Lawrence Berkeley National Laboratory Comments on Staff Draft Report MI Power Grid: Energy Programs and Technology Pilots August 10, 2020

Hi Joy,

Thanks for giving me the opportunity to review the report. The references and citations are exhaustive - kudos on performing such a thorough lit review. In reading over the report, I have a few comments for your consideration:

- 1) Page 28: I think Annika would agree with Sanem that an RCT or an RED are advisable and would strongly recommend either design for producing results that have limited self-selection bias. You never define "gold standard", but this paragraph seems to presume the reader knows what that means. So I would urge you to either define what you mean by gold standard, or use some other terms to characterize the same sentiment. However, RCTs and REDs need not be employed universally to adequately answer the questions of interest in the pilot. My LBNL report that I asked you to review sought to lay out the balancing act associated with different experimental designs. Certainly, for some pilots, it would be best if they used an RCT or an RED, but for others that are looking to do a proof-of-concept or are focusing on implementability, an RCT/RED is totally overkill. My point is that the experimental design should be more closely tied to the goals, objectives, and purpose of the pilot as well as the cost of getting a wrong result and making a decision on that wrong result. If the cost is high, then more internal validity, power, and precision are needed via more rigorous experimental designs. If the cost is relatively low, then less rigorous experimental designs will do.
- 2) Page 33 (Section 4.4.2): You will probably need to explain further what the SGIG Consumer Behavior studies were for your reader to understand the subsequent few sentences. Something like the following:
- "Peter Cappers (LBNL) shared his experience with organizing, collecting, and analyzing data from the 11 utility pricing pilots that came out of the Department of Energy's Smart Grid Investment Grant's consumer behavior studies. By having unique access to all data generated and collected by each utility's pilot, his team of researchers was able to conduct a number of different cross-utility analyses to gain valuable programmatic insights that an individual utility on its own could not (Cappers, 2020). Public access to pilot data in Michigan would support these types of cross-utility studies. In the stakeholder survey..."
- 3) Page 33 (Section 4.4.3): You didn't mention what I think was a critical issue that ultimately doomed my efforts to make all the SGIG CBS data publicly available the challenge of competing versions of the truth. By having the data at the same level of granularity as the utility evaluators, third-parties can replicate the utility analysis but apply their own methods and data screening techniques to arrive at the answer they may want. This creates a massive risk for the

utility who then must defend and justify their findings and approach, relative to a competing version of results.

I'd be happy to talk through any of these issues if you want in more detail. Again, great job on this report!!

Best regards,

Pete

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