

## I. IDENTIFICATION DATA

<b>Thesis title:</b>	<b>Short-Term Forecasting of Electricity Consumption</b>
<b>Author's name:</b>	<b>Elena Kapustina</b>
<b>Type of thesis :</b>	master
<b>Faculty/Institute:</b>	Faculty of Electrical Engineering (FEE)
<b>Department:</b>	Department of Economics, Management and Humanities
<b>Thesis reviewer:</b>	Marek Adamec
<b>Reviewer's department:</b>	External person

## II. EVALUATION OF INDIVIDUAL CRITERIA

<b>Assignment</b>	<b>challenging</b>
<i>How demanding was the assigned project?</i>	
The assignment, that is i.a. related to market predictions is challenging.	

<b>Fulfilment of assignment</b>	<b>fulfilled with minor objections</b>
<i>How well does the thesis fulfil the assigned task? Have the primary goals been achieved? Which assigned tasks have been incompletely covered, and which parts of the thesis are overextended? Justify your answer.</i>	
Author fulfilled the task. Primary goals have been achieved, but description of calculation can be more detailed.	

<b>Methodology</b>	<b>correct</b>
<i>Comment on the correctness of the approach and/or the solution methods.</i>	
Author has chosen appropriate methodology.	

<b>Technical level</b>	<b>C - good.</b>
<i>Is the thesis technically sound? How well did the student employ expertise in the field of his/her field of study? Does the student explain clearly what he/she has done?</i>	
Technical level of the thesis is deep in theoretical area. Application of theoretical methods are on the other hand fuzzy.	

<b>Formal and language level, scope of thesis</b>	<b>A - excellent.</b>
<i>Are formalisms and notations used properly? Is the thesis organized in a logical way? Is the thesis sufficiently extensive? Is the thesis well-presented? Is the language clear and understandable? Is the English satisfactory?</i>	
Thesis is correctly structured according to commonly used outlines.	

<b>Selection of sources, citation correctness</b>	<b>B - very good.</b>
<i>Does the thesis make adequate reference to earlier work on the topic? Was the selection of sources adequate? Is the student's original work clearly distinguished from earlier work in the field? Do the bibliographic citations meet the standards?</i>	
Author has used references in his thesis correctly.	

<b>Additional commentary and evaluation (optional)</b>
<i>Comment on the overall quality of the thesis, its novelty and its impact on the field, its strengths and weaknesses, the utility of the solution that is presented, the theoretical/formal level, the student's skillfulness, etc.</i>
See overall evaluation.



### III. OVERALL EVALUATION, QUESTIONS FOR THE PRESENTATION AND DEFENSE OF THE THESIS, SUGGESTED GRADE

*Author of this thesis has described the Wholesale Market for Electricity and Power in Russia as well as methodology for electricity consumption forecast models. In the theoretical part, the Autoregressive Integrated Moving Average, Artificial Neural Networks and Classification and Regression Trees methods is described. Theory of economic evaluation of the investment is presented in following part.*

*Author utilizes very advanced theoretical approach with very high level of theoretical description e.g. statistic autoregressive or Neural networks method, but real application into theory of economic evaluation is not as clear as it is according to author of this review required.*

Author of this review has following questions:

1. How would be your approach applicable for long-term predictions?
2. Table 14 can you provide more detailed description of NPV calculations?
3. Is the NPV model only cost – based or have you some savings (resulting e.g. from higher prediction accuracy) considered into NPV?
4. Can you compare these forecasting methods with no forecasting from economical point of view?

The grade that I award for the thesis is **C - good**.

Date: **28.5.2021**

Signature: