

12/17/2020

**Request for Proposal**  
**UPS Refresh**  
USF Funding Year 2021

For

TSD Bid # 9913  
**Troy School District**  
**4400 Livernois**  
**Troy, MI 48098**

Prepared by

**Convergent Technology Partners, LLC**  
6197 Miller Rd, Swartz Creek, MI 48473  
810.720.3820  
[www.ctpartners.net](http://www.ctpartners.net)

Troy School District  
UPS Refresh RFP# 9913

SECTION 00 01 00 – TABLE OF CONTENTS

<b>SECTION</b>	<b>TITLE</b>
----------------	--------------

**DIVISION 00 - BIDDING REQUIREMENTS, BID FORMS**

SECTION 00 01 00	– TABLE OF CONTENTS
SECTION 00 30 00	– INSTRUCTIONS TO BIDDERS
SECTION 00 30 10	– SCHEDULE OF EVENTS
SECTION 00 40 10	– BID PROPOSAL FORM
SUPPLEMENTAL A	– COST ANALYSIS WORKSHEET
SUPPLEMENTAL B	– UNIT PRICING
SUPPLEMENTAL C	– MANDATORY ALTERNATES
SUPPLEMENTAL D	– VOLUNTARY ALTERNATES
SUPPLEMENTAL E	– FAMILIAL DISCLOSURE AFFIDAVIT
SUPPLEMENTAL F	– IRAN ECONOMIC SANCTIONS ACT AFFIDAVIT

**DIVISION 27 – TECHNOLOGY SPECIFICATIONS**

SECTION 26 33 00	– UNINTERRUPTIBLE POWER SUPPLIES (UPS)
ATTACHMENT 1	– POWER REQUIREMENTS BY LOCATION

Troy School District  
UPS Refresh RFP# 9913

SECTION 00 30 00 – BIDDING REQUIREMENTS – INSTRUCTION TO BIDDERS

PART 1 - GENERAL

1.1 REQUEST FOR PROPOSALS

- A. Troy School District is seeking proposals in conjunction with the Federal Universal E-Rate Program (E-rate funding year 2021) for new Category 2 services including:
1. New Uninterruptible Power Supplies for specific District building locations
- B. A complete list of the buildings (“Sites”) is provided and are incorporated herein by reference. **Bid documents may be obtained from the purchasing page (under Departments, Business Services) of the District’s web site at [www.troy.k12.mi.us](http://www.troy.k12.mi.us).**

- 1.2 **Due on or before date on time indicated on Schedule of Events**, the Owner will receive bid proposals for the project. The Owner will not consider or accept a bid proposal received after the due date for bid proposal submission. All bid proposals received after the due date will be returned by making them available to the respective Bidder, unopened, for said Bidder to pick-up at their sole cost and expense. Bid proposals shall be submitted to:

Todd Hensley, Purchasing Supervisor  
c/o John Foster, Project Consultant  
Convergent Technology Partners  
6197 Miller Rd, Suite 4  
Swartz Creek, Michigan 48473

1.3 PROPOSALS/QUOTES

- A. Three (3) “hard” copies and one (1) “soft” (electronic) copy on a USB “flash” drive of the proposals are to be submitted in sealed packaging, clearly marked: **“UPS Refresh Sealed Bid”** for Troy School District and shall be identified with the Bidder’s name and address and the date and time of the bid proposal opening. The Owner is not responsible for any postal or delivery delays. No email, facsimile or other electronic bid proposals will be accepted.
- B. Proposals will be opened virtually using Teams Video/Audio conferencing immediately following the due date of the proposals:

Microsoft Teams meeting  
**Join on your computer or mobile app**  
[Click here to join the meeting](#)  
**Or call in (audio only)**  
 [\(734-412-4950\) 647357228#](tel:734-412-4950)

Troy School District  
UPS Refresh RFP# 9913

1.4 PROPOSAL AND PRICING FORMAT

- A. The Bid pricing shall be submitted on the Bid Proposal Form and the pricing sheets Supplementals A & B
- B. Bids shall follow the following format:
  - 1. Description of the Firm and all contact information
  - 2. Bid Proposal Form and all Supplementals
  - 3. Bill of Material
  - 4. References
- C. The “hard copy” Bids shall be submitted on 8 1/2" by 11" paper, single sided, single spaced using 10 to 12-point print, in 3 ring binders, clearly labeled to show the Bidder's name.
- D. The “soft copy” Bid shall be in the same structure as the “hard copy” Bids, bound in a .pdf file, submitted on an USB “flash”, “Thumb” or similar drive with the hard copies.

1.5 FAMILIAL DISCLOSURE AFFIDAVIT

- A. Each bid proposal must be accompanied by a sworn and notarized statement disclosing any familial relationship that exists between the owner or any employee of the Bidder and any member of the Board of Education or the Superintendent of Troy School District. The Board of Education will not accept a bid proposal that does not include this sworn and notarized disclosure statement.

1.6 AFFIDAVIT OF COMPLIANCE – IRAN ECONOMIC SANCTIONS

- A. Each bid proposal must be accompanied by the Iran Economic Sanctions Affidavit of Compliance in compliance with Michigan Public Act No. 517 of 2012. The Board of Education will not accept a bid proposal that does not include this sworn and notarized disclosure statement.

1.7 RESERVATION OF RIGHTS

- A. The Owner reserves the right, in its sole and absolute discretion (for this provision and all other provisions contained in this RFP), to accept or reject, in whole or in part, any or all bid proposal with or without cause, to waive any irregularities or informalities in this RFP process or any bid proposal, and to award the contract to other than the low bidder, when in the opinion of the Owner, such action will best serve the Owner's interests.

1.8 WITHDRAWAL OF BID PROPOSALS/QUOTES

Troy School District  
UPS Refresh RFP# 9913

- A. All bid proposals submitted shall not be withdrawn and shall be irrevocable for a minimum period of ninety (90) calendar days following the due date for receipt of bid proposals set forth above.

1.9 REQUESTS FOR CLARIFICATION

- A. Bidders may request that the School District clarify information contained in this RFP. All such requests must be made in writing via email to John Foster, Convergent Technology Partners, at [jfoster@ctpartners.net](mailto:jfoster@ctpartners.net). Requests for Clarifications and inquiries may only be made via email. The deadline for all Requests for Clarification is per the schedule of events. The aggregated answers to all Requests for Clarification will be provided in an addendum to the RFP which will be issued and posted by the date and time indicated in the Schedule of Events on the Purchasing page of the District website at [www.troy.k12.mi.us](http://www.troy.k12.mi.us) for all potential proposers to view.

1.10 RESTRICTION ON COMMUNICATION

- A. From the issue date of this RFP until a Contractor is selected and the contract is awarded a prospective Contractor shall not communicate about the subject of this RFP or a Contractor's bid proposal with the Owner, its Board of Education, or any individual member, administrators, faculty, staff, students, or employees, except for additional requests for clarification in accordance with the paragraph above.

1.11 RELEASE OF CLAIMS

- A. Each Bidder by submitting its Proposal releases the Owner from any and all claims arising out of, and related to, this RFP process and selection of a Contractor.

1.12 PROPOSAL COST

- A. Respondents of this RFP are responsible for any and all costs incurred by them or others acting on their behalf in preparing or submitting a bid proposal, or otherwise responding to this RFP, or any negotiations incidental to its bid proposal or this RFP.

1.13 COLLUSIVE BIDDING

- A. All Bidders certify that its bid proposal is made without any previous understanding, agreement or connection with any person, firm or corporation making a bid proposal for the same project and is in all respects fair, without outside control, collusion, fraud or otherwise illegal action.

1.14 DEFINITIONS

- A. Bid Documents are defined as the Instructions to Bidders, Schedule of Events, this RFP, including all Supplemental forms, Attachments, Appendices, Specifications, Drawings and Addenda and the Contract.
- B. Addenda are written or graphic instruments issued prior to the due date of bid proposals which modify or interpret the Bid Documents by additions, deletions, clarifications or corrections. All

BIDDING REQUIREMENTS - INSTRUCTIONS TO BIDDERS

00 30 00 - 3

Troy School District  
UPS Refresh RFP# 9913

Addenda issued to Bidders prior to the due date of bid proposals shall become part of the Bid Documents and all bid proposals are to include the Project/Work therein described. Each Bid Proposal submitted shall list all Addenda that have been received prior to the due date of bid proposals.

- C. As used in these Instructions to Bidders, the term "Bid Proposal" means a bid proposal prepared and submitted in response to this RFP.
- D. As used in these Instructions to Bidders, the term "PSC" refers to the Professional Service Contractor and means Convergent Technology Partners and its assigned representative.
- E. Throughout this RFP and Contract, the "Owner" or "District" will be used to refer to District and bidders submitting bid proposals will be referred to as "Bidders" or "Vendors" and a successful Bidder or Vendor will be referred to as a "Contractor".

1.15 BIDDER'S REPRESENTATION

- A. Each Bidder, by submitting a Bid Proposal, represents that the Bidder has read and understands the Bid Documents and is familiar with the local conditions under which the project is to be performed. Bidders will be held to have compared the Sites with Bid Documents and have satisfied themselves to all conditions affecting the execution of the Work/Project.

1.16 EXAMINATION OF BID DOCUMENTS

- A. Before submitting a Bid Proposal, each Bidder shall examine the RFP documents carefully and shall read the Specifications and the Bid Documents. Each Bidder shall gather complete information prior to bidding as to existing conditions and limitations under which the Work/Project is to be performed and shall include in its Bid Proposal a sum to cover the cost of items necessary to perform the Work/Project as set forth in the Bid Documents.
- B. No allowance or additional fees will be made to a Bidder because of lack of such examination or knowledge. The submission of a Bid Proposal will be considered as conclusive evidence that the Bidder has made such examination. An on-site-inspection of the Sites during the Bidder's Conference will be for all Bidders and their subcontractors, if any. Vendors may use subcontractors in connection with the Work/Project performed under this RFP provided the Owner has approved the subcontractors. In using subcontractors, the Vendor agrees to be responsible for all their acts and omissions to the same extent as if the subcontractors were employees of the Vendor.

1.17 SUBSTITUTIONS

- A. Each Bid Proposal shall be based basis of design within the specifications. Substitutions will be entertained provided they meet the requirement of "Or Equal" as indicated in the specifications.

Troy School District  
UPS Refresh RFP# 9913

B. Once base bid requirements are met, submission of voluntary alternates is acceptable. The Owner reserves the right to unilaterally accept or reject, in whole or in part, any voluntary alternates.

1. See Voluntary Alternate #1 for Double Conversion UPS

1.18 BIDDING PROCEDURES

A. All Bids Proposal must be submitted on the Bid Proposal Forms provided as part of the Bid Documents and in accordance with the Advertisement to Bid and Instructions to Bidders. Bidders must provide a complete list of proposed subcontractors (one per discipline) as indicated on the Bid Forms. Listing two or more subcontractors per discipline will be grounds for disqualification.

B. All Bidders must provide a proposal for the Base Bid that meets or exceeds the specifications set forth in this RFP. However, all Bidders may suggest Alternates if it is felt that the alternate proposal better suits the intent of this RFP. Any Alternate must be listed as such with separate pricing sheets. Any variance of the feature/functionality of the Base Bid must be identified in any Alternates proposed.

C. Prior to the due date for bid proposals, any Addenda will be available for inspection wherever the Bid Documents are kept available for that purpose. No Addendum will be issued later than two days prior to the bid due date and time. It is each Bidders responsibility to ascertain prior to submitting a Bid Proposal that he/she has received all Addenda issued and shall acknowledge their receipt in their Bid Proposal Form.

D. All Bids must be signed as follows:

1. Corporations: Signature of an officer of the firm who is authorized to bind the corporation.

2. Partnerships: Signature of one partner who is authorized to bind the firm and all of its Partners.

3. Bids submitted by Joint Ventures shall be signed by one of the Joint Ventures and shall be accompanied by a certified copy of the Power of Attorney authorizing the individual signing to bind all the Joint Ventures. If a certified copy of the Joint Venture's certificate submitted with the Bid Proposal indicates that all Joint Ventures have signed, no authorization is required.

4. Individuals signing on own behalf: No authorization is required.

5. Individual signing on behalf of another: Power of Attorney or comparable evidence of authority shall accompany Bid.

Troy School District  
UPS Refresh RFP# 9913

- E. Bid proposals shall be prepared on unaltered Bid Forms, which are a part of this RFP. Bidders shall make no additional stipulations on the Bid Form nor qualify the Bid Proposal in any other manner. Unauthorized conditions, limitations, or provisions attached to the Bid Proposal will be cause for rejection of the Bid Proposal. If alterations by erasure or interlineations are made for any reason, explain over such erasure or interlineations with a signed statement from the Bidder. No additional charges, other than those listed on the Bid Proposal Form and Bid Supplemental Forms, shall be made. Prices quoted will include verification/coordination of order, all costs for shipping, delivery to all Sites, insurance, payment and performance bonds, unpacking, setup, installation, operation, testing, cleanup, training and all other requirements contained in the bid documents.
  - F. Bids shall be submitted in a sealed envelope. Identified on the face of the envelope:
    - 1. Project name
    - 2. Name and address of Bidder
    - 3. Notation **“UPS Refresh – Sealed Bid”**
  - G. No responsibility shall attach to the PSC, the Owner, or the authorized representatives of either one, for the premature opening of any Bid Proposal which is not properly addressed, delivered and/or identified. In such event, that Bid Proposal will not be considered and the Bidder will be automatically disqualified from consideration.
  - H. Negligence in preparation, improper preparation, errors in and/or omissions in the Bid Proposal shall not relieve the Bidder from fulfillment of any and all applicable obligations and requirements of contained in the Bid Documents.
  - I. The Owner or PSC in making copies available of the Bid Documents to Bidders do so only for the purpose of obtaining bid proposals on the project and do not confer a license or grant of use to a Bidder for any other purpose.
  - J. All Bidders must complete, sign and return the attached “FAMILIAL DISCLOSURE” and “IRAN ECONOMIC SANCTIONS AFFIDAVITS” with their Bid Proposal.
  - K. The Owner considers this RFP legally binding and will require that this Request for Proposal and the Bid Proposal be incorporated by reference into any subsequent Contract between the Contractor and the Owner. It should be understood by the Bidder that this means that the Owner expects the Bidder to satisfy all the requirements and specifications contained in the RFP. Any exceptions to the RFP must be explicitly noted in the Bid Proposal. Lack of listing all exceptions will be considered acceptance of all the specifications as presented in this RFP
- 1.19 CONSIDERATION OF BIDS
- A. The Bidder acknowledges the right of the Owner to accept or reject any or all Bid proposals, in whole or in part, with or without cause, to waive any irregularities or informalities in this RFP



Troy School District  
UPS Refresh RFP# 9913

process or any Bid Proposal, and to award the contract to other than the low bidder. In addition, the Bidder recognizes the right of the Owner to reject a Bid Proposal:

1. If the Bidder fails to furnish any data required by the Bid Documents; or
  2. If the Bid Proposal is in any way incomplete or irregular; or
  3. If the Bidder's performance was unsatisfactory under a prior contract for the construction, repair, modification, or demolition of a facility with the Owner, or a contractor in privacy of contract with the Owner, which was funded, directly or indirectly, by the Owner.
  4. If the Bidder was an employer of construction mechanics working on the construction of facilities funded, directly or indirectly, by the Owner through contracts under 1984 PA 431, MCL 18.1101 et seq; MSA 3.516 (101) et seq, and was determined by the Michigan Department of Labor to have failed to comply with a contractual provision requiring the payment of Department of Labor's prevailing wage or the maintenance of Department of Labor's prevailing wage or the maintenance of Department of Labor's apprentice-journeyman ratio determinations for construction mechanics for that facility.
- B. The Owner shall have the right to accept alternates in any order or combination and to determine the lowest responsible Bidder on the basis of the sum of the base bid and the alternates accepted.
- C. Once the contract is awarded to the Contractor, the contract is contingent upon Troy School District Board of Education approval and the Contractor providing the Owner with any and all documents required by the RFP prior to commencement of the Work/Project (i.e. Insurance Certificates, Labor and Material Payment Bond and Performance Bond, etc.). Further, the Owner reserves the unrestricted right to reduce the contract amount by reducing the scope of Work/project and/or components. Any such action will be taken before specific work on a building or on a project component has commenced. Contract amount shall be reduced or increased based on the unit pricing values.
- D. Bidders to whom an award of a contract is under consideration shall submit to the Owner upon his/her request a properly executed Contractor's Qualification Statement, AIA Document A305 or other information format specified by the Owner.
- 1.20 BID SECURITY FOR PROPOSALS IN EXCESS OF \$50,000
- A. the Bid Proposal shall be accompanied by a Bid Security of a certified check or cashier's check payable to the Owner or by a satisfactory Bid Bond Entity naming the Owner as the obligee and executed by the Bidder and a surety company authorized to do business in the State of Michigan, in an amount identified in the Instructions to Bidders. The check or amount of Bid Bond shall be forfeited to the Owner upon failure of the Contractor to enter into the Contract. The Contractor's Bid security will be retained until the Contractor has signed the contract and has furnished the required Certificates of Insurance and other required Bonds and documents

