# CTU CZECH TECHNICAL UNIVERSITY IN PRAGUE

## THESIS SUPERVISOR'S REPORT

# I. IDENTIFICATION DATA

Thesis title: Power supply system optimization of the Narym rural settlement

Author's name: Terenteva Anna

**Type of thesis:** master

Faculty/Institute: Faculty of Electrical Engineering (FEE)

**Department:** Department of Economics, Management and Humanities

**Thesis reviewer:** Ing. Tomáš Králík, Ph.D.

**Reviewer's department:** Department of Economics, Management and Humanities

#### II. EVALUATION OF INDIVIDUAL CRITERIA

#### Assignment ordinarily challenging

How demanding was the assigned project?

I consider the difficulty of the assignment to be average and fully corresponds to the requirements of the master thesis.

#### **Fulfilment of assignment**

fulfilled

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.

All the tasks of the assignment were fulfilled to the extent required for diploma theses.

## Activity and independence when creating final thesis

B - very good.

Assess whether the student had a positive approach, whether the time limits were met, whether the conception was regularly consulted and whether the student was well prepared for the consultations. Assess the student's ability to work independently.

The student consulted her thesis throughout its development. A minor limitation at the beginning was the fact that the level of detail and complexity of the proposed evaluation model, chosen by the student, did not match the demands placed on the master thesis. For this reason, the original timeline for the elaboration was pushed back. However, the student demonstrated the ability to work independently appropriate to a master's degree.

#### Technical level C - good.

Is the thesis technically sound? How well did the student employ expertise in his/her field of study? Does the student explain clearly what he/she has done?

I evaluate the professional level as good, the graduate managed to identify key problems in the area of the optimization of the stand alone system and then correctly apply the optimization procedure combining the knowledge gained from the study with information from practice and professional literature. The optimization model itself can be evaluated as average.

#### Formal level and language level, scope of thesis

C - good.

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?

Formally and language-wise, the thesis can be assessed as good. The level of English used shows minor shortcomings, but the overall comprehensibility of the text is not impaired. However, there are a number of minor formal shortcomings in the thesis, which reduce the final quality of the work.

#### Selection of sources, citation correctness

B - very good.

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?



# THESIS SUPERVISOR'S REPORT

All formalities concerning the sources and their citations are fully corresponding with required standards. The student was able to select relevant sources of information and then use them effectively.

#### Additional commentary and evaluation (optional)

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 consider the obtained results only as an initial analysis in deciding how to supply electricity in the Narym area. For greater applicability and telling value, a comprehensive model incorporating and optimizing other types of RES, including possible electricity storage, and working with a greater level of detail would be needed. However, this has not been implemented by the student due to lack of time. In the student's defense, it should be noted that she received only a minimum of input for the assignment (DP topic defined within the double degree program by TPU). This then led to the need to simulate the missing data, which not only significantly increased the time required but also reduced the quality of the results obtained.

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

Since the student has met all the requirements for the master thesis in the required quality, I recommend the submitted work to be accepted, and I have no additional questions.

The grade that I award for the thesis is <b>C</b> - <b>good</b> .	

Date: **16.6.2022** Signature: