

Quadplex plus Health Facilities GESA RFP Written Questions and Answers

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RFP and Attachments

- 1. It appears that the December 2022 electric consumption provided in Attachment C is incorrect. Can this value be verified or updated?**

A: This value has been updated in the Attachment C file.

- 2. Upon review of the Attachment C Energy Use Profiles for Quadplex Buildings and Health Centers, the Municipal Services Building had very high water and sewer usage for September and October of 2020, but the recorded water and sewer cost for those months was very low. Please elaborate on the reasoning behind the high usage and low cost for water and sewer at MSB.**

A: These values have been updated in the Attachment C file.

- 3. Please clarify whether campaign contributions to state-wide Commonwealth representatives also need to be disclosed, or just City of Philadelphia reps.**

A: Campaign contributions only need to be disclosed for any individual who seeks nomination or election to Philadelphia City public office, other than a judge of elections or inspector of elections, whether or not such individual is nominated or elected. Contributions to state-wide Commonwealth candidates do not need to be disclosed.

- 4. The request for proposal (RFP) asks that proposals do not exceed 10MB to ensure email delivery. Would the Philadelphia Energy Authority (PEA) and City allow proposals to exceed 10MB if a link to a large file sharing site was emailed to the PEA and City?**

A: No. Links to file sharing sites will not be accepted. However, files up to 25MB in size will be accepted. Please split up files that are larger than 25MB and send each file via separate emails.

- 5. Hazardous material information such as prior asbestos and lead testing was not provided with the RFP. Given the age of the buildings, some hazardous materials may be encountered as part of the proposed scope of work. There is not sufficient time and building access for each company to perform the hazardous material testing needed to prepare scope and cost estimates for hazardous material abatement. Would the PEA and City be agreeable to either excluding hazardous**

material pricing from the RFP, or requiring all proposers to include a fixed hazardous material abatement budget of \$250,000 in their proposal?

A: We encourage Proposers to recommend an appropriate and reasonable contingency amount for hazardous materials abatement and/or alternative approaches including but not limited to including a material abatement budget of \$250,000. It is expected that final hazardous materials contingencies will be negotiated during the Investment Grade Audit process.

- 6. It is not clear if proposers are required to submit an Economic Opportunity Plan (EOP) with their proposal, or if the EOP is only required for selected proposers. Can you confirm that the EOP is only required for selected proposers during the next phase, the investment grade audit?**

A: A full Economic Opportunity Plan (EOP) is not required during the proposal stage, but proposers must, at a minimum, complete [Attachment F-1 – Economic Opportunity Plan Participation and Workforce Commitments Form](#) to outline how they would meet the participation commitments for the proposal scope. Selected Proposer(s) will be required to submit and agree to a legally binding EOP after completion of the Investment Grade Audit.

- 7. Section 4.3.6a of the RFP has a table that specifies the percentages required for each M/WBE category by work type. Are these percentages calculated using only the value of the work from first tier subcontractors? Is there any flexibility in the subcontracting structure to allow for 2nd tier subcontractors to fulfill the RFP requirements in section 4.3.6a?**

A: Percentages are calculated using only first tier subcontractors. Second tier subcontractors do not count towards M/WBE participation goals.

- 8. Section 4.3.3.ii., “Proposer Characteristics and Project Approach” and Section 2.3, “Proposer Team Resumes” states narrative and references are needed for each proposer team member. How many references are required for each team member?**

A: At least one reference should be provided for each key Proposer Team Member.

- 9. Attachment A, item 2.3 requests “...that the proposer provide a single PDF document with all key proposer team member resumes”. Should the single resume PDF document be in addition to our proposal PDF document (i.e. one resume PDF and a second PDF of our proposal)? Or should the resumes be a section within a single PDF document of our proposal (i.e. one PDF document that includes both resumes and our proposal)?**

A: Resumes should be included in the primary proposal document.

