

Commenter Name	Comments Received / Comments Page No.	Text	Questions / Comments	Consultant Responses	Discussion with SMC?
			<p>A. Invest our limited resources to create renewable energy for our use, not for Renewable Energy Credits (RECs).</p> <p>In my view, converting our energy sources to "clean energy" means replacing the fossil fuels that supply our electricity, natural gas, gasoline and other energy with renewable sources like solar, wind, biogas, and geothermal.</p> <p>Investing in REC certainly helps create renewable sources somewhere, which is itself a positive step towards de-fossilizing the whole energy system. But we have a very limited ability to force our current suppliers of fossil-fueled energy to quickly switch to clean sources, and we have very limited financial resources to directly replace those fossil sources in a short timeframe. So I understand the attraction of investing in RECs as a readily available source representing "clean energy."</p> <p>But I believe Madison's citizens will more clearly understand and accept that their tax dollars are being spent to reduce energy use and to create local, sustainable sources of clean energy, and our City will have much better prepared itself for a true clean energy future. We certainly have begun that effort with Madison-Sun, rooftop solar on our buildings and other programs, but we can partner with the County and utilities to work on this essential goal.</p>		
Jarvis Green	Via Email		<p>B. Work cooperatively to generate local biogas to replace our natural gas usage as soon as possible.</p> <p>The draft report does not seem to address how we will replace the flared, fracked fossil gas we now use to heat buildings and water, run commercial operations and even generate some of electricity we use. Yes, many energy uses will change over from gas to electricity, but we will still need to keep pumping gas into the system for many years.</p> <p>As I have expressed several times at our meetings during the past year, we have large amounts of organic "wastes" that could be utilized to produce local, clean biogas and feed it into the massive gas distribution infrastructure we already have. Can all the manure, leaves, lake plants, and recycled food materials we generate be converted by digesters into a clean, renewable replacement?</p> <p>We have already successfully utilized the gas generated in our landfills and manure/food digesters to locally produce electricity and fuel vehicles. I believe the City, Utilities, Dane County and others should work intensively to build the collection and processing systems to best utilize our organic wastes for local, clean biogas.</p>	Added text 4.2.6, about a local REC program.	none
Jarvis Green	Via Email		<p>Report text often moves between addressing conversion of City operations only and converting the entire City to clean energy. For example, the Executive Summary begins with this statement:</p> <p>"In March 2017, the City of Madison became the 25th city in North America to set a goal of achieving 100% renewable energy and net-zero carbon emissions."</p> <p>So right here at the beginning of the document we don't know which this means, but I believe most would assume it means the goal is for clean energy City-wide. This sentence, and all further expressions of the scope of actions described this report, should be consistently clear which they mean.</p> <p>Here is another example from the next page, 1. MADISON'S CURRENT SUSTAINABILITY SUCCESS :</p> <p>"The City of Madison recently adopted a new comprehensive plan, which includes a priority for the City to implement its 100% renewable energy and net-zero carbon emissions goal."</p> <p>The following sustainability goals were in place as of the writing of this report:</p> <ul style="list-style-type: none">• Reduce carbon emissions by 80% by 2050• Obtain 25% of electricity heating and transportation energy from clean energy sources by 2035• Reduce overall energy consumption by 50% by 2030 (Watt and therms per square foot or equivalent unit of measure)..."<p>Besides being much clearer about what scope these goals address, this text should clarify which goals were adopted when and where, for example:</p><p>"The following sustainability goals were adopted in 2012 Madison's Sustainability Report:"</p><p>Many other statements of goals and actions throughout the report confuse these two very different scopes and should be made very clear to all readers.</p>	Added section 4.1.16 regarding biomass	none
