Dear Ms. Lise Trudeau,

Thank you for the opportunity to provide comments on issues and factors affecting CHP deployment in Minnesota. The BlueGreen Alliance (BGA) appreciates the opportunity to provide comments and applauds the leadership of DER for engaging stakeholders in meaningful discussions about opportunities and pathways to improve CHP deployment in the state. BGA has participated in stakeholder meetings and has reviewed the documents DER provided. The comments included below are directly attributed to BGA only.

**FVB Energy Proposed CHP Policy Options**
The BGA would like to highlight some issues identified by DER in the analysis of the policies suggested and further the conversation with some insight obtained through our work engaging BGA partners on industrial efficiency in Minnesota.

Three of the five options involve the CIP, which FVB rightly determined to have significant issues with industrial company opt-outs. Any policy dealing with the CIP may encounter opposition from labor unions—some of whom are BGA partners—whose members are employed by industrial companies. The APS option does not have these issues and therefore may be the cleanest, most expedient way to compel large industrials to participate.

Another policy not analyzed by DER/FVB is to include CHP in the EERS; introducing a new EERS level higher than the 2% proposed by CEJ specifically designed to allow for CHP could also avoid issues the aforementioned issues. BGA has done some preliminary research on this option.

**Current barriers and issues hindering CHP projects/ Alternative mechanisms and approaches to facilitate economically efficient deployment of CHP in Minnesota**
From our work on industrial energy efficiency with companies, we have identified upfront capital cost as the most critical barrier to implementing energy efficiency improvements, including installing CHP projects: companies find it very difficult to put that much money into a system on the front end; they prefer to put dollars towards their end product. Third party ownership models may be a way to overcome that barrier. But they have unanswered questions. For instance, if a utility owns the systems on the property of the consumer, what entity would maintain the system? Industrial companies may be
resistant to others operating systems on their property. BGA would like to see this conversation become a priority, engaging companies and utilities to take a close look at this financing option.

Resource planning, strategic, and regulatory factors affecting CHP options and potential
According to the DER studies, CHP potential has been identified using profiles of energy use for individual companies/entities, and estimated the payback period to recover from the upfront cost, which were considered “economic” if it was under 10 years. This is still a considerable payback period, and some companies or utilities may find it unacceptable. Reducing the upfront costs, and/or providing financial assistance, is important.

One interesting thing we found was that Massachusetts was able to establish separate funding for CHP programs, allowing for more flexible support, which is important because CHP programs have peculiar characteristics and are susceptible to market change. This additional support also allowed for prioritizing implementation of CHP at the best or most feasible of the potential sites and provided the support needed to ensure those priority sites were developed. In Minnesota, these “high value” sites could be identified using a set of physical criteria (including space on-site, need for new boiler systems, etc.) as well as resource planning criteria (expected regional electricity demand increase, retiring facilities, and meeting requirements of the Clean Power Plan SIP).

Additional CHP issues
Through our research on CHP, we have found a few recommendations from other states and national organizations, such as the American Council for an Energy-Efficient Economy, worth noting:

- CHP should have unique CHP targets, separate from other alternative energy, clean energy, or energy efficiency targets;
- Energy and carbon savings need to be counted and credited effectively; and
- Societal and broader economic benefits (such as avoided costs of transmission) of CHP need to be captured in the economic decisions to install a CHP system.

These issues all appear in the documentation sent out by DER, but we would like to highlight them for additional discussion about how each of them impact CHP deployment in Minnesota.

Conclusion
Thank you for the opportunity to submit comments and we look forward to engaging in future dialogues about how best to increase CHP in the state. Please feel free to contact me if you have any questions about any of the issues discussed in these comments.

Regards,

Sara Letourneau
BlueGreen Alliance