## MINISTRY OF EDUCATION OF THE REPUBLIC OF BELARUS STATE EDUCATIONAL INSTITUTION "SCHOOL OF BUSINESS OF BELARUSIAN STATE UNIVERSITY"

Chair of Innovative Management

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## RISK MANAGEMENT OF WIND POWER PROJECTS AND SOLAR PHOTOVOLTAIC POWER GENERATION PROJECTS

Master`s thesis specialty 1-26 80 04 "Management" (profile "Financial Management")

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Admitted to Master's thesis defense on "\_\_\_\_" \_\_\_\_ 2021 Head of Chair of Innovative Management Ph.D., Associate professor \_\_\_\_\_ Alena A. Poddubskaya

Minsk, 2021

## **GENERAL CHARACTERISTICS OF THE WORK**

Master's thesis: 93 p., 27 figures, 21 tables, 29 sources.

RISK MANAGEMENT, NEW ENERGY, POWER GENERATION PROJECT, ANALYTIC HIERARCHY PROCESS, FUZZY COMPREHENSIVE EVALUATION

The purpose of the study is to develop a system of risk management measures for a wind power project and a solar photovoltaic power project.

In order to achieve the above stated goal, the following **objectives** have been developed:

- to examine the theoretical concept and essence behind the establishment of risk management model of power generation project;
- to analyze the current situation and risk factors of wind power generation project and solar photovoltaic power generation project in China;
- to apply risk management model to two practical cases of wind power generation project in NP county and solar photovoltaic power generation project in DQ county to calculate the risk level and put forward the corresponding countermeasures.

**Object of the research:** 200MW wind power generation project in NP County and 100MWp Solar photovoltaic power generation project in DQ Country.

**Subject of the research**: risk management of power generation project construction.

**Research methods:** comparative analysis, expert assessments, fuzzy comprehensive evaluation, graphic method and analytic hierarchy process.

**Realm of the possible practical application**: Risk identification, risk assessment and response plan of new energy power generation project.

The author of the paper confirms that the computational and analytical material provided in the thesis reflects the state of the process under investigation correctly and objectively, and all theoretical, methodological and methodical provisions and concepts are referenced to their authors.