- 10. The projected energy savings generated from the requested scope is not likely to be sufficient to cover the financed cost of the improvements. Will additional capital funds be available to help fund the GESA project should a sufficient level**

of energy savings not exist? If so, could you please relate to us the available amount of funds?

A: If projected savings from the current requested scope is not sufficient to cover the costs, denote which measures cannot be covered and/or recommend Alternative Concepts. Include an estimate of additional capital investment needed. Proposers should be factoring all eligible federal and utility incentives to offset cost. Projects must still comply with Pennsylvania GESA requirements.

11. Is union labor required on the project?

A: Prevailing wage is required on all City projects. See Section 34.1., Labor-Management Relationship: Prevailing Wages of [GESA Contract, RFP Attachment E](#).

General

12. Please provide building populations for the buildings in scope.

A: MSB has a maximum of approximately 2,300 employees on a peak weekday. SCCJ has a maximum of approximately 650 employees on a peak weekday. Visitor population data is unavailable for these buildings.

On a peak weekday, Health Center 5 has approximately 90-105 employees and 360 patients/visitors seen over the course of day.

13. Please provide occupancy schedules and operating hours for each building.

A: The general operating hours for MSB and SCCJ are Monday to Friday 7:00 am to 5:00 pm, with the exception of the SCCJ lobby and basement which are open 24/7. Health Center 5 operating hours are Monday to Friday 8:00 am to 5:00 pm.

Refer to the Triplex Occupancy Schedules spreadsheet, saved in the shared folder, for MSB and SCCJ occupancy schedules. The Health Center 5 HVAC system runs occupied 24/7/365.

14. Please provide 30-min electrical interval data for the buildings in scope if available.

A: Refer to PECO Average 15-Minute Interval Data spreadsheet, saved in the shared folder.

15. Are the buildings in scope enrolled in the Demand Response program? If so, what steps are taken to shed load?

A: SCCJ and MSB are enrolled. The steps to shed load in a Demand Response event are as follows:

MSB

1. Reduce the frequency of the VFDs for the building air handler units and return fans to 35 Hz
2. Reduce the lighting levels in the building, in low or minimum occupancy areas

3. Turn off the operation of a select quantity of elevators: High Rise Bank (2) and low Rise Bank (1)

SCCJ

1. Set the chilled water setpoint for the Trane chillers to 47°F on Red Days and 49 °F on Demand Response Days
2. Reduce the frequency of the VFDs for the building air handler units and return fans to 40 Hz
3. Turn off the operation of a select quantity of elevators: Public 6pk bank (2)
4. Reduce the lighting levels in certain areas of the building with minimum tenant occupancy

16. What is the status of the previous GESA contract? Is it still under a performance guarantee?

A: The previous contract has ended. The performance guarantee period was 4 years and ended in 2019.

17. Please provide lighting line-by-lines from the 2015 GESA project.

A: Refer to the Quadplex GESA As-Built Lighting Summary, provided via the shared folder on 01/09/2024.

18. Please provide the IGA and the most recent M&V report from the 2015 GESA project.

A: Refer to the Quadplex GESA IGA, Volumes 1 and 2 (2011), provided via the shared folder on 01/09/2024, and the Quadplex GESA Quarterly Performance Report Y6Q3, saved in the shared folder.

19. Please provide drawings M2.3, M2.4, and M2.5 referenced in the PES Center for Criminal Justice Chiller Plant Optimization Project Progress Report (Attachment D).

A: Refer to the City Hall Chilled Water System Diagrams (M-2.3-2.5), provided via the shared folder on 01/09/2024.

20. Please provide recent sample utility bills (electricity, natural gas, oil, water/sewer) for each building.

A: Refer to the documents in the Sample Utility Bills subfolder in the shared folder. The City does not receive physical bills for any utilities except electricity. Sample bills for those utilities are generated from the City's utility data management system. There are no recent oil bills for these facilities.

21. Please provide the floor plans for each building.

A: Refer to Health Center 5 Mechanical and Architectural Set (1961), SCCJ Architectural Floor Plans, and various MSB drawings, saved in the shared folder.

22. Please provide Asbestos Hazard Emergency Response Act (AHERA) reports for SCCJ, MSB and HC#5.

A: These buildings are not required to comply with AHERA as non-school buildings. SCCJ has no known asbestos hazards as it was built in the 1990s. The City does not have current, comprehensive asbestos hazard assessments for MSB and HC#5. However, past sampling reports have detected asbestos in these buildings in some materials such as floor tile, ceiling tile, mastics, and pipe insulation. [The response to Question 5](#) provides guidance on how to handle hazardous materials abatement in proposals.

23. Could you please provide screenshots from the Energy Management System (EMS) DDC System at all 3 buildings?

A: Refer to the documents in the BAS Screenshots subfolder in the shared folder.

SCCJ and Chiller Plant

24. The scope for the Chiller Plant Optimization at the SCCJ building includes replacement of the Alerton Controls and integration into the City's Tridium EMS. Is this control replacement only for the chiller plant or the entire building?

A: This control replacement applies to the entire SCCJ building.

25. For SCCJ, very general lighting information was provided in Attachment B, but given no site visits are permitted, what is the expectation regarding proposals for lighting upgrades at this site?

A: Lighting for SCCJ is not part of the proposal scope and does not need to be included.

26. What kind of lighting upgrades have been done in the SCCJ?

A: Some lighting upgrades were performed as part of the first Quadplex GESA project. Refer to the Quadplex GESA As-Built Lighting Summary, provided via the shared folder on 01/09/2024. No further lighting upgrades have been performed since the first GESA project was completed.

27. Which part of the building, if any, requires cooling during the winter?

A: The locations within SCCJ and City Hall that require year-round cooling were identified in a 2012 analysis and can be found in the Winter Cooling Loads for SCCJ and City Hall (2012) document, saved in the shared folder.

28. Please provide chiller runtime logs if available.

A: Refer to SCCJ Chiller Compressor Log Sheet photos for total runtimes and SCCJ Chiller Plant Compressor kW spreadsheets for granular demand data for individual compressors.

29. Please provide the original submittal for the cooling towers or the model number and serial number. An image of the nameplate would suffice.

A: Make: Baltimore Aircoil
Model No.: IMT-1700-4

The model and contract number is shown in the SCCJ Cooling Tower Fan Spec Cover Sheet photo, saved in the shared folder. Cooling tower fan motor details can also be found in the SCCJ Cooling Tower Fan Motor Nameplate photo, saved in the shared folder.

30. Please provide any available MEP drawings for the central plant, especially P&ID diagrams showing chilled water and condenser water loops.

A: Refer to the SCCJ 2010 Chiller Replacement Project As-Built Controls drawings, SCCJ 2010 Chiller Replacement Project Bid Set (2009), and Quadplex GESA MSB and SCCJ As-Built Controls drawings, provided via the shared folder on 01/09/2024.

31. Please provide Controls Sequence of Operations for the central plant.

A: Refer to the SCCJ 2010 Chiller Replacement Project As-Built Controls drawings and Quadplex GESA MSB and SCCJ As-Built Controls drawings, provided via the shared folder on 01/09/2024.

32. What is the status of the Practical Energy Solutions (PES) economization project described in Attachment D?

A: PES has completed site surveys and sketches. Scope of work and schematic design documents are in progress and the economization project can be coordinated with the Selected Proposer(s)' work.

33. Please provide data from the electrical sub-meters installed to track energy consumption for all major SCCJ CHW Plant components (as described in CHW Optimization report).

A: Interval data for chiller plant temperatures, flow rates, and kW for each piece of equipment can be found in the SCCJ Chiller Plant Submeter data (2022-2023) spreadsheets, saved in the shared folder.

34. What are the flow rates at the maximum and minimum load?

A: Refer to the SCCJ Chiller Plant Submeter data (2022-2023) spreadsheets, saved in the shared folder.

