# Article information:

Energies | Free Full-Text | Active Participation of Air Conditioners in Power System Frequency Control Considering Users’ Thermal Comfort  
<https://www.mdpi.com/1996-1073/8/10/10818>

# Article summary:

1. The article discusses the potential of air conditioners to actively participate in power system frequency control, considering users’ thermal comfort.

2. Two mechanisms for air conditioners participating in frequency control are available: (1) directly switch ON/OFF and (2) modulation of temperature setting.

3. Factors such as temperature and relative humidity have a large influence on human thermal comfort, with temperatures between 24 °C and 27 °C and relative humidity between 55% and 70% being most comfortable in summer.

# 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 is generally reliable and trustworthy, providing an overview of the potential of air conditioners to actively participate in power system frequency control while considering users’ thermal comfort. It provides a comprehensive review of existing research on the topic, citing relevant sources to support its claims. The article also acknowledges possible risks associated with using air conditioners for frequency control, such as negative impacts on user comfort.

However, there are some areas where the article could be improved upon. For example, it does not explore counterarguments or present both sides equally when discussing the potential benefits and drawbacks of using air conditioners for frequency control. Additionally, it does not provide any evidence for its claims regarding human thermal comfort preferences or discuss any potential biases that may exist in this area. Furthermore, it does not consider other factors that may influence user comfort levels beyond temperature and relative humidity, such as airflow rate or noise level.

In conclusion, while the article is generally reliable and trustworthy overall, there are some areas where it could be improved upon to provide a more comprehensive overview of the topic at hand.

# Topics for further research:

* Human thermal comfort preferences
* Air conditioner frequency control risks
* Airflow rate and user comfort
* Noise level and user comfort
* Potential biases in thermal comfort research
* Benefits and drawbacks of air conditioner frequency control

# Report location:

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