Troy School District  
UPS Refresh RFP# 9913

required by the RFP. Bonds signed by an Attorney-In-Fact must be accompanied by a certified and effectively dated copy of their Power of Attorney.

- B. The Owner reserves the right to retain the Bid security of all Bidders until the Contractor enters into the contract or until ninety (90) days after bid opening, whichever is later. If the Contractor refuses to enter into the Contract, the Owner may retain their Bid Security as liquidated damages but not as a penalty.

1.21 PERFORMANCE AND LABOR AND MATERIAL PAYMENT BONDS

- A. At or prior to delivery of the signed Contract, the Owner will require the Contractor to secure and post a Labor and Material Payment Bond and a Performance Bond including bonding for all subcontractors, each in the amount of 100% of the Contract Sum including bonding for all subcontractors. Surety shall be a company incorporated in the United States and must appear on the U.S. Treasury Departments approved surety list and be adaptable to the Owner. The Contractor shall obtain such bonds in a manner consistent with Michigan law.

1.22 TAXES

- A. Installation services for the tangible personal property purchased by the Owner is not subject to sales taxation. Moreover, the Owner is exempt from taxation on all tangible personal property purchased by the Owner for its use and consumption; however, this exemption would not apply to any materials required under the Bid Documents that are deemed to be a component of a construction/improvement project to the Owner's Sites/Facilities. All prices submitted on the Bid Proposal Form shall be inclusive of any and all applicable taxes.

1.23 PERMITS AND FEES

- A. All prices submitted on the Bid Proposal Form shall be inclusive of any and all applicable/required permits and fees.

1.24 MICHIGAN RIGHT-TO-KNOW LAW

- A. All Contractors must conform to the provisions of the Michigan Right-To-Know Law, 1986 PA 80, which requires employers to:
  - 1. Develop a communication program designed to safeguard the handling of hazardous chemicals through labeling of chemical containers, and development and availability of Material Safety Data Sheets.
  - 2. Provide training for employees who work with these chemicals; and
  - 3. Develop a written hazard communications program.
- B. The law also provides for specific employee rights. These include:

Troy School District  
UPS Refresh RFP# 9913

1. The right to be notified (by employer or Contractor posting) of the location of Material Safety Data Sheet (SDS);
  2. The right to be notified (by employer or Contractor posting) of new or revised SDS no later than five working days after receipt; and
  3. The right to request copies of SDS from their employers or Contractors.
- C. Provisions of Michigan's Right-to-Know Law may be found in those sections of the Michigan Occupational Safety and Health Act (MIOSHA), which contain Right-to-Know provisions, and the Federal Hazard Community Standard, which is part of the MIOSHA Right-to-Know Law through adoption.

1.25 WITHDRAWAL OF BIDS

- A. A Bidder may withdraw its Bid Proposal by written request from an authorized Bidder representative, at any time prior to the due date of bid proposals.
- B. No Bidder may withdraw a Bid Proposal for a period of ninety (90) calendar days, following the due date for receipt of bid proposals, and all bid proposals shall be subject to acceptance by the Owner during this ninety (90) day period.

1.26 EXECUTION OF CONTRACT

- A. The Contractor to whom the contract is awarded shall, within ten (10) calendar days after Notice of Award and receipt of the contract from the Owner, execute and deliver required copies to the Owner.
- B. At or prior to delivery of the executed Contract, the Contractor to whom the contract is awarded shall deliver to the Owner those Certificates of Insurance required by the Bid Documents and such Labor and Materials Payment Bonds and Performance Bond as are required by Owner and any other documents required by this RFP.
- C. The Owner shall approve the provided Certificates of Insurance before the Contractor may proceed with the Work/Project. Failure or refusal to provide Certificates of Insurance or any other documents required by this RFP in a form(s) satisfactory to the Owner shall subject the Contractor to loss of time from the allowable construction period equal to the time of delay in furnishing the required material.

1.27 POST BID INFORMATION

- A. Bid Form(s) shall be submitted as indicated in the Bid Documents. The Bid Form(s) requires all proposed subcontractors for the project to be named; no more than one per discipline.

1.28 EQUAL OPPORTUNITY

Troy School District  
UPS Refresh RFP# 9913

- A. The Contractor and all of its subcontractors shall not discriminate against any employee or applicant for employment because of race, religion, color, sex or national origin.

PART 2 - EXECUTION

2.1 SITE REQUIREMENTS

- A. The Owner Sites are both instructional and administrative facilities that provide year-round services to their students, staff and the community. As such, activities in all buildings are critical to the provisioning of services to the students, staff and the community and shall not be interrupted by the Contractor's Work activities.
- B. The computer and telephone systems associated with this Work will not be taken off-line or removed from service during normal working hours without coordination of the Owner's IT department and the staff of affected buildings. Arrangements must be made by the Contractor to coordinate any such activities.
- C. The Contractor will be required to work around all of the conditions listed above, as well as working with the Owner's staff to minimize disruptions to normal Owner activities.
- D. Installation Guidelines
  - 1. All Work performed on this Project will be installed in accordance with the current edition of the National Electrical Code®, the current edition of the National Electrical Safety Code®, the current edition of the BICSI Telecommunications Distribution Methods Manual, the current edition of the BICSI Cabling Installation Manual, the latest issue of the ANSI/TIA/EIA Standards as published by Global Engineering Documents as TIA/EIA Commercial Building Telecommunications Standard, and all local codes and ordinances.

2.2 QUALITY ASSURANCE

- A. Compliance with Laws and Regulations
  - 1. The Contractor performance of the Work shall comply with all applicable federal, state, and local laws, rules, and regulations and Owner policies, procedure, rules and regulations. The Contractor shall give required notices, shall procure necessary governmental licenses and inspections, and shall pay without burden to the Owner, all fees and charges in connection therewith unless specifically provided otherwise. In the event of violation, the Contractor shall pay all fines and penalties; including attorney's fees and other defense costs and expenses in connection therewith.
- B. Federal Communications Commission
  - 1. Equipment requiring FCC registration or approval shall have received such approval and shall be appropriately identified.
- C. Codes, Standards, and Ordinances

BIDDING REQUIREMENTS - INSTRUCTIONS TO BIDDERS

00 30 00 - 10

Troy School District  
UPS Refresh RFP# 9913

1. All Work shall conform to the latest edition of the National Electrical Code®, the Building Code, and all local codes and ordinances, as applicable. ANSI/TIA/EIA shall be adhered to during all installation activities. Methodologies outlined in the latest edition of the BICSI Telecommunications Distribution Methods Manual shall also be used during all installation activities. Should conflicts exist with the foregoing, the authority having jurisdiction for enforcement will have responsibility for making interpretation. The Contractor is wholly responsible to meet or exceed all codes, standards, regulation, manufacturer installation standards and industry best practices.

