



## **MASTER THESIS READER REPORT**

Name of Master Thesis: **Electricity Market Prices Comparison for European Union and Russian Federation**

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The aim of the discussed master thesis is to describe smart technologies, evaluate benefits of their integration, describe possible usage and propose some smart solutions in specific case study.

The thesis is divided into 3 main parts. The first part introduces smart technologies and broadly describes the available devices and their use and benefits. Author also focuses on the integration of the smart technologies into the grid (so called concept Smart grids) and tries to evaluate benefits of smart technologies integration. This part also evaluates usage of smart technologies in passive houses and describes smart house market. This part is thoroughly prepared, but with small imperfections and is not also very well structured.

The second part is widely devoted to methodology of evaluation of project. The author focuses on economic and non-economic methodology of evaluation and describes all aspects of decision making. Part of economic methodology is properly done and detailed, but sometimes confusing and also with small mistakes. The part where the author provides a thorough consideration of noneconomic criteria is well-done, with no significant faults.

The last part is dealing with concrete case study analysis. At first detailed description of object of analysis (private family house) is given. At second the author made wide analysis of possible installation of smart technologies. The evaluation is done by economic point of view, but in this case a non-economic benefits should be considered, which is discussed at the end of part of evaluation. I would like to point out especially her work on research of smart devices and on the calculations regarding the house.

I consider the submitted work as average. It has a logical structure, but sometimes it is not easy to read, because of structure. There are no weak or illogical parts and the chosen approach is quiet corresponding with the scope of the problem. I have a few comments on both the formal and content part. The thesis is written with a few typographic and syntactic errors and also the research part is more broadly processed than computing part. At last, thesis is a little confusing, missing numbering of formulas and overall precise approach.

As a reviewer I can conclude that submitted diploma thesis demonstrates quiet good orientation in the topic and the all the aims of the master thesis instructions are fulfilled and therefore I recommend the thesis to be accepted and to be graded

## **C – Good**

Questions regarding the master thesis:

- 1) Based on your thesis is it possible to predict technical and economic conditions under which will be the usage of "smart house" economically interesting?
- 2) What in your opinion is the main obstacle of a greater spread of this technology?

Prague 26.5.2015  
Ing. Jan Truxa