35. In the winter are the pumps serving the Justice center on or off? What about the pumps servings MSB?

A: Both sets of secondary chilled water pumps, the set serving SCCJ and the set serving MSB/City Hall, continue to operate throughout the winter under the current operation. The chilled water pumps located in MSB are left to freewheel unless manually started.

36. Does the cooling tower have a remote sump?

A: No.

37. Please provide CHW and CW treatment reports for the SCCJ CHW system.

A: Refer to Triplex HVAC Water Treatment Service Report (Dec 2023), saved in the shared folder.

38. Please provide City Hall utility consumption data. Interactive effects of the CHW optimization measures may affect energy consumption in this building.

A: Refer to the City Hall tab in the updated Attachment C file.

39. Please provide MEP drawings for SCCJ.

A: Refer to the SCCJ 2010 Chiller Replacement Project Bid Set (2009), provided via the shared folder on 01/09/2024. Additional MEP drawings are not currently available.

40. For CJC, is the greenish exterior roof a standing seam roof? If yes, what is the profile of the seams?

A: Yes, the greenish exterior roof is an aluminum standing seam roof. The seam profile is not available.

MSB

41. Several floors (2nd, 3rd, and 4th) currently have new 2'x4' & 2'x2' LED panels installed, please provide the manufacturer/model number information.

A: 2'x4' troffers are AIRVOLA24 30WLED-UNIV-30. 2'x2' troffers are AIRVOLA22 26WLED-UNIV-30.

42. Is the control system in MSB the City's central Tridium Niagara supervisor as described in Attachment D of the RFP docs? Or is it located elsewhere?

A: The BAS supervisor for MSB is in the MSB basement mechanical room office. This supervisor is also connected to the City's central supervisor, located off-site.

43. Which part of the building, if any, requires cooling during the winter?

A: The following locations within MSB require year-round cooling:

- AHU 7 Elevator Room
- 6th Floor Elevator Machine Room
- MOIS Communication (LAN) Room
- IT Room NE Concourse
- Central Duplication
- Emergency Generator

44. Please provide the full Mechanical drawings for MSB.

A: Refer to MSB Mechanical drawings (1962 As-Builts), provided via the shared folder on 12/14/2023.

45. For MSB, is there an elevator that goes to the roof? If not, what is the highest access one could get in an elevator and what would one need to do to get to the roof?

A: There is no elevator access to the roof. The highest floor the elevator can reach is the 16th floor. Then stairs need to be climbed to the roof hatch which uses a stationary ladder to access the roof.

46. We are already in receipt of mechanical drawings for the MSB building, but these drawings do not include performance schedules for the HVAC systems. Could you please provide the HVAC schedules for the MSB building?

A: All available HVAC schedule details are included in the MSB Mechanical drawings (1962 As-Builts) and MSB Mechanical drawings (1993 Renovation), saved in the shared folder.

47. Please provide structural and plumbing plans for the MSB parking garage.

A: Refer to the MSB Plumbing and Structural drawings (1962 As-Builts), provided via the shared folder on 01/09/2024.

Health Center 5

48. We are already in receipt of mechanical drawings for the Health Center 5 building, but these drawings do not include performance schedules for the HVAC Multizone and Atrium HVAC units. Could you please provide the HVAC schedules for the Health 5 Building?

A: All available schedules are included in the Health Center 5 Mechanicals and Architectural Set, saved in the shared folder.

49. Detailed lighting drawings and fixture schedules from May 2020 were provided for the Health Center. Was this system installed and, if not, what information is available regarding the existing lighting system?

A: The designed lighting system was not installed. Descriptions of the existing fixtures are available in the Health Center 5 LED Lighting Upgrade Fixture Schedule spreadsheet.

50. Please provide any available drawings for the original building (currently missing drawings 302 and 303), the addition (only have M-1 & 2), original JCI controls and subsequent Tridium Niagara controls, submittals for original equipment and subsequent replacement equipment.