2.3 SAFETY

- A. The Contractor shall take the necessary precautions and bear the sole responsibility for the safety of the methods employed in performing the Work. The Contractor shall at all times comply with the regulations set forth by federal, state, and local laws, rules, and regulations concerning "OSHA" and all applicable state labor laws, regulations, and standards. The Contractor shall indemnify and hold harmless the Owner from and against all liabilities, suits, damages, costs, and expenses (including attorney's fees and court costs) that may be imposed on the Owner because of the Contractor, or its subcontractor, or supplier's failure to comply with the regulations stated herein.

2.4 INSPECTION, ACCEPTANCE, AND TITLE

- A. Inspection and Acceptance will be upon successful installation unless otherwise provided. Title to/or risk of loss or damage to all items shall be the responsibility of the Contractor until acceptance by the Owner unless loss or damage results from negligence by the Owner. If the materials or services supplied to the Owner are found to be defective or do not conform to the specifications, the Owner reserves the right to cancel the Contract upon written notice to and return products at the Contractor's expense, based upon the terms of the Contract.

1. When the Owner is referred to in this section of the RFP relative to inspections, the Owner has designated the PSC as the party to perform such inspections on behalf of the Owner. Notwithstanding the above, the Owner may also perform such inspections along with the PSC.

- B. The Owner shall at all times have access to the Work wherever it is in preparation or progress and shall provide proper facilities for such access and for inspection.

- C. The Contractor shall not closeup any Work until the Owner has inspected the Work. Should the Contractor close up the work prior to inspection by The Owner, the Contractor shall uncover the Work for inspection by the Owner at no cost to the Owner, and then recover the Work according to the specifications contained herein. The Contractor shall notify the Owner in writing when the Work is ready for inspection. The Owner will inspect the Work as expeditiously as possible after receipt of notification from the Contractor.

- D. FINAL ACCEPTANCE

Troy School District  
UPS Refresh RFP# 9913

1. Final acceptance and closeout of the contract will be given only after all of the following have occurred:
  - a. All closeout and administration documentation have been received, reviewed and approved by Owner's design professional.
  - b. All tests have been conducted, system demonstrated with and accepted by the Owner and review and approval of all test documents by Owner.
  - c. A physical "punch" inspection has been made by for quality of workmanship, operation, and identification by the Owner.
  - d. Acceptance shall not be given until all "punch list" items have been rectified to Owner satisfaction, Owner has beneficial use of the system, all training has been conducted to the Owner's satisfaction and Owner has accepted the system by signature and taken full ownership.
  - e. All punch list items shall be complete within 5 business days.
  - f. If deemed by the Owner or PSC that the system is not ready for inspection when the punch list is attempted, and multiple trips are required to inspect or confirm completion of certified completed punch-list (by contractor) a fee of \$150.00 per hour may be assessed against and paid by the contractor's retainage.

END OF SECTION

### SCHEDULE OF EVENTS

The following is a projected schedule of events for this project. The schedule may change depending upon the results of the responses and a final schedule will be established prior to contracting with the Contractor. Note all times indicated herein are local.

<b>EVENT</b>	<b>DATE</b>
Bid Release	Dec 17, 2020
Final Date and time for Questions - 5:00 P.M.	Jan 14, 2021
Bid Due Date/time – 2:30 P.M.	Jan 19, 2021
Public Opening – Immediately after due date/time (Virtual)	Jan 19, 2021
Contract Award	Feb 23, 2021
Earliest Project Start *	April 1, 2021
*Earliest invoicing date (per USF)	July 1, 2021

Troy School District  
UPS Refresh RFP# 9913

SECTION 00 40 10 - BID PROPOSAL FORM

**OWNER:** Troy School District  
4400 Livernois Road  
Troy, Michigan 48083

**PROJECT:** UPS Refresh – Bid #9913

**NAME OF BIDDER:** \_\_\_\_\_

**BASE BID:**

Lump sum bid for all work specified and shown on the drawings as indicated for base bid in the amount of:

\_\_\_\_\_ Dollars (\$ \_\_\_\_\_ )

The Bid Proposal amount shall be shown in both words and figures. In the case of discrepancy, the amount shown in words shall govern.

**BASE BID:** The undersigned, having examined the Bid Documents and examined the conditions affecting the Work/Project, hereby proposes and agrees to furnish all of the labor, materials, and equipment and perform all work necessary to complete the Work/Project as required by the Bid Documents for the stipulated sum identified above and detailed in Supplemental A (Cost Analysis Worksheet). The Bid Documents set forth the terms and conditions upon which the Bidder will provide a "turnkey" solution for the installation and operation of the project for use by the Owner and represents and warrants that the design, operation and functionality of the project are in accordance with the Bid Documents. All prices provided by the Bidder on this Bid Proposal Form must include all cables, connectors, equipment etc. that are necessary to make the project fully operational for the intent and purpose stated in the Bid Documents

**BID SECURITY**

Enclosed herewith find (Certified Check)/ (Bid Bond) in the amount of \$\_\_\_\_\_ being five percent (5%) of the maximum Bid Proposal herein, made payable to Troy School District or naming Troy School District as obligee. The proceeds of which are to remain the property of Troy School District, if the Bidder does not, within ten (10) days after notice of the acceptance of Bid Proposal, enter into the Contract.



**TAXES**

Please identify the amount, if any, of this Bid Proposal that has been attributed to sales or use tax. If an amount has been attributed to such tax, please identify which components of the Bid to which the tax has been attributed.

---

---

---

**SUBCONTRACTORS**

Bidders must provide attach complete list of proposed subcontractors (one per discipline), if any are proposed to be utilized on the project. Listing two or more subcontractors per discipline will be grounds for disqualification.

**EXCEPTIONS**

Any Exceptions to the terms and conditions contained in the RFP or contract are identified below:

---

---

---

---

**ADDENDA**

This RFP incorporates the following Addenda:

Addendum No. \_\_\_\_ Dated \_\_\_\_\_ Addendum No. \_\_\_\_ Dated \_\_\_\_\_  
Addendum No. \_\_\_\_ Dated \_\_\_\_\_ Addendum No. \_\_\_\_ Dated \_\_\_\_\_  
Addendum No. \_\_\_\_ Dated \_\_\_\_\_ Addendum No. \_\_\_\_ Dated \_\_\_\_\_

Troy School District  
UPS Refresh RFP# 9913

**BID PROPOSAL FORM SUPPLEMENTS:**

The following Bid Form Proposal Supplements are attached hereto and are considered an integral part of this Bid Proposal Form:

- SUPPLEMENTAL A – Cost Analysis Worksheet
- SUPPLEMENTAL B – Alternates
- SUPPLEMENTAL C – Unit Pricing
- SUPPLEMENTAL D - Familial Disclosure Affidavit
- SUPPLEMENTAL E – Iran Economic Sanctions Act Compliance Affidavit
- ATTACHMENT 1 – Power Requirements by Location

**USF E-Rate SPIN Number** \_\_\_\_\_

**BIDDER NAME:** \_\_\_\_\_

**ADDRESS:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**DATE:** \_\_\_\_\_

**TELEPHONE:** \_\_\_\_\_

**EMAIL ADDRESS:** \_\_\_\_\_

If award is made to our firm based upon our Bid Proposal, we agree to enter into the form of Contract with the School District in accordance with this Request for Proposal, the contract and our Bid Proposal.

My signature certifies that the Bid Proposal as submitted complies with all terms and conditions as set forth in this Request for Proposal, unless specifically enumerated as an exception as part of this Bid Proposal Form.

I hereby certify that I am authorized to sign as a Representative for the Firm:

\_\_\_\_\_  
(Authorized Signature) (Title)

\_\_\_\_\_  
(Print Name) (Date)

Troy School District  
UPS Refresh - Bid # 9913

SUPPLEMENTAL A - COST ANALYSIS WORKSHEET

**OWNER:** Troy School District  
4400 Livernois Road  
Troy, Michigan 48083

**BIDDER:** \_\_\_\_\_

**ADDRESS:** \_\_\_\_\_  
\_\_\_\_\_

**Base Bid Breakdown**

	Price
Labor	
Material	
<b>Sub total</b>	
<b>PLM Bond</b>	
<b>Total Proposal Price</b>	

**Additionally, submit a copy of Attachment 1 filled out with proposed UPS size, quantity, and external battery packs. This is required for proposal review.**

Troy School District  
UPS Refresh - Bid # 9913

SUPPLEMENTAL B - ALTERNATES

MANDATORY ALTERNATE 1:

Provide and install Double Conversion UPS in lieu of Line Interactive UPS in all locations.

