Bachelor thesis opponent’s review

Master thesis: Power System Stability Maintaining and Control
Author: Vadim Barba
Thesis supervisor: Ing. Jan Švec, Ph.D.
Thesis opponent: Ing. Jakub Ehrenberger

Rating (1 – 5)
(1 = best; 5 = worst):

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: 3
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):
   verbal: B

Brief summary evaluation of the thesis (compulsory):
The thesis deals with power system stability and control. The work is divided into two parts. In the first part, design, stability and control of power system is described and in the second part, evaluation of measured frequency data is performed.
The work is clear and readable, but right numbered equations could be a better choice, some parts could be described more precisely, and sometimes there is no figure and table description. In chapter Oscillations, measured data are evaluated and labeled, but there is no scheme corresponding with labels to show the measurements location.

Questions:
1. In equation 3.1 for active power flowing from the generator to the network, only imaginary part of impedance between generator and network is assumed. Is there any change in the equation if also resistance is assumed?

Date: Signature: