

Review of: "Water-Energy Nexus in Power Systems: A Review"

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Potential competing interests: No potential competing interests to declare.

Article review

Water-Energy Nexus in Power Systems: A Review

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The title of the article is promising. A significant amount of scientific material has been analyzed. The article is relevant, especially in the process of transition to alternative energy - biofuels, solar and wind energy, which, due to the stochastic nature of energy production, requires intelligent systems for managing energy flows and consumption, such as, for example, Smart Grid technologies, on the basis of forecasting the change of parameters of technological processes. However, the article does not analyze the materials presented in this area of research.

The article must be valuable to the reader. A scientific work, including a review, must have a clearly formulated goal, which the author sets and communicates to his readers. To achieve this goal, the author sets tasks that he needs to complete in order to achieve the goal. It is these problems that should be presented in the conclusions as already solved.

Shortcomings in work.

1.It is necessary to provide an analysis of scientific publications on the optimization of energy systems using Smart Grid technologies in renewable energy and make changes to subsections: Optimization Modelling. The complex synergy between water and energy. The water-energy nexus for urban areas. System efficiency.

2.It is necessary to develop a structural diagram of the interaction of water as a source and receiver and energy as a source and receiver.

- 3. It is necessary to present a block diagram of the Methods for Investigating the Water-Energy Nexus section indicating the directions for the development of interaction between water and energy.
- 4. It is necessary to provide specific examples of the use of the water-energy connection with the presentation of graphical and tabular information.
- 5. The abstract should reflect the results of work with specific data.
- 6. It is necessary to clearly and succinctly formulate the purpose of the work.



- 7. In order to achieve the goal of the research, it is necessary to present the tasks.
- 8. The conclusions should reflect the solved tasks with specific data.
- 9. Remove duplicate sentences in the abstract, main part, and conclusions.