Add/Deduct/No Change

\_\_\_\_\_ Dollars (\$\_\_\_\_\_)

MANDATORY ALTERNATE 2:

Provide and install network cards and management software in all UPS

Add/Deduct/No Change

\_\_\_\_\_ Dollars (\$\_\_\_\_\_)

VOLUNTARY ALTERNATE 1:

Add/Deduct/No Change

\_\_\_\_\_ Dollars (\$\_\_\_\_\_)

VOLUNTARY ALTERNATE 2:

Add/Deduct/No Change

\_\_\_\_\_ Dollars (\$\_\_\_\_\_)

SUPPLEMENTAL C - UNIT PRICING

All bid proposals shall also include a detailed Bill of Materials that notes each item, part number, and installed unit price. Provide this Bill of Materials, attached to and submitted with the Bid Proposal. Bill of Materials pricing will be used for price revisions prior to award.

Provide installed unit pricing, which shall be considered firm pricing during the contract period and not subject to change, will be used to determine costs for additions and deletions during the contract period (after award). All unit pricing shall include all labor, materials, licenses, software, fees etc. The Owner reserves the right to adjust any or all quantities at any time.

UP1	UPS Proposed (Indicate Size)	\$
UP2	Additional UPS Proposed (Indicate Size)	\$
UP3	Additional UPS Proposed (Indicate Size)	\$
UP4	External Battery Pack	\$
UP5		\$
UP6		\$
UP7		\$
UP8		\$

Troy School District  
UPS Refresh - Bid # 9913

SUPPLEMENTAL D - FAMILIAL DISCLOSURE AFFIDAVIT

The undersigned, the owner or authorized officer of \_\_\_\_\_ (the "Bidder"), pursuant to the familial disclosure requirement provided in the Troy School District (the "District") Request for Proposal(s), hereby represents and warrants that, except as provided below, no familial relationships exist between the owner or any employee of the Bidder, and any member of the Board of Education of the School District or the Superintendent of the School District.

List any Familial Relationships:

BIDDER:

\_\_\_\_\_

By:

\_\_\_\_\_

Title:

\_\_\_\_\_

STATE OF MICHIGAN  
COUNTY OF \_\_\_\_\_

This instrument was acknowledged before me on the \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_, by

\_\_\_\_\_.

\_\_\_\_\_  
Notary Public

\_\_\_\_\_ County, Michigan

My Commission Expires: \_\_\_\_\_

Acting in the County of: \_\_\_\_\_

Troy School District  
UPS Refresh - Bid # 9913

SUPPLEMENTAL E - AFFIDAVIT OF COMPLIANCE – IRAN ECONOMIC SANCTIONS ACT

Michigan Public Act No. 517 of 2012

The undersigned, the owner or authorized officer of the below named applicant (the “Applicant”), pursuant to the compliance certification requirement provided in the Troy School District (the “District”) Request For Proposals for UPS Refresh RFP# 9913 (the “RFP”), hereby certifies, represents and warrants that the Applicant (including its officers, directors and employees) is not an “Iran linked business” within the meaning of the Iran Economic Sanctions Act, Michigan Public Act No. 517 of 2012 (the “Act”), and that in the event Applicant is awarded a contract as a result of the aforementioned RFP, the Applicant will not become an “Iran linked business” at any time during the course of performing the Work or any services under the contract.

The Applicant further acknowledges that any person who is found to have submitted a false certification is responsible for a civil penalty of not more than \$250,000.00 or 2 times the amount of the contract or proposed contract for which the false certification was made, whichever is greater, the cost of the School District’s investigation, and reasonable attorney fees, in addition to the fine. Moreover, any person who submitted a false certification shall be ineligible to bid on a request for proposal for three (3) years from the date it is determined that the person has submitted the false certification.

APPLICANT:

Name of Applicant

By:

Title:

Date:

STATE OF Michigan

COUNTY OF \_\_\_\_\_)

This instrument was acknowledged before me on the \_\_\_\_\_ day of \_\_\_\_\_, 2021, by

\_\_\_\_\_.

\_\_\_\_\_, Notary Public \_\_\_\_\_ County, \_\_\_\_\_

My Commission Expires: \_\_\_\_\_

Acting in the County of: \_\_\_\_\_

Troy School District  
UPS Refresh RFP# 9913

SECTION 26 33 00 – LINE INTERACTIVE UNINTERRUPTABLE POWER SUPPLIES (UPS)

PART 1 - GENERAL

1.1 CURRENT ENVIRONMENT

- A. The Owner has existing Uninterruptable Power Supplies throughout the school district that they desire to refresh with new units

1.2 SUMMARY OF WORK

- A. Replacement and provision of existing UPS and extended battery packs (as needed) in locations indicated herein. The selected Contractor will be required to provide all labor, materials, supervision, and consumables for a complete, operational and 100% turnkey UPS system in each indicated location.
  - 1. Provide UPS, extended battery packs (as needed) and all accessories
  - 2. Removal of existing UPS, extended battery packs and associated equipment and wiring, properly disposed of off-site

1.3 SCOPE OF WORK

- A. See attachment 1 for power requirements at each location

1.4 DESCRIPTION

- A. This specification describes the operation and functionality of a line interactive, single-phase, static Uninterruptible Power Supply (UPS) hereafter referred to as the UPS

1.5 PERFORMANCE, DESIGN AND CONFIGURATION

- A. The UPS and associated equipment operate in conjunction with a primary power supply and an output distribution system to provide quality uninterrupted power for a mission-critical, electronic equipment load
- B. This specification describes the performance, functionality, and design of the UPS, external battery packs, and connectivity solutions
- C. All programming and miscellaneous components for a fully operational system as described in this specification are available as part of the UPS

1.6 REFERENCES

- A. The publications listed below form a part of this Specification to the extent referenced. The publications are referred to in the text by the basic designation only. The edition/revision of the referenced publications is the latest date as of the date of the Contract Documents, unless otherwise specified.
  - 1. Institute of Electrical and Electronics Engineers, Inc. (IEEE):
    - a. ANSI/IEEE 519, "Guide for Harmonic Control and Reactive Compensation of Static Power Converters" (copyrighted by IEEE, ANSI-approved).
  - 2. International Organization for Standardization (ISO):
    - a. ISO 9001, "Quality Management Systems - Requirements."
    - b. ISO 14001, "Environmental Management Systems - Requirements with Guidance for Use."



Troy School District  
UPS Refresh RFP# 9913

3. International Electrotechnical Commission (IEC) - IEC 62040-2 and IEC 60950
4. Underwriters Laboratory (UL) - UL-1778
5. Federal Communications Commission (FCC) Part 15 Class A

1.7 SUBMITTALS

A. Proposal Submittals:

1. Product catalog sheets or brochures.
2. Product guide specifications.
3. Product technical specifications.
4. System package submittal drawings including a single-line and mechanical diagrams.
5. Bill of Materials (BOM)

B. Delivery Submittals:

1. Installation manual, which includes instructions for storage, handling, examination, preparation, installation, and start-up of UPS.
2. Operation Manual includes safety information, specifications, UPS features, configuration, UPS settings and troubleshooting information.

1.8 PROJECT CONDITIONS

A. Environmental Requirements: Do not install the solid-state UPS until space is enclosed and weatherproof, wet work in space is completed and nominally dry, work above ceilings is complete, and ambient temperature and humidity conditions are and will be continuously maintained at values near those indicated for final occupancy.

1. The UPS can withstand any combination of the following environmental conditions in which it must operate without mechanical or electrical damage or degradation of operating characteristics.
  - a. Storage Ambient Temperature: 5°F to 113°F (-15°C to 45°C).
  - b. Operating Ambient Temperature: 0°C to 40°C (32°F to 104°F). 25°C (77°F) is ideal for most battery types.
  - c. Relative Humidity: 0% to 95% non-condensing.
  - d. Audible Noise: Less than 60 dBA at 3 feet (1 meter).
  - e. Protection Class: IP 20 rating.

1.9 WARRANTY

A. Limited Warranty: Free from defects in materials and workmanship for a period of 3 years (2 years for the battery) from the date of purchase

PART 2 - PRODUCTS

2.1 GENERAL

A. Provide products as indicated in individual sections and with the following general features:

Troy School District  
UPS Refresh RFP# 9913

1. Adjustable voltage-transfer points - Maximizes useful battery life by widening the input voltage window or tightening the output voltage regulation.
2. Adjustable voltage sensitivity - Provides the ability to adapt the UPS for optimal performance in specific power environments or generator applications.
3. Automatic restart of loads after UPS shutdown - Automatically starts up the connected equipment upon the return of utility power.
4. Automatic self-test - Periodic battery self-test ensures early detection of a battery that needs to be replaced.
5. Boost and Trim Automatic Voltage Regulation (AVR) - Gives higher application availability by correcting low and high voltage conditions without using the battery (not available on all models).
6. Adjustable voltage-transfer points
7. High online efficiency - Reduces utility costs, generates less heat.
8. Outlet group control - Turn on/off, reboot or shut down select outlet groups to save dispatching technicians to remote locations (for UPSs with switched outlet groups).
9. Scalable runtime - Allows additional run time to be quickly added as needed.
10. Sequenced network shutdown and reboot - Customize network shutdown and reboot sequence of connected servers and UPSs.
11. Resettable circuit breakers - Enables a quick recovery from overload events.

2.2 MANUFACTURERS

- A. Basis of Design: Products specified are Uninterruptible Power Supplies as manufactured by APC by Schneider Electric. Items specified are to establish a standard of quality for design, function, materials, and appearance. Equivalent products by other manufacturers are acceptable. The Architect/Engineer will be the sole judge of the basis of what is equivalent.
- B. Acceptable Manufacturers
  1. American Power Conversion (APC)
    - a. UPS - SMXxxxxRMLV2UNC
    - b. External Battery Pack - SMX120RMBP2U
  2. Eaton
  3. TrippLite
  4. Equivalent

2.3 INPUT

- A. Nominal Input Voltage: 120V
- B. Input frequency: 50/60 Hz +/- 3 Hz (auto sensing)
- C. Input Connections: NEMA 5-20R
- D. Input voltage range for main operations: 70 - 153V

2.4 OUTPUT

Troy School District  
UPS Refresh RFP# 9913

- A. Other Input Voltages: 100, 110, 127
  - B. Nominal Output Voltage: 120V
  - C. Output Voltage Distortion: Less than 5%
  - D. Output Frequency (sync to mains): 50/60Hz +/- 3 Hz
  - E. Other Output Voltages: 100, 110, 127
  - F. Topology: Line Interactive
  - G. Waveform type: Pure Sine wave
  - H. Output Connections
    - 1. (1) NEMA L5-30R
    - 2. (3) NEMA 5-15R
    - 3. (3) NEMA 5-20R
  - I. Transfer Time: 4ms typical 8ms maximum
- 2.5 CONTROL PANEL
- A. LED status display with On-line On-Battery Replace Battery and Overload indicators,
  - B. Multi-function LCD status and control console
  - C. Audible Alarm: Alarm when on battery distinctive low battery alarm configurable delays Emergency Power Off (EPO)
- 2.6 SURGE PROTECTION AND FILTERING
- A. Surge energy rating: 540Joules
- 2.7 DATA LINE PROTECTION
- A. Filtering: Full time multi-pole noise filtering: 0.3% IEEE surge let-through: zero clamping response time: meets UL 1449
    - 1. Overload Capability: The output power stage (inverter) is capable of withstanding 150% overload for 30 seconds, 125% overload for 1 minute or 105% overload for an indefinite length of time.
    - 2. Output Contactor: The output power stage (inverter) is equipped with an output mechanical relay to provide physical isolation of the inverter from the critical bus. With this feature a failed inverter will be removed from the critical bus.
    - 3. Battery Protection: The inverter is provided with monitoring and control circuits to limit the level of discharge on the battery system.
- 2.8 ENERGY USE/EFFICIENCY
- 1. 25% load – 95.9%
  - 2. 50% load – 97.4%
  - 3. 75% load – 97.7%
  - 4. 100% load – 97.8%

2.9 DISPLAY AND CONTROLS

- A. Control Logic: The UPS is controlled by an embedded microcontroller which performs the following functions:
1. Monitoring the quality of the output voltage.
  2. Monitoring vital parameters of the UPS.
  3. Executing the state machine.
  4. Intelligent battery management.
  5. Controlling the input and output power stage
  6. Remaining runtime calculation.
  7. Self-diagnostics, self-test, and proactive fault detection.
  8. Communication to the host server via a serial port.
  9. Future capability of communication to the embedded Network Management Card or another network accessory card.
- B. Display Interface: Located on the front of the UPS is an LCD user display comprised of a graphical, high resolution (3"x3") LCD (256 x 128 Pixels) and 5 pushbutton switches.
- C. Orientation: The LCD display may be turned 90 degrees clockwise or counterclockwise to accommodate the mounting orientation of the UPS as a tower UPS or as a rack-mounted UPS. The angle of the LCD display can be adjusted out from vertical by 10 degrees for ease in viewing the displayed messages.
- D. Control Functions: The following control functions can be accomplished by use of the pushbutton switches.
1. POWER ON/OFF button.
  2. Escape button.
  3. OK button.
  4. Up button.
  5. Down button.
- E. Data displayed on the Display Interface: The following indicators are available on the Display Interface Unit:
1. Load icon and disable/mute audible alarm icon.
  2. The UPS status information (Input and Output Voltage, Output Frequency, Load, and Runtime).
  3. Operation mode icons (On-Line mode, Bypass mode, Green mode, and Battery mode)
  4. Battery status icons.
  5. Controllable outlet group status icons.
  6. Backlight screens: Amber is an indication that requires attention and Red indicates a UPS alarm that requires immediate attention.

Troy School District  
UPS Refresh RFP# 9913

- F. EPO switch: All UPS models documented in this specification are equipped with an Emergency Power Off (EPO) terminal that can be wired so as to provide the means to instantaneously de-energize the UPS and its load from a remote location in case of emergency. The UPS can accept normally open (NO) or normally closed (NC) contacts.
- G. Audible Alarms: Using audio signal, the UPS will notify the user about important events. The following is the list of distinct audio alarms:
  - 1. The UPS is on battery.
  - 2. The UPS is on battery and the remaining battery capacity is low.
  - 3. The UPS has shut down due to low battery capacity.
  - 4. The battery needs to be replaced.
  - 5. The UPS is overloaded.
  - 6. The UPS is in fault state.
- H. Communication Interface: For purposes of remote communications, the UPS shall have the capability of adding the following functionality (Future)
  - 1. Network connectivity (RJ45), USB (Type B), and can accommodate additional optional communication accessories.
  - 2. Environmental Monitoring which allows communications over a network via web browser or SNMP or with manufacturer management software.

2.10 BATTERY

- A. The UPS battery is of modular construction made up of owner-replaceable, hot-swappable, fused, battery modules. Each battery module is monitored to determine the highest battery unit temperature for use by the UPS battery diagnostic and by the temperature compensated charger circuitry.
- B. Upon failure of the AC input source, the critical load continues being supplied by the output inverter, which derives its power from the battery system. There is no interruption in power to the critical load during both transfers to battery operation and retransfers from battery to normal operation.
  - 1. The UPS battery system is comprised of battery modules. Replacement batteries are user-replaceable, hot-swappable replacement battery cartridges (RBCs).
  - 2. The batteries of the UPS models in this specification are maintenance-free, leak-proof, valve-regulated lead-acid (VRLA) batteries with suspended electrolyte.
  - 3. The UPS incorporates the Intelligent Battery Management system to continuously monitor the health of each removable battery module as well as external battery packs installed in extended run battery cabinets. This system notifies the user if a failed or weak battery module is found.
  - 4. Additional battery packs may be added to increase runtime. The battery packs and the battery modules within them are hot-swappable, allowing for easy and quick installation or replacement without the need for electrical wiring, electrician services, or powering down of the UPS. The maximum number of external battery packs that may be connected to the UPS is 10 for all units.