A: Health Center 5 Mechanicals and Architectural Set has been added to the shared folder. Additional controls and equipment drawings are not currently available.

51. Attachment B describes a 15kW emergency diesel generator located in the basement of Health Center 5 but based on satellite photography there is a piece of equipment outside the building that could be a generator as well. Can you confirm what this piece of equipment is, and if it is a generator, what is the size in kVA, what is its purpose, and how is it tied into the existing electrical?

A: The generator is not located in the basement, as stated in Attachment B. The generator is located along Woodstock St, outside of the building, in the staff parking lot. This is the building's only generator and is a Caterpillar SR4B 438 kVA unit. The generator is tied into a transfer switch located in the electrical room in the basement.

52. Attachment D lists energy storage and a microgrid in addition to solar PV – is the goal of the energy storage and microgrid to carry the entire load of the facility, or to carry some subset of the load during a utility outage?

A: The goal of the energy storage and microgrid is to carry critical loads of the facility in the case of utility outage. Critical loads include the HVAC system, vaccine boxes and computer servers containing digital records. Once Proposer selections have been made, additional information will be provided on critical loads as part of the Investment Grade Audit and design process.

53. Is there a goal for how many hours or days that the microgrid would need to carry the building load (or subset of the load as per the question above) in a utility outage for the microgrid to satisfy the customer's needs or the intent of the RFP?

A: To fully replace the existing generator, the microgrid would need to support critical loads for at least 2 days. If that is not possible, or hard to determine with available information, the City is interested in the largest capacity battery/longest duration that is feasible within the space and financial constraints.

54. There are one or maybe two generators at the site currently. What loads inside the building do they power at this time?

A: There is one generator. It powers all loads in the building.

55. Are the existing generators powered by a fuel line (not cap on how long they run) or a supply tank (limit on fuel supply)?

A: The generator is powered by a supply tank with a maximum 600 gallon capacity. The generator with a full tank of fuel can run for 2 to 2 1/2 days, depending on building occupancy.

56. Is removing the existing generator(s) a project goal?

A: This is not a project goal, but all feasible energy conservation measures may be considered.

57. With the battery approach, how long does the City want to have off grid autonomy for?

A: The City does not have a goal of a specific duration of off-grid autonomy for a battery storage system. We are interested in the largest capacity battery/longest duration that is feasible within the space constraints at project site and proposed project budget.

58. Does the City imagine a multi-building microgrid or is it just Health Center 5?

A: At this stage of the process, Proposers should not consider a multi-building microgrid and focus on designs for Health Center 5 alone.

59. Is removing 2-4 parking spaces from the spaces along N Woodstock Street for locating a battery backup system something the City would consider?

A: The Procurement team will consider all options for locating a battery system.

Previous Written Questions and Answers (from 12/8/2023)

60. Is there a limit to how many people per company can be on each Walk-Through?

A: Yes, there are limits. Three (3) people per Proposer may attend the Walk-Through for SCCJ Chiller. Two (2) people per Proposer may attend each Walk-Through for MSB and Health Center 5.

61. Will Proposers be able to schedule Walk-Throughs outside of the scheduled times, for subcontractors?

A: No, the scheduled Walk-Throughs will be the only times offered to tour the Proposal Scope sites, prior to Proposal submissions.

62. What restrictions are there to taking SCCJ off of the district steam loop?

A: Steam currently serves as the backup fuel for SCCJ's heating system. With this backup fuel in place, the City is able to receive interruptible service rate pricing on natural gas, the primary heating fuel, lowering energy cost for the building. The City plans to maintain the system and explore the expansion of steam use in the building. The City aims to leverage the existing infrastructure and planned electrification of steam generation to advance progress toward the City's goal to become carbon-neutral by 2050.

63. Who is supplying electric commodity to each of the three buildings?

A: WGL is the electricity supplier.