The impact of online machine-learning methods on long-term investment decisions in electricity markets

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Abstract

Keywords: Long-Term Energy Modelling, Online learning, Machine learning, Market investment, Climate Change

1. Introduction

Introduction goes here

2. Literature Review

- Literature review on online machine learning and different impacts on long-term investment decisions (look for things directly similar to this work)

3. Material

- Introduce online learning, machine learning and ElecSim.
- Should I introduce theory behind machine learning techniques? If so, just the most successful?

4. Methods

- Use of hyperparameter tuning, talk about time taken to train/query models.
- Talk about ML methods used
- Talk about residuals
- Talk about sampling from residuals and placing these errors on the day-ahead market.

5. Results

- Results of offline learning, online machine learning shown. Include residuals and MAE,MAPE,MASE etc

- Results of the residuals on the output of ElecSim until 2035.

6. Discussion

- Discuss the impact of this on the electricity market and global economy. Make suggestions.

7. Conclusion

- Summary of work and future work.

8. Funding Sources

References

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