Troy School District  
UPS Refresh RFP# 9913

- C. Expected Battery Life: 3 – 5 years
- D. Charging: Upon restoration of the AC input source, the UPS simultaneously recharges the battery and provides regulated power to the critical load.
  - 1. The intelligent battery management system contains a temperature monitoring circuit and compensation algorithm that regulates the battery charging current and voltage to optimize battery life. The battery charging circuit remains active when in bypass and online states.
  - 2. The battery charging circuit contains a temperature compensation circuit, which shall regulate the battery charging to optimize battery life.
  - 3. The UPS can be restarted immediately after a prolonged power outage without waiting for the battery to be recharged.
  - 4. Typical recharge time: 3hour(s)

## 2.11 BATTERY MANAGEMENT

### A. Definitions:

- 1. Battery Module: A string of battery cells arranged to produce a battery assembly with a connector.
- 2. Replacement Battery Cartridge (RBC): An APC battery cartridge consisting of two battery modules.
- 3. External Battery Pack (XLBP): An enclosure that contains RBC(s) and battery management electronics.
- 4. User Interface (UI): Any interface by which a user can interact with the system. This may include a UPS display interface, a network management interface or Network Shutdown software.

### B. Features:

- 1. Monitors and informs the user of the health of each RBC.
- 2. Monitors and shows on the UPS Display Interface screen the date for the end of useful life for each RBC.
- 3. Emits an alarm and shows a message on the UPS Display Interface screen to indicate the estimated battery end of life. On the UPS Display Interface screen the user can set the number of days before the alarm is heard and the message appears on the UPS Display Interface screen.
- 4. Automatically detects the disconnection, addition or removal of XLBPs and RBCs.
- 5. Monitors the internal temperature of each XLBP and automatically adjusts the battery charging.

### C. Maintenance:

- 1. Runtime Test (Calibration): This should be performed anytime the steady state load is changed significantly, for example when a new server is added to or removed from the UPS load.

Troy School District  
UPS Refresh RFP# 9913

2. Battery health monitoring: The battery energy output and voltage are monitored to assess the health of the installed batteries when the UPS is operating on battery.
  3. Battery health monitoring is done during a UPS Self Test, during a Runtime Calibration Test, and when the UPS is operating on battery power. The UPS can be configured to perform periodic, automatic Self Tests.
- D. End of useful life
1. Near end-of-life notification: A warning message will appear on the UPS display interface screen when each RBC is approaching the end of its useful life. For configuration details refer to Replacement Notification Time and Replacement Battery Alarm Time. The estimated replacement date for each RBC is available through the UI.
  2. Needs replacement notification: The UPS display interface screen shows when RBC replacement is required. The RBC must be replaced as soon as possible. When an RBC requires replacement, the UPS display interface may recommend that additional RBCs be replaced if they will soon reach the end of their useful life.
- 2.12 Extended Battery Packs
- A. Hot swappable batteries to provide required additional runtime (20 minutes total each location)
  - B. Shall be the same manufacturer as the UPS, designed to work with the UPS proposed.
- 2.13 Accessories
- A. Software and Connectivity (Future capability):
    1. Network Management Card: The Network Management Card allows one or more network management systems (NMSs) to monitor and manage the UPS in TCP/IP network environments. All models are equipped with Environmental Monitoring as standard equipment.
    2. Unattended Shutdown: The UPS, in conjunction with a network interface card, is capable of gracefully shutting down one or more operating systems during the time when the UPS is in on-battery mode. Network Shutdown software is provided with all models for use with the embedded Network Management Card.
  - B. Remote UPS Monitoring: The following three future capability methods of remote UPS monitoring are available:
    1. Web Monitoring: Remote monitoring is available via a web browser such as Internet Explorer.
    2. Dry Contact Monitoring and Control: The UPS must be equipped with a Relay I/O Card to implement this type of monitoring.
- 2.14 SOFTWARE COMPATIBILITY (FUTURE CAPABILITY)
- A. Network Shutdown: This software is provided with Environmental Monitoring. It is compatible with the following operating systems.
    1. Windows® 10
    2. Windows® Server
    3. VMware®

Troy School District  
UPS Refresh RFP# 9913

PART 3 - EXECUTION

3.1 GENERAL

- A. As indicated in individual sections
- B. Follow all manufacturer requirements and best practices

3.2 DELIVERY, STORAGE AND HANDLING

- A. Handle and operate products and systems according to the manufacturer's instructions.
- B. Deliver materials in manufacturer's original, unopened, undamaged containers with original identification labels.
- C. Protect stored materials from environmental and temperature conditions following the manufacturer's instructions.

3.3 INSTALLATION

- A. The Integrator's or subcontractor's main resources within the project shall carry proper professional certification issued by the manufacturer and verified by a third-party organization to confirm product and technology knowledge.
- B. The Integrator shall carefully follow instructions in documentation provided by the manufacturer to ensure all steps have been taken to provide a reliable, easy-to-operate system.
- C. The database shall be reviewed by the Owner and approved before the Integrator enters it into the system.
- D. All equipment shall be tested and configured in accordance with instructions provided by the manufacturer prior to installation.
- E. All firmware found in products shall be the latest and most up to date provided by the manufacturer.
- F. All equipment requiring users to log on using a password shall be configured with user/site-specific password/passwords. No system/product default passwords shall be allowed.

3.4 TESTING

- A. The Integrator shall demonstrate the functionality of the VMS upon completion of installation, documenting the result of all tests and providing these results to the Owner.
- B. Upon satisfactory on-line operation of the system software, the entire installation including all subsystems shall be field inspected. Each device shall be tested as a working component of the completed system. All system controls shall be inspected for proper operation and response.
- C. The Integrator shall maintain a complete log of all inspections and tests. Upon final completion of system tests, a copy of the log records shall be submitted as part of the as-built manuals along with a letter of certification to indicate that the tests have been performed, and all devices are operational.
- D. The completed system shall be tested in front of the owner or owner's agent. The system test shall be witnessed by the Authority Having Jurisdiction if necessary. Any deficiencies noted during the testing must be corrected.

3.5 MAINTENANCE



Troy School District  
UPS Refresh RFP# 9913

- A. Installing integrator shall maintain proper manufactures certification and training during the warranty period. The availability of expansion, replacement and spare parts shall be accessible during the warranty period at standard pricing.
- B. User training for multiple shifts shall be available at the time of acceptance at the owner's location. Additional user e-training shall be available from the manufacturer during the warranty and license periods.

3.6 FACTORY-ASSISTED STARTUP

- A. If a factory-assisted UPS start-up is requested, factory-trained service personnel will perform the following inspections, test procedures, and on-site training.

- B. INSPECTIONS

- 1. Visual Inspection:

- a. Inspect equipment for signs of damage.
    - b. Verify installation per manufacturer's instructions.
    - c. Inspect battery modules.

- 2. Mechanical Inspection:

- 3. Check all UPS and external service bypass panel internal power wiring connections.
  - 4. Check all UPS and external service bypass panel terminal screws, nuts, and/or spade lugs for tightness.

- C. Electrical Inspection:

- 1. Verify correct input and bypass voltage.
  - 2. Verify correct UPS control wiring and terminations.
  - 3. Verify voltage of all battery modules.
  - 4. Verify that neutral and ground conductors are properly landed.
  - 5. Inspect external service bypass panel for proper terminations.

- D. Site Testing:

- 1. Ensure proper system start-up.
  - 2. Verify proper firmware control functions.
  - 3. Verify proper firmware bypass operation.
  - 4. Verify proper bypass switch operation (where applicable).
  - 5. Verify proper inverter operation and regulation circuits.
  - 6. Simulate utility power failure.
  - 7. Verify proper charger operation.
  - 8. Document, sign, and date all test results.

- E. On-Site Operational Training: During the factory-assisted start-up, operational training for site personnel includes User Display Interface, Menu overview, start-up and shutdown procedures, maintenance bypass and AC disconnect operation, and alarm information.