Jarvis Green	Via Email		<p>really like the report and noticed that on page B-16 Status of EV Charging infrastructure in Madison, it dnan a good job of promoting EV charging and the current efforts in the Madison area. I would like to submit an edit to the description of MGE's efforts to promote EV charging through our program and services. "MGE owns 30 public charging stations in the Madison area, including 27 Level 2 chargers and three DC fast chargers – eight of these stations are located in the City of Madison parking facilities. MGE will install another DC fast charger at Home Depot in November 2018, and three additional Level 2 chargers by the end of the year. MGE also offers a Charge@Home program that currently has 50 participants with approval to email up to 100 customers. The Charge@Home and public charging programs allow MGE to study charging behavior and how to best manage the impact of EV charging on our distribution system. MGE also partner with businesses and developers to install charging stations for employees and apartment residents."</p> <p>Attached are my comments on the document. Overall, it looks really good. I made comments throughout on suggested changes. The most substantive comment I have is a suggested rewrite of the overall outline of the document – it's unclear why all the details about the scenarios are buried in an appendix. To me, appendices are where you put things that don't necessarily add to the discussion of the report but offer supplementary information. Yes, there is so much relevant detail in the appendices that merit being placed front and center in the main body of the report. I have this written in one of my comments, but here is my suggested rewrite of the outline. I think it will make it a stronger report, but obviously feel free to take it or leave it.</p>	Revised narrative to clarify where we are referring to "city operations" or "city-wide" (larger community).	none
Jessie Shields	Via Email		<p>1. Madison Current Successes</p> <p>a. Constraints to further sustainability (currently appendix A2)</p> <p>2. Scenarios</p> <p>3. Summary of scenarios (currently the four pages at the start of section 2)</p> <p>b. Detail of scenarios... (currently appendix c)</p> <p>c. Technical detail of scenarios... (currently appendix b) (could also be renamed "Definitions of strategies")</p> <p>d. Suggested actions to accelerate... (currently appendix d)</p> <p>Appendix A: Baseline emissions</p> <p>Appendix B: Stakeholder engagement (currently appendix E)</p> <p>Appendix C: Additional information (currently appendix F)</p> <p>Great opening letter to provide context to this document</p> <p>Not a big task, but seems odd that we have a phase 1 and 2 report.</p> <p>Modify this reference to link to the specific webpage of Serra Club that mentions the 5 cities. I want to be the link referenced and was unable to find the one that is specific to that report.</p>	Updated report with this information 4.1.7 on or near page B-16	none
Joannette LaZarus	Via Email		<p>Really This seems somewhat biased statement, and without description. What are the challenges? What are the limitations? Is it that we don't have a municipal utility? Whatever limitations or challenges you think there are, it would be good to acknowledge them here. What does this entail? What is it tracking? I know what this likely entails, but the reader may not. Provide more details, like: How many buildings? All buildings? Or a monthly energy audit? Is it public information?</p>	Added description here	none
Joannette LaZarus	3	has limited options		Added information	none
Joannette LaZarus	3	Energy usage tracking.			none
Joannette LaZarus	4	These five cities only generate 100% of the energy used communitywide from renewable sources		Updated the reference link	none
Joannette LaZarus	5	Opening Letter		Updated report organization to pull key appendix items into the body of the report. Added information to Executive Summary	none
Joannette LaZarus	6	STAFF TO REPRESENTATIONS OR WARRANTIES, EXPRESSED OR IMPLIED		Included Raj's most recent letter in report	none
Joannette LaZarus	6			Updated	none
Joannette LaZarus	6			Updated	none
Joannette LaZarus	7	2. Scenarios to Achieve 100% Renewable Energy and Zero Net Carbon		Added 4-page section to Executive Summary and updated report organization	none
Joannette LaZarus	8	Table 1. 100% Renewable Energy and Zero Net Carbon Timeline Menu		Noted	none
Joannette LaZarus	8	Table 2. Scenario Key Financial Estimates - Simple Payback		Updated	none
Joannette LaZarus	9 Edits / Additions			Updated narrative	none
Joannette LaZarus	9, 10			none	none
Joannette LaZarus	10 Edits / Additions			none	none
Joannette LaZarus	B-5			Worked with graphic designer to highlight updates in final report	none
Joannette LaZarus	C-1			Updated	none
Joannette LaZarus	C-3			Agreed. Revised the report to move these items out of the appendix.	none
Joannette LaZarus	C-7			Deleted the year column on the 3 tables detailing the measures.	none
Joannette LaZarus	C-9			We included it as text for narrative purposes to explain the tables better.	none
Joannette LaZarus	C-12			Removed the years from the tables. MGE	none
Joannette LaZarus	D-1			We selected 20 energy efficiency, renewable energy and transportation measures to include in models based on ability for city operations to implement, energy/climate impacts, and cost effectiveness. The additional actions are included in the report as good suggestions that most require additional information before a more detailed analysis, as part of a future implementation effort. Propose to discuss priorities and get feedback from SMC about how to best address additional suggested measures.	Yes, Agenda Item 2 we would like to discuss with SMC about 20 key measures and possible prioritization of additional measures
