ASSESSMENT OF THE ECOLOGICAL SAFETY OF THE OPERATION OF ELECTRIC GENERATORS WITH RECIPROCATING ICE WITH TAKING INTO ACCOUNT THE DECARBONIZATION

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The development of environmental protection technology (EPT) based on assessing the ecological safety of the operation of electric generators with reciprocating internal combustion engines (RICE) with taking into account decarbonization is an urgent task in view of the need to ensure compliance with the requirements contained in the explanations of the State Agency for Energy Efficiency and Energy Saving of Ukraine on the Government Portal of Ukraine "Energy efficiency and decarbonization are integral components of a successful climate policy", 01.02.2024 (https://www.kmu.gov.ua/news/enerhoefektyvnist-ta-dekarbonizatsiia-nevidiemni-skladovi-uspishnoi-klimatichnoi-polityky) both during times of armed aggression and the post-war reconstruction of the country's critical infrastructure and economy in the historical perspective of ensuring the goals of sustainable development, defined in the Decree of the President of Ukraine No. 722/2019 of 09.30.2019. "On the Sustainable Development Goals of Ukraine for the period up to 2030" [1-2]. The purpose of the study is to develop the EPT based on an assessment of the ecological safety of the operation of electric generators with RICE with taking into account decarbonization as well as relevant recommendations, as a basis for further implementation of the research results into the practice of economic and production activities of an enterprise that uses electric generators to ensure its energy independence in blackout conditions, and ensuring the established level of technogenic and ecological safety. The object of the study is indicators of technogenic and ecological safety of the operation of the enterprise that uses electric generators to ensure its energy independence in blackout conditions, both during times of armed aggression and the post-war reconstruction of the country's critical infrastructure and economy in the historical perspective of ensuring sustainable development goals. The subject of the study is the impact of the developed schemes and composition of EPT on the object of the study.

References:

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