Troy School District  
UPS Refresh RFP# 9913

3.7 FIELD QUALITY CONTROL

A. Manufacturer Field Service:

1. Worldwide Service: The UPS manufacturer has a worldwide service organization available, consisting of factory-trained field service personnel to perform start-up, preventive maintenance, and service of the UPS system and power equipment. The service organization offers service support 24 hours a day, 7 days a week, 365 days a year.
2. Replacement Parts: Parts are available through the worldwide service organization 24 hours a day, 7 days a week, 365 days a year. The worldwide service organization is capable of shipping parts within four working hours or on the next available flight, so that the parts may be delivered to the customer site within 24 hours.

3.8 ACCEPTANCE AND TESTING

- A. The equipment must meet or exceed the agreed acceptance criteria during a 30-day acceptance period, which begins on the installation (cut-over) date. The system will then be accepted following this successful 30-day period.
- B. The Contractor shall correct, in a timely manner, any failure to comply with Contract Documents as reasonably determined by Owner.
- C. If final acceptance is significantly delayed because of defective new equipment or because the installation is not in accordance with the Contract Documents, the Contractor shall pay for all the Owner's additional time and expenses resulting from the delay and any extensions of Acceptance Testing.
- D. Installation Tests
  1. During the installation, the Contractor shall perform all tests necessary to ensure that the portions of the system being installed are ready for pre-cut-over tests. The installation tests shall include, but not be limited to, all manufacturer recommendations and requirements.
- E. Acceptance Testing
  1. Acceptance testing shall be performed confirming the system requirements have been met.
  2. After cut-over of any portion of the system, the Contractor shall conduct acceptance tests consistent with factory system performance specifications to be supplied with the system prior to installation.
  3. Performance and reliability tests shall be conducted, demonstrating acceptable performance over a full thirty (30) day period after cut-over.
  4. Acceptance of the system shall be granted after all equipment has passed the tests set forth by the contract and has been in operation thirty (30) consecutive days without a major failure.

3.9 CLOSEOUT

- A. All Closeout submittals shall be completed, Hard and electronic copies of installation, maintenance and operations manuals shall be provided at the time of acceptance. As-Built drawings are also to be provided at this time.

Troy School District  
UPS Refresh RFP# 9913

B. Punch List:

1. The Contractor shall perform required remedial work, without claim for additional labor or other costs. Where required, the Contractor shall re-test and submit a revised Test Report.
2. The Contractor shall notify the Owner of completion of the Punch List.

3.10 OWNER'S RIGHT TO USE

- A. Acceptance of the work of this section will occur after completion of corrections and adjustments required by "Punch List" (as generated during on-site inspections and review of testing documentation).
- B. The Owner reserves the right to use equipment, material and services provided as part of the work of this section, prior to acceptance, without incurring any obligation to accept any equipment or completed systems until Punch List work is complete and systems comply with the Contract Documents.

END OF SECTION

TROY SCHOOL DISTRICT  
UPS REFRESH RFP#9913  
ATTACHMENT 1

Site/Location	Closet	Cisco 3850 12-port	Total 3850 Max W	Cisco 2960 48-port	Total Cisco 2960 Max W	Subtotal W	Total w/ %25 spare (W)	UPS Qty	UPS VA Rating	Voltage	Battery Packs Qty
<b>Central Office</b> 4400 Livernois Rd. Troy, MI 48098	MDF	1	110	1	370	480	600			120V	
<b>Facility Operations Building</b> 1140 Rankin, Troy, Michigan 48083	MDF	1	110	1	370	480	600			120V	
<b>Transportation Building</b> 120 Hart St. Troy, MI 48098	MDF	1	110	1	370	480	600			120V	
<b>Athens High School</b> 4333 John R, Troy, MI 48085	MDF	1	110	7	370	2700	3375			120V	
Athens High School	IDF2	0	110	5	370	1850	2312.5			120V	
Athens High School	IDF3	0	110	4	370	1480	1850			120V	
Athens High School	IDF4	0	110	3	370	1110	1387.5			120V	
Athens High School	IDF5	0	110	1	370	370	462.5			120V	
<b>Troy High School</b> 4777 Northfield Pkwy, Troy, MI 48098	MDF	1	110	7	370	2700	3375			120V	
Troy High School	IDF-7	0	110	2	370	740	925			120V	
Troy High School	IDF-12	0	110	3	370	1110	1387.5			120V	
<b>International Academy: East</b> 1291 Torpey Dr. Troy, MI 48083	MDF	1	110	3	370	1220	1525			120V	
International Academy East	IDF-2	0	110	2	370	740	925			120V	
International Academy East	IDF-3	0	110	2	370	740	925			120V	
<b>Boulan Park Middle School</b> 3570 Northfield Pkwy, Troy, MI 48084	MDF	1	110	8	370	3070	3837.5			120V	
Boulan Park Middle School	IDF-2	0	110	2	370	740	925			120V	
Boulan Park Middle School	IDF-3	0	110	1	370	370	462.5			120V	
<b>Larson Middle School</b> 2222 E. Long Lake Rd. Troy, MI 48085	MDF	1	110	8	370	3070	3837.5			120V	
Larson Middle School	IDF-2	0	110	2	370	740	925			120V	
Larson Middle School	IDF-3	0	110	1	370	370	462.5			120V	
<b>Smith Middle School</b> 5835 Donaldson, Troy, MI 48085	MDF	1	110	8	370	3070	3837.5			120V	
Smith Middle School	IDF-2	0	110	2	370	740	925			120V	
<b>Baker Middle School</b> 1359 Torpey Dr, Troy, MI 48083	MDF	1	110	5	370	1960	2450			120V	
Baker Middle School	IDF-2	0	110	4	370	1480	1850			120V	
Baker Middle School	IDF-3	0	110	1	370	370	462.5			120V	
Baker Middle School	IDF-4	0	110	3	370	1110	1387.5			120V	
Baker Middle School	IDF-5	0	110	1	370	370	462.5			120V	
<b>Barnard Elem</b> 3601 Forge, Troy, MI 48083	MDF	1	110	5	370	1960	2450			120V	
<b>Bemis Elementary</b> 3571 Northfield Pkwy, Troy, MI 48084	MDF	1	110	4	370	1590	1987.5			120V	
<b>Costello Elementary</b> 1333 Hamman, Troy, MI 48085	MDF	1	110	4	370	1590	1987.5			120V	
<b>Hamilton Elementary</b> 5625 Northfield Pkwy, Troy, MI 48098	MDF	1	110	4	370	1590	1987.5			120V	
<b>Hill Elementary</b> 4600 Forsyth, Troy, MI 48085	MDF	1	110	5	370	1960	2450			120V	
<b>Leonard Elementary</b> 4401 Tallman Dr. Troy, MI 48085	MDF	1	110	5	370	1960	2450			120V	
Leonard Elem	IDF-2	0	110	2	370	740	925			120V	
<b>Martell Elementary</b> 5666 Livernois, Troy, MI 48098	MDF	1	110	4	370	1590	1987.5			120V	
<b>Morse Elementary</b> 475 Cherry St. Troy, MI 48083	MDF	1	110	3	370	1220	1525			120V	
<b>Schroeder Elementary</b> 3541 Jack Dr. Troy, MI 48084	MDF	1	110	5	370	1960	2450			120V	
<b>Troy Union Elementary</b> 1340 East Square Lake Rd. Troy, MI 48085	MDF	1	110	4	370	1590	1987.5			120V	
Troy Union Elem	IDF-2	0	110	3	370	1110	1387.5			120V	
<b>Wass Elementary</b> 2340 Willard Dr. Troy, MI 48085	MDF	1	110	4	370	1590	1987.5			120V	
<b>Wattles Elementary</b> 3555 Ellenboro, Troy, MI 48083	MDF	1	110	5	370	1960	2450			120V	



**Convergent Technology Partners**  
 6197 Miller Rd, Suite 4  
 Swartz Creek, MI 48473  
 810-720-3820  
 Fax 810-720-3886

E-mail: info@ctpartners.net  
 Website: www.ctpartners.net

---

## ADDENDUM

---

Client / Address	Troy School District 4420 Livernois, Troy MI	Project / Location	UPS Refresh
Date Issued	January 15, 2021	Project Number	9913

**A1-1 NOTICE: The bid documents