Joannette LaZarus	D-2			Added reference to stronger building codes and stretch codes	none
Joannette LaZarus	D-3			Added reference to stretch building codes and stretch codes	none
Joannette LaZarus	D-4			Added reference to stretch building codes and stretch codes	none
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Jessica LeClair	B-11	The need to provide clean, decarbonized, and efficient transportation plays an important role in solving many of the most serious challenges facing the greater Madison area including public health, air quality, noise pollution, and the City of Madison's Racial Equity and Social Justice (RESJ) goals.	When discussing Transportation, the #1 most effective strategy to improve public health and health equity is to increase opportunities for Active Transportation. We are missing an analysis of strategies to reduce energy consumption by increasing active transportation through planning and policy. This is 100% under the purview of the City.	We agree it is important, we didn't go into much detail in our report because many of the larger "active transportation" topics are addressed in the Madison in Motion comprehensive sustainable transportation plan (2017) that is covered by different city and regional planning agencies. We added some narrative language about this, although the larger transportation demand management issue is addressed in the Mobility Madison plan.	none
Jessica LeClair	B-11	Most of these involve decreasing the amount of transportation fuel in use by fleet vehicles, but a second approach entails switching to fuel that emit fewer GHG emissions (i.e., replacing a vehicle that uses gasoline with one that runs on lower emissions, such as compressed natural gas (CNG) or propane).	What about a "3" approach: decreasing vehicles on the road by increasing access to public and active transportation options?		none
Jessica LeClair	B-16	* MG&E has an EV charging station map on its website and offers programs to customers to charge at home and at the workplace.	Does this include access to EV charging in lower income neighborhoods? Apartment buildings, etc?	MG&E current programs are available to all customers, as of now, we understand that the program is targeting new apartment buildings, most of which are market rate; however, MG&E is talking with many other developers from whom we have been told, agreed that as part of a city-wide EV charging plan, MG&E and other stakeholders should account for using charging stations in lower income neighborhoods.	none
Jessica LeClair	D-2 Edits / Additions	* Electric vehicle zoning and permitting. The City of Madison should implement an EV and EV charging station zoning and permitting policy identifying areas of the city with appropriate grid requirements or needs where EVs and vehicle-grid initiatives could support strategic zoning, appropriate investments, and Racial Equity and Social Justice Initiative goals. City permitting requirements should be transparent and clear. Some cities include incentives and/or requirements for EV charging stations in new developments or major retrofit projects and projects that require city subsidies or financing, such as TIF.		Made text edits as indicated.	none
Jessica LeClair	D-4	Action: Initial policies and/or funding preferences for C&A and the Affordable Housing Trust Fund that all new single-family homes built with C&A funds should be certified as Net Zero Ready, and all affordable housing using city funds should be built as renewable-ready and EV-ready.	Need What about also retrofitting existing properties that are using C&A funds?	We added a reference to existing buildings using C&A funds.	none
Jessica LeClair	D-7, D-8 Edits / Additions	Action: To accommodate the rapidly increasing demand for EVs in Madison and the surrounding area, the City should immediately develop comprehensive plans for the implementation of EVs and EV charging infrastructure. The City should use its Madison in Motion plan (2017) and work with the Madison Area Transportation Board, MG&E, Alliant, and other organizations to develop appropriate plans for future distribution and procurement of public EV charging stations through 2030. Whenever possible, public EV charging stations should be accompanied by solar PV installations (and energy storage if beneficial) to ensure that EVs are charged with renewable energy and to provide educational and outreach opportunities for the public. Utility tariffs and rate structures must also be created to address the needs of EVs and EV charging infrastructure, while also meeting local equity and social justice initiative goals. An initial target for public EV charging stations could include 100 new public EV charging stations by 2023 and 250 new public EV charging stations by 2030. The target should be revised as needed based on market research and customer surveys. The City of Madison EV implementation plan should include the mapping of current EV charging stations to include an interactive map of current EV charging stations via a public website.		Made text edits as indicated.	none
Jessica LeClair	D-8 Edits / Additions	Action: Continue to work with other local governments and electric utilities to develop and promote community solar options, while also meeting the goals of the Racial Equity and Social Justice Initiative. Set appropriate targets, aim to develop 5 MW of community solar by 2020, 20 MW by 2023 and 30 MW by 2030.		Made text edits as indicated.	none
Jessica LeClair	D-9	The City of Madison has negligible control fossil generation, the retirement order generation resource	This doesn't make sense.		none
Jessica LeClair	D-9	2 + 1 fossil-fueled electricity generation in the Community	??		none
Jessica LeClair	D-9 Edits / Additions	More efficient, affordable, green, and net zero energy projects are developed in Madison and across Wisconsin each year. However, Madison needs more of these projects implemented more quickly with strategies that meet the goals of the Racial Equity and Social Justice Initiative.		Added text for clarity.	none
Jessica LeClair	D-9 Edits / Additions	Action: Madison can create a policy framework that creates healthy and thriving communities, called "green zones" or "energy investment districts." Green zones provide a framework for equitable energy policies by infusing impacted communities with the financial and technical assistance needed for development of local renewable energy resources. There are five aspects to the green zone/ID model: 1. Identifying overburdened and impacted communities. 2. Prioritizing identified communities for public investment. 3. Advancing on the ground models. 4. Providing resources and assistance to impacted communities. 5. Facilitating community governance and democratic decision-making processes.		Made text edits as indicated.	none
Jessica LeClair	D-9 Edits / Additions	Action: Continue and expand funding for Madison and consider funding additional community engagement initiatives that align with the goals of the Racial Equity and Social Justice Initiative, such as collaborating with established community-based organizations that have a history of working with historically marginalized communities. Face-to-face outreach and culturally appropriate and multilingual marketing are best for environmental justice communities. Crowd-sourcing ideas, competitions, increase collaboration with the Focus on Energy program. Begin a dialogue with the Madison Metropolitan School District about energy efficiency and renewable energy at area schools, expand work with community-based organizations who work with or represent people burdened by health and social inequities, neighborhood associations and the faith community to provide education, outreach, and technical assistance about the benefits of clean energy for Madison.	Source: Farchild, D., Weinreb, A. (2017) Energy Democracy: Advancing Equity in Clean Energy Solutions. Island Press. P. 59-61	Added this suggestion to Additional Ideas section.	none
Jessica LeClair	D-11 Edits / Additions	Source: Farchild, D., Weinreb, A. (2017) Energy Democracy: Advancing Equity in Clean Energy Solutions. Island Press. P.62		Good suggestions; some are included in other recommendations; will discuss with SMC and update.	none
Jessica LeClair	E-1	such as City of Madison departmental staff and the SMC.	Have RESJ members been engaged?	We met with RESJ members in December 2017; city staff will discuss next steps with SMC.	yes, per Agenda Item 1 (we met with RESJ team in December 2017 for initial discussion; city staff will discuss possible next steps)
Jessica LeClair	E-1	external stakeholders	Have organizations representing historically marginalized people been engaged?	As indicated above, we had an initial meeting with RESJ members in December 2017; city staff will discuss next steps with SMC.	yes, per Agenda Item 1
Jessica LeClair	E-1	public input meetings	Are low income communities? Including historically marginalized groups?	The public input meeting was held at the Central Library and was open to all.	none
Jessica LeClair	E-1	public internet surveys	Outreach to people with little to no internet access? Multiple languages?	We did not conduct outreach to people with little or no internet access. All outreach was conducted in English.	none
Jessica LeClair	E-2	other local stakeholders	Historically marginalized groups??	As indicated above, we had an initial meeting with RESJ members in December 2017; city staff will discuss next steps with SMC.	yes, per Agenda Item 1
Jessica LeClair	E-2	Almost 100 people attended the meeting	What were the demographics of this group?	We didn't collect formal demographics; the public meeting photo suggests that most of the attendees were in that demographic.	none
Jessica LeClair	E-3	Figure 1.7. City of Madison 100 Percent Renewable Energy and Zero Net Carbon Public Meeting September 27, 2017	White, middle to upper class, English speaking?	We didn't collect formal demographics; the public meeting photo suggests that most of the attendees were in that demographic. As above, city staff will discuss possible next steps for RESJ team with SMC.	none
		We have set an ambitious goal for our city—100% renewable, zero-net carbon energy. Madison is the first city in Wisconsin set our sights so high. We aim to be the first to meet the challenge. But understand, this work is about more than "the environment".			
		Clean energy is about people, the community we live in, and the city we deserve.			
		The fossil fuels we use every day cause climate change. 2016 will be the fourth hottest year in recorded history. The only years hotter were 2017, 2016, and 2015. That string of records is part of a rapid climb in temperatures since the start of the industrial age. And the warning signs for what could come are all around us. Fire rages. Floods rise. Wildlife disappears. Food and water grow scarce for too many each day.			
		At the same time, income inequality has skyrocketed. Disparities along race and gender lines persist. And women, people of color, and low-income communities stand to lose the most as the planet warms.			
		Scientists are very clear that our health and safety depend on rapid changes to the way we live and work. Our community is just as clear that Madison must show the way toward a green future.			
		We can't afford to wait to confront the threat of climate change. Renewable energy technology has advanced at breakneck speed and costs continue to plummet. Our city will save money if we power our lives with the sun and wind. We will also honor our commitment to social and environmental justice. This report is the first step.			
		Enacted are options to set Madison on course to 100% renewable, zero net carbon energy. We present three timelines and recommended actions to meet each. The first scenario emissions success by 2020 and relies heavily on investing outside the city. The second hits our target by 2023 and requires more local investments. The third reaches our goal by 2030 and requires additional investment with immediate impact.			
		It is an exciting moment for Madison. But it is only a beginning. Our people have big dreams. It is up to all of us to create a city that is true to our ideals.			
Bo Shultz	Cover Letter - Edits / Additions	We have everything we need. Now, let's get to work!		inserted new letter and edits to "historically marginalized populations"	none
Michael Vickerman	Via Email		looks like there are other utilities that have submitted a green tariff and that different utilities use different standards for net-metering.		none
		After our conversation last night, it occurred to me that many people will read the HGA/Navigant report and evaluate it through the lens of the recently released IPCC study on limiting increases to 1.5 C (see excerpts below). That report is generating a substantial amount of public discussion on climate change, and it seems to be amping up public perception that more drastic action is necessary. In interim goal, which for us translates to a 40% reduction in human-caused CO2 emissions by 2030 (which, would be an incredibly stiff challenge for any city in the United States, let alone in Wisconsin, with a state government that pretends that climate change is someone else's problem. As it relates to the current draft report, I strongly recommend working in some reference to the IPCC report, perhaps in a sidebar, and expand on it with some discussion acknowledging the need for ambitious and sweeping changes to happen rather quickly. I understand that this will result in more work for you, but believe there is a real danger that the report will be regarded as "weak tea" if it is issued without any reference to, and discussion of, the IPCC study's conclusions.	https://www.ipcc.ch/news_and_events/2018/PAG_sgm.shtml	The report finds that limiting global warming to 1.5°C would require "rapid and far-reaching" transitions in land, energy, industry, buildings, transport, and cities. Global net human-caused emissions of carbon dioxide (CO2) would need to fall by about 45 percent from 2010 levels by 2025, reaching "net zero" around 2050. This means that any remaining emissions would need to be balanced by removing CO2 from the air.	
