Comments on HGA Navigant 100% Renewable Draft

- Overall organization: Consider reorganizing report so that the appendices are focused on providing supporting data. Right now the "Report" is comprised of background and a menu of options (the scenarios) that are not really comprehensible without the info contained in the appendices. The narrative in the report should educate the reader so that the actions contained in the "Scenarios" are more readily understood. The appendices should be limited to the more quantitative or granular data and graphs.
 - SEG response: Appendix have been reorganized in a more logical manner. I (MB) would not be opposed to renaming the appendix as the body, and having sections 1 and 2 be called the executive summary. We can review again in further discussion with larger SMC. -MB

Specifically:

- Appendix A: Baseline Data (currently A-1)
 - A.2 (Constraints) should be in the body of the report, as a new Section 2
 - SEG Response: We are trying to keep the section 1 and 2 as short as possible. Let's review further with team after we have the graphic designed section 1 and 2. -MB
 - B.1, B.2, B.3 should also be in body of report, because they establish the basis for understanding the Scenarios.
 - SEG Response: See comments above. -MB
 - C.1 and C.2 can probably be included in body as relevant detail; C.3 (policy review) seems like it should go in what is now Appendix E (additional actions to accelerate). The References sections should be included in what is now Appendix G (additional info)
 - SEG Response: See comments above. -MB
- Appendix B: Scenarios (currently Appendix D): much of the narrative information is already, or should be, in body of report. The info in this appendix should be limited to the more granular information related to cost, low carbon calculator and marginal abatement cost analysis.
 - SEG Response: See comments above. -MB
- Appendix C: Suggested Actions (currently Appendix E). Not sure why this is a separate Appendix, and not part of the body of the report, perhaps as a new section 3, following the scenarios.
 - SEG Response: Generally I agree what is referred to as appendix really should be part of the body of the report, with section 1 and 2 being the "executive summary". -MB
- Appendix D (currently F, Project Approach) This is ok to establish how the background behind the report and how public engagement was accomplishment, but lets relabel it accordingly (Public Engagement, or something like that)
 - Response: Updated
- Appendix E (currently G, Additional Info)

- Scenarios: STRONGLY consider focusing the narrative in the main report around the 2030 scenario, maybe even as a recommendation, and reference that if the City wants to accelerate the timetable, it can do so by investing more in RECs in other areas of the State. This is going to be the key point of contention when the report is reviewed by the Committee and ultimately council: achieving the overall goal will require the City to (i) partner with Alliant and MGE to build more renewable resources for the City (and residents) to utilize and (ii) buy RECs as offsets. The City will have to make a policy choice if it wants to accelerate the timeline: more dollars toward RECs will quicken the pace, but lessen the investment in direct actions that reduce the City's carbon emissions, including in the development of new renewable resources that can be utilized by the City and its residents. By focusing on the 2030 scenario, and then including the other two as scenarios for accelerating the pace, the policy choice becomes clearer (as opposed to including all three as a menu of options).
 - SEG Response: I don't disagree, but we thought the this was a policy decision to be made by SMC and the alders, not by the consultants. Let's revisit this discussions with larger SMC. -MB
- Comments on present draft:
 - Exec Summary: Third paragraph uses word "options" when rest of report uses "scenarios" Per bullet point above, I think this third paragraph should make it clear that the City only has a few levers to achieve its goal (Direct action around energy efficiency and renewable investment, and offsets) and the timeline is a function of how the city chooses to invest in these.
 - SEG Response: See comments above. I edited options to scenarios in the referenced paragraph. -MB
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 - o Section I
 - P. 1: Reduce "carbon emissions" (1st bullet)
 - SEG Response: Revised. Also added footnote that clarifies "Carbon", "carbon emissions" and "carbon dioxide emissions". - MB
 - 1.1.1: "Solar targets" should be "renewable targets"; then make it clear that the emphasis on solar is due to unfeasibility of other renewable resources (wind, etc)
 - o SEG Response: Edited as indicated. -MB
 - P. 2: Reference to OV REC project is inaccurate. Use MV's comments. Report should include info (maybe it's already there) on how much of the City's OV purchase is included in the Scenarios. In other words, is that already part of the baseline, such that all the REC purchases reflected in the scenarios are incremental investments?
 - SEG Response: REC deal language has been updated. -MB

