



MEMORANDUM

To: [REDACTED]

From: Michael Brodskiy

Subject: Research Synthesis and Annotated Bibliography Peer Review

Date: Wednesday, May 29, 2024

This document was quite an interesting read! I particularly enjoyed the juxtaposition of the energy center size requirements to the country of Ireland, as it added a clear sense of urgency by putting the problem into perspective.

Looking at the annotated bibliography, all of the sources seem to be directly pertinent to the topic at hand. I would, however, recommend that, when summarizing the argument of a publication, try starting with something along the lines of "the document *argues* . . ." or "this publication *considers* . . ." instead of more mundanely stating "this paper is important because . . ." In doing so, it more clearly differentiates your own synthesis and opinions regarding the document from the author's findings. There are also a few typos strewn throughout like: "University of Massachusetts" and "minimise" to "minimize" (there may be others, so please consider reviewing once again). Other than this, I commend you for using quality sources and synthesizing them to find interesting solutions to a relevant problem.

As for the substance of the paper, you do a great job of defining acronyms before first use, like artificial intelligence (AI) and machine learning (ML). Oftentimes, technical writing novices forget to do this. Reading the entirety of the paper, I now understand that not only is AI and ML already creating a huge environmental impact with data centers, but this strain is also increasing; however, the future does seem optimistic, as the heat produced as a byproduct may be used for a specific purpose (like heating cities) by implementing heat pumps, rather than being released into the environment. The document does seem to perform quite a thoughtful synthesis; however, I would suggest one major update: beware of run-on sentences! There were many throughout, and, thus, consider proofreading and adding in more punctuation, when necessary.

In a more general scope, I would recommend that, in addition to using IEEE citation format, you would use an IEEE document format (an example can be found [here](#)). Using this would not only be beneficial for your future endeavors, but will also improve the overall readability of your exhibition. Also, a small fix would be to indent the first paragraph (to maintain conformity with the other paragraphs). Finally, I would also suggest getting rid of some of the citations. In general, when citing a work, it is unnecessary to re-cite it when continuing with the same thought (unless multiple documents are cited or a different document is cited before continuing).

Great work overall!