Michael Vickerman	Via Email	"Limiting warming to 1.5°C is possible within the laws of chemistry and physics but doing so would require unprecedented changes," said Jim Skee, Co-Chair of IPCC Working Group III.		We updated the report to include information from the latest IPCC report and further reflect the sense of urgency needed to implement the City's 100% RE plan.	none
		I would echo Michael's statement. The IPCC Special Report changes the conditions under which the City of Madison must implement this plan. The actions are increasingly important and urgent and the City should be sure to make this clear throughout the document. Practically speaking a forward or an introduction focused on the new IPCC might be very useful. And if we wanted to go even deeper we could reflect on the WCCO models for a wetter and warmer Wisconsin with more intense storms. We have seen how those predictions played out with major flooding in August of this year.		As indicated above, we updated the report to include information from the latest IPCC report and further reflect the sense of urgency needed to implement the City's 100% RE plan. We have a reference to the flooding in August and Bob Lindner's presentation about increased heavy rainfall leading to possible flooding or other extreme weather events.	none
		Overall organization: Consider moving reporting out 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 or 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.		We updated the organization of the report to reflect this outline and the comments above.	none
Richard Heinemann	Via Document	Appendix A: Baseline Data (currently A-1)		As indicated above, we updated the organization of the report to reflect this outline and the comments above.	none
Richard Heinemann	Via Document	A.2 (Constraints) should be in the body of the report, as a new Section 2		Agreed	none
Richard Heinemann	Via Document	A.3, A.2, A.3 should also be in body of report, because they establish the basis for understanding the Scenarios.			none
Richard Heinemann	Via Document	A.4 (Policy review) seems like it should go in what is now Appendix C (additional actions to accelerate). The References sections should be included in what is now Appendix G (Additional info).		Updated	none
Richard Heinemann	Via Document	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 transition and regional achievement (not analysis).		Updated	none
Richard Heinemann	Via Document	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).		As indicated above, we updated the organization of the report to reflect this outline and the comments above.	none
Richard Heinemann	Via Document	Appendix D (currently F): Project Appendix This is an to establish how the background behind the report and how public engagement was accomplished, but not really a separate (Public Comments), or something like that.		Updated	none
Richard Heinemann	Via Document	Appendix E (currently G): Additional info			none
		2030 scenario, maybe even as a recommendation, and reference that if the City wants to accelerate the timeline, 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 MG&E 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 accelerate the goal, but lower 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 including the other two scenarios for accelerating the pace, the policy choice becomes clearer (as opposed to not making the choice as a result of the report).		We would like to discuss how SMC would like to prioritize the scenarios in the new 3rd SMC meeting.	yes, per Agenda Item 1
Richard Heinemann	Via Document	Free Summary: Third paragraph used word "options" when read of report use "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.		Edited "options" to "scenarios" in the referenced paragraph. Added language about city officials having few levers to achieve 100% RE goal.	none
Richard Heinemann	Via Document	B Section 1		Revised. Also added footnote that clarifies "Carbon" "Carbon emissions" and "carbon dioxide emissions"	none
Richard Heinemann	Via Document	B.P. 1: Reduce "Carbon emissions" (2nd bullet)			none

Richard Heinemann	Via Document		8.1.1 "Solar targets" should be "renewable targets", then make it clear that the emphasis on solar is due to unavailability of other renewable resources (wind, etc)	Edited as indicated	none
Richard Heinemann	Via Document		7.2 Reference to OR REC project milestones. Use REC's comments. Report should include info (maybe it's already there) on how much of the City's PV 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?	Updated description. The Organic Valley RECs are not part of the baseline in the report, they would satisfy a big part of the REC requirements for each scenario.	none
Richard Heinemann	Via Document		Section 5 (see comments above—I think this section must be rewritten to clarify the policy choice)	Updated language to clarify	none
Richard Heinemann	Via Document		7.2.1.1 PH 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 few ever 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.	language in this section has been revised	none
Richard Heinemann	Via Document		Similarly, re municipalization. We saw grants incumbent utilities indeterminately permits so COM cannot leverage franchise renewal for energy policy preference; 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.	We updated this comment.	none
Richard Heinemann	Via Document		8.1.1 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".	The measures were prioritized by cost /carbon benefit in a different section. The plant reconfiguration was not included in any of the scenarios.	none