- Nav: OV RECs are not part of the baseline. OV RECs would satisfy a big part of the REC requirements for each scenario. - JA
- Section 2 (see comments above—I think this section must be rewritten to clarify the policy choice)
 - SEG Response: I don't disagree, but we thought the this was a policy decision to be made by SMC and the alders, not by the consultants. Let's revisit this discussions with larger SMC. -MB
- o A.2.1

JH is correct- net metering section should be clarified: the point is that current rules limit the amount of onsite solar customers (like COM) can install because kws over customer load are compensated at the wholesale rate. Hence, solar is economic to the extent customer can offset consumption otherwise paid for at higher retail rate.

• SEG Response: Language in this section has been revised. -MB

Similarly, re municipalization, WI law grants incumbent utilities indeterminate permits so COM cannot leverage franchise renewal for energy policy preferences; in Boulder's case, residents were willing to fund efforts by paying a sizable surcharge on electric bills. Here, COM has opted to collaborate with MGE.

• NAV: Thank you, we updated this comment. - JA

o B.1.5

Can't these retrofit investments be ordered in terms of some cost-benefit priority? Reconfiguring Capital Heat and Power plant (Page B-5, 2nd to last par.) seems way too costly to be included as an "option".

- SEG Response: In Appendix D Scenario section, the measures have been prioritized by cost /carbon benefit. The plant reconfiguration was not included in any of the scenario's. -MB
- B.2

Intro to this section has to do a better job of distinguishing between what City can do BTM, and what it can do in partnership with MGE, either through RER or siting a community solar project. Not sure why wind is foregrounded when later it becomes clear it is unfeasible. Same with other resource options.

• SEG Response: The B subsections break down renewable generation by behind the meter, offsite solar, off site wind, greener grid and REC's. At this point, wind is a bit inaccessible to the City outside of REC's, but that could change over time, which is why we still include it. We are open to any language revisions for the intro. -MB

B.2.1

The discussion about alternative financing should be clearer: City can selffinance by taking advantage of low cost of borrowing as a unit of local government. But State Constitution imposes a debt limit and debt financing is costly, so partnering with other entities is essential. Many local governments enter into co-ownership arrangements with entities (which can include the incumbent utility) so that they can take advantage of PTCs unavailable to City as a unit of local government. I don't think Id include Monona in that list (they used a different model not replicated by other municipalities). Key point here, however, is that the City does own a significant portion of the system upfront, using grant money, or other financing sources. This point is unclear in draft at present ("The developer largely covers the initial cost of the system in this arrangement"). I would absolutely eliminate the discussion about RFPs and state policy. No need to open that can of worms.

• SEG Response: This section has been revised. There are lots of ways for the city to finance solar. SMC and alders need to decide what is the best choice for the City. I included footnote reference to the UW extension Solar Finance Guide that goes into detail on all the different options. -MB

B.2.4

The point of this section should be emphasize that City has an opportunity to partner with both these utilities to build more renewable resources- utility scale, as well as behind the meter (through RER, in MGE's case).

• SEG Response: B2.2. is the section about off-site solar development. The only (existing) way for COM to accomplish offsite solar without a straight REC deal is through the MGE RER. B2.4 is intended to be about rate based renewables that are being developed by MGE and Alliant. -MB

B.2.5

This RER discussion needs to be much clearer- explain what a REC is (it's a means of accounting for the renewable attributes associated with a unit of electric generation, not an "investment associated with production of electricity") and emphasize that it's a method to increase investment in local renewable resources by providing enhanced revenue streams to developers or offtakers. As stated earlier, there should be a discussion of how COM's investment in the OV RECs is factored in to the scenario analysis.

• SEG Response: Revised language in this section, specifically related to the first sentence of this section. -MB

D.1—see larger discussion about Scenarios. I would point out here that the Table D-1 on Page D-2 for 2020 key measures is different than same table when it appears on p. 9/10.

The table has different terminology for the pilot implementation efforts, also missing electric buses and landfill CNG.