



**CITY OF DULUTH**  
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**Addendum 1**  
**File # 19-05AA**

**RFP Develop and Implement an Energy Service Micro-Grid System**

This addendum serves to notify all bidders of the following changes to the solicitation documents:

1. The timeline from receipt of answers to questions (March 7th) to the proposal due date (March 14th) is only 7 calendar days. This is a very, very short window to make adjustments, obtain revised quotes, etc. Would the City of Duluth consider extending the due date by 1-2 weeks to provide more time to absorb the answers and reflect them in our proposals?
  - a. Please feel free to submit questions as you go, the City will make every effort to turn answers around as fast as possible. In addition, the City has revised the timeline as indicated below:  
Questions due: 12:00 noon central time, Tuesday, March 12, 2019  
Responses provided: Thursday, March 14, 2019  
**Proposals due: 4:30 pm central time, Thursday, March 21, 2019.**
2. If a site walkdown was requested, could it be provided?
  - a. Yes, a site walkthrough has been scheduled for 1:00 pm central time on Thursday, March 7, 2019 at 8130 Congdon Park Blvd., Duluth, MN 55804. Attendance is not mandatory but is encouraged.
3. What is the driver for renewable energy and battery storage? A completely diesel-based back-up system would be significantly less expensive than a renewable-based microgrid.
  - a. It is understood that diesel back up generation is cheaper. The City of Duluth has committed to reducing Greenhouse Gas emissions 80% by 2050. As a result, the offsetting of our grid consumption is valuable from an environmental stand point as well as a cost stand point. Further, battery storage on site will allow us to peak shave and recognize further value. Finally, the city owns and operates the local natural gas company and there is a 6in gas main that runs past the site.
4. Thank you for the screen prints of the site. Is it possible to mark them up (redlines) and show available land, rooftop, etc. where renewable energy, BESS, or diesel generators could be installed? Or areas that are not available to build on? This will allow us to better understand the real estate we have to consider for the microgrid solution.
  - a. Attached is an aerial view from Google Earth (Attachment 1). The black shaded polygons are not available to use. In regards to the roof, roof features would

need to be strengthened in order for it to support solar and meet current standards. Through the middle of the photo there is a black line. It is our preference that priority be given to the areas to the “left” or south/southwest of that line.

5. The last page of the RFP is a screen shot of the site with a few markers for buildings. We are unsure which of the service lines (white or green) are the utility lines expected to be buried underground. Is it the white line or the green lines or both?
  - a. The green lines are owned and maintained by the city of Duluth. The long green line is an overhead line that we would like buried. The short green line is already buried. The city is open to the possibility that the utilities line (the white line) will need to be relocated as a result of this project. If so, we would like as much of the electrical infrastructure on site buried as reasonable.
6. Section IV.3.iv – “engineering design, proof cost, and long-term service contracting”. Does this mean the selected contractor would perform the engineering and final cost estimates without city council approval? Does that mean these efforts are unpaid, internal costs? Please provide more details on what is meant by this phase.
  - a. The City is not asking for unpaid internal costs. It will be agreed upon prior to the design and cost determination work that the firm with the accepted proposal will have a fee for design and cost determination services. If the City chooses to have this work done and then not move forward with an implementation phase, the city will pay for the design services and own the plans. If we choose to move forward with the implementation of the project, those same design and cost determination fees will be included in the project cost and paid via the services provided.
7. Section IV.1 outlines a number of use cases for the microgrid. Can we assume the order of use cases matches the priority of the use cases? Meaning, reducing purchased energy is the highest priority, followed by demand response programs, etc. If not, please provide the priority of use cases for the EaaS microgrid.
  - a. Continued, indefinite, operation of low lift pump one, high lift pump one and necessary supporting operations, equaling ~1000 kW, in the event of grid failure
  - b. Greenhouse gas emission reductions
  - c. Providing services/solutions to reduce demand and load factor charges
  - d. Provide load shedding capabilities for our electrical utility
8. How quickly does the microgrid need to transition into island-mode? Some customers accept a transition in the ½ second range, while others required blinkless. Be aware that blinkless will require UPS systems that either cover the entire system (very, very expensive) or smaller UPS systems on critical loads. Either way, a blinkless system would add in significant cost. Please advise on your requirement.
  - a. It is our requirement that the pumps not shut off during the transfer from grid power to island mode.
9. We have concerns over the following statement from Section IV.2.i in the RFP, “the cost of these energy services will not significantly increase the operating cost associated with the production or distribution of potable water”. This is not feasible. A new, renewable-based microgrid with storage and diesel generation would be much more expensive than the current \$0.09 / kWh you’re currently spending. Preliminary analysis shows

energy pricing at 2-3 times your current pricing.....even with a 15 – 25 year PPA. Please confirm the City of Duluth recognizes the EaaS microgrid will cost quite a bit more and the project.

- a. The City of Duluth is hoping for innovative and creative partners who can work with us to solve problems. Further we are hoping that there are strategies available that will put the city close to making this goal.
10. Historical and concept roots can be found at <http://www.duluthmn.gov/energy/energy-projects/>.

Please acknowledge receipt of this Addendum by including it with your proposal.

Posted: **March 1, 2019**



# Potential Solar Locations

White areas are areas that could be locations for solar. That said we prefer solar to stay on the west and southwest areas. Exact genset and battery location can be discussed in development. At this time just note your preferred location.

- Legend
- Electrical Utilites feed
  - feed
  - Lakewood approx. Property
  - no
  - potential solar location
  - Water Distribution lines