Richard Heinemann	Via Document		2 Intro to this section has to do a better job of distinguishing between what City can do BTA, and what it can do in partnership with MGE, either through RER using a community solar project. Not sure why end is foregrounded when later it becomes clear it is unfeasible. Same with other resource option	Updated language to clarify the limited options available to city officials	none
Richard Heinemann	Via Document		2.2.4 The discussion about alternative financing should be clearer. City can sequeffiance 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 PFCs unavailable to City as a unit of local government. I don't think it include Measure 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 RPS and state policy. No need to open that can of worms.	This section has been revised. Included footnote reference to the USE extension Solar Finance Guide that goes into detail on different options to finance solar for some examples.	none
Richard Heinemann	Via Document		2.2.4 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).	Updated language	none
Richard Heinemann	Via Document		2.2.5 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 off-takers. As stated earlier, there should be a discussion of how COM's investment in the OR REC is factored in to the scenario analysis.	Updated language to clarify	none
Richard Heinemann	Via Document		The table has different terminology for the pilot implementation efforts, also missing electric buses and landfill CNG.	Agreed with RH about the reorganization. As I read the more detail descriptions in the Appendix, could direct an anchor /word(s) needed in the following to bounce back and forth.	none
Stacie Rance	Via Document		TOC: "Demand Side" vs. "Supply Side" hyphen or not, pick one and find/reduce throughout for consistency	As indicated above, updated the organization of the report	none
Stacie Rance	Via Document		TOF: Figure A-2 and Figure A-3 have """" that I am unable to find. Also, when creating TOCs it grabs the same title as later in the report (pg. A-3) — is there a way to fix this?	Modified the formatting of the """" so that it should no longer show up in the TOC. MB	none
Stacie Rance	Via Document		TOF: Figure D-10 has a double space after hyphen	Updated	none
Stacie Rance	Via Document		TOT: Fix Table D-7 to look like Table D-4	TOT: Fix Table D-7 to look like Table D-4	none
Stacie Rance	Via Document		Opening letter: This is for Bay 2nd para, change "poor people" to "low-income communities"	Changed as indicated	none
Stacie Rance	Via Document		Executive Summary: 1st para, along JRC comment, after first meeting wasn't clear the difference between the 25 cities in MA and the 20 entities in the US.	Updated to clarify	none
Stacie Rance	Via Document		Executive Summary: 1st para, last line: is referencing any sort of health benefits, those could be eliminated through EPA's AHERA/CDBA laws.	Notes: We added the AHERA/CDBA law as a reference.	none
Stacie Rance	Via Document		1.1.3 Transportation, 4th bullet: Madison Mobility Plan, is this Madison in Motion? MIM is referenced later in report (see C.1.1. Check for consistency)	Yes, updated the language	none
Stacie Rance	Via Document		1.1.3 Transportation, 2nd bullet: "MGE" but see later on the same page 1.2.2 para "Madison Gas & Electric (MGE)"	Updated. Added Madison Gas and Electric to the first "MGE" in the report for clarity.	none
Stacie Rance	Via Document		Page 5 3rd bullet, change to "Dane County Council on Climate Change"	Updated as indicated	none
Stacie Rance	Via Document		Page 8, Table 1 – Do we want to have a table that includes a side-by-side comparison of Cost, \$ Savings, Payback Year? Also agree with comments that the Table 1 / Figure 1 could be combined or organized in a way to better complement	Added summary table for the economic numbers.	none
Stacie Rance	Via Document		Page 9, Figure 1, per JK comment, if color changes occur, note they are repeated in subsequent graphics / tables and will also need changing. Also agree with RH comment on not using "REC Heavy" as to a layman, not sure if that is a positive or negative or what it means to the overall picture	Deleted that graphic with the arrows.	none
Stacie Rance	Via Document		Figure B-1, can we use the branding through the rest of the report?	The graphic designer will provide ideas for the branding of the report.	none
Stacie Rance	Via Document		B.1.1 – "COM" spell out	Updated	none
Stacie Rance	Via Document		Page B.10, 2nd para, "behind the meter" in section title "Behind the Meter"	Updated – to hyphen throughout	none
Stacie Rance	Via Document		Page B.10, JK Comment, comment: it should reference "gross subsidy" as that is the language PSC / MGE uses when listing the MWR that a meter can use on a RER project (so as to not cause cross subsidies from ratepayers to meter)	Added language	none
Stacie Rance	Via Document		Page B.3, moved to Focus on Energy (FOE) and TOC in same para as it is spelled out throughout rest of report	Edited throughout.	none
Stacie Rance	Via Document		8.1.2 Title is not in italics	Revised with italics.	none
Stacie Rance	Via Document		8.1.11 – Possibly include something about resilience here?	Updated to include reference to resilience.	none
Stacie Rance	Via Document		8.1.15 – Change to "Dane County Council on Climate Change" also add the Municipal Working Group under the CCA	Updated terminology	none
Stacie Rance	Via Document		F.3.4 – include Madison Energy Cloud Graphic?	Included Madison Energy Cloud graphic.	none
Stacie Rance	Via Document		Page G-6, is Madison College "REC" for Renewable Energy Certificate? If so, spell out	Revised as noted.	none