# Article information:

Review of optimization of power dispatch in renewable energy system | IEEE Conference Publication | IEEE Xplore
<https://ieeexplore.ieee.org/document/7796394>

# Article summary:

1. Optimization of power dispatch in renewable energy systems is crucial to overcome the challenges brought about by the rise of renewable energy sources and electric vehicles, and to capitalize on the opportunities that they present.

2. Optimization techniques can be broadly classified into exact and heuristic optimization, with advantages and disadvantages for each approach.

3. Artificial neural networks, fuzzy logic, and multiagent systems are frequently used computational intelligence tools in conjunction with optimization algorithms for power dispatch in renewable energy systems.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article provides a comprehensive overview of the optimization tools and techniques used in power dispatch for renewable energy systems. It highlights the challenges faced by the rise of renewable energy sources and electric vehicles, and how optimization can help overcome these challenges. The article also discusses the advantages and limitations of different optimization techniques, as well as their applications.

One potential bias in the article is that it focuses mainly on smaller-scale systems such as microgrids, rather than transmission systems. This may limit the applicability of some of the discussed optimization techniques to larger-scale systems. Additionally, while the article acknowledges that renewable energy sources are becoming more cost-competitive, it does not fully explore the economic viability of these sources in all regions.

The article provides a balanced discussion of both exact and heuristic optimization techniques, highlighting their respective advantages and disadvantages. However, it could benefit from further exploration of potential risks associated with each technique, particularly in terms of reliability and scalability.

Overall, the article provides a valuable overview of power dispatch optimization in renewable energy systems. However, readers should be aware of its potential biases towards smaller-scale systems and limited exploration of economic viability.

# Topics for further research:

* Economic viability of renewable energy sources in different regions
* Optimization techniques for large-scale transmission systems
* Risks associated with exact and heuristic optimization techniques
* Scalability of optimization techniques in renewable energy systems
* Integration of electric vehicles in power dispatch optimization
* Impact of weather variability on power dispatch optimization for renewable energy systems

# Report location:

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