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Jeanne Hoffman, Facilities and Sustainability Manager
City of Madison
210 MLK, Jr. Blvd. CCB Room 115
Madison, WI 53703

Sustainable Madison Committee (SMC)
210 Martin Luther King Jr. Blvd.
Madison, WI 53703

RE: Draft 100% Renewable Madison Report

Dear Ms. Hoffman and members of the SMC:

Over the course of recent meetings, the Sustainable Madison Committee has included on its agenda the draft report "100% Renewable Madison" prepared by the City's consultants, HGA and Navigant Consulting. MGE has been working with the City to help further our shared clean energy goals, and we have been responsive to the City's consultants throughout their work on this report. As the committee's review of the draft report nears its conclusion, we offer a few comments provided previously during this process for the City as an MGE customer.

1.3 Constraints to Further Sustainability Success, and 3.2 Supply Side Strategies

The SMC and its consultants should consider an additional sub-section, perhaps a 1.3.4, to address operational constraints. The City is limited in the amount of renewable energy it can utilize to directly offset its electricity use based on when that electricity is currently consumed. The profile of electricity used (timing and amount) in City operations does not now align well with the profile of renewable electricity generation that may be available to the City. Our own analysis suggests that based on the City's current energy use profile, the City can take advantage of only about 4 megawatts (MW) of solar if the City does not realign its energy consumption with energy production. This would allow the City to offset only a little more than 26% of its current electric use with electricity generated from solar PV. To the extent the City has operational flexibility, now or over time, to allow its energy consumption to better align with renewable generation, the City may be able to reduce its reliance on Renewable Energy Credits under any of the three scenarios discussed in Section 2. City staff should be encouraged to review operations to determine where changes can be made and then evaluate the economic costs of adjusting the City's energy use profile. This could be done over time, rather than immediately. For example, pumping the water utility may do at night to take advantage of off-peak energy rates also prevents the City from directly utilizing additional solar PV energy that can only be generated during the day.

Both Sections 3.2.2, “Off-Site Solar Farm,” and 3.2.3, “Off-Site Wind Farm,” offer another opportunity through utility partnerships to raise operational changes as a strategy for the City to increase its direct utilization of renewable energy. The draft report correctly discusses the limitations due to the need to match the renewable energy generated with the City’s actual load in real time. But, it does not discuss any potential for the City to alter its operations to better align its energy use with optimal wind and solar generation periods, thereby increasing the amount of the City’s total energy use that can be directly offset and reducing the need to rely upon Renewable Energy Credits. While there is certainly an economic trade-off, it is a strategy worth evaluating in these sections.

3.3.6 Strategic Electrification of Metro Transit Bus Fleet

The transition of the Metro Transit (Metro) bus fleet to modern electric buses is the single best opportunity for the City to achieve the most significant carbon emissions reductions, add renewable energy sources to the grid, and benefit all who use the Metro system and the community at large. Electrification of the transportation is a well-recognized strategy to achieving deep decarbonization goals. As demonstrated by the modeling of emission reduction options in the report, electrification of the City’s bus fleet ranked first in cost per ton of carbon reductions. Recognizing these and other benefits, MGE was an enthusiastic partner with the City of Madison in pursuing federal funding to enable the City to acquire three all-electric buses, which will arrive later this year. We are interested in continuing to work with the City to reach its current goal of a 50% electric bus fleet by 2035, or alternatively, a more ambitious goal that is identified as an option in this report. The participation and support of Madison residents in the electrification of mass transit as a strategy to reduce carbon emissions and to grow renewable energy should be recognized and promoted through public awareness efforts as an important way for residents to play a role in advancing the City’s energy and carbon reduction goals.

We also recommend that the SMC reach out to other policy-making committees of City government such as the Transportation Commission and the Transportation Policy and Planning Board to bring about coordination of the SMC recommendations with the City’s overall transportation objectives.

3.3.2 Reducing Fuel Use through Green Fleet Strategies

We also note the report’s identification of greening its vehicle fleet as an option to reduce emissions. We are pleased to have played a supportive role as the City applied for and was awarded funding from the Office of Energy Innovation to purchase 20 electric Chevy Bolts. The modeling included in the report identified greening the City’s fleet as highly ranked options for cost per ton of carbon reductions. It is our hope that the City’s leadership in this area will encourage other fleet owners in our community to utilize EV and other green technologies.

1.3 Constraints to Further Sustainability Success

In support of development of the report, we have discussed with the City’s consultant the regulatory framework under which MGE operates. The draft currently identifies utility regulation only as a constraint on options the City can pursue to reach its sustainability goals. While state regulatory processes are a factor for a range of topics in the report, we also think it is important to balance the discussion of state regulation by acknowledging important public interest goals achieved by MGE that

Ms. Jeanne Hoffman
Members of SMC
January 24, 2019
Page 3

are guided by state regulation. MGE is required by law to offer service to any customer located in the MGE service territory. As such, the current regulatory approach in Wisconsin plays an important equity and social justice role by ensuring that all customers may benefit from renewable energy. Our customers also have extensive consumer protections in State electric and gas service rules. Further, our rates and choices of resources to serve our customers are reviewed by state regulators and approved only if reasonable and cost-effective. We are required to have adequate facilities to provide and distribute safe, reliable and affordable service to our customers both now and in the future.

State taxes collected from MGE support the utility aid payments received by local units of government. MGE also is responsible for supporting programs that provide bill payment assistance to low-income customers and for collecting the funding that supplies the statewide Focus on Energy program with those funds used by customers and local units of government to save energy and to acquire customer-sited renewable energy. In short, the regulatory system in Wisconsin provides many benefits and protections to all Madison residents, and the report is remiss in urging regulation as a constraint only.

Again, we hope that the committee finds our comments useful as it reviews the draft report. We look forward to continuing to work with the committee and the City of Madison to advance our shared energy goals.

Sincerely,

A handwritten signature in black ink, appearing to read "Eric A. Reinhard". The signature is fluid and cursive, with a large initial "E" and "R".

Vice President and General Counsel

CAR/kjl