by applying a lot of knowledge from the relevant literature. The formal and linguistic level of the work is good, with the reproach of occasional typos (page 11 - the correct unit should be GW, page 19 - the correct unit should be MW). The assignment of the thesis has been fulfilled and therefore I recommend the thesis for defense with a rating of B (Very good).

Questions:

1. Where is the point of maximum power of the photovoltaic cell within the volt-ampere characteristic?
2. What is the structure of the installed generating capacity in Azerbaijan and in the Nakhchivan region?

Date: 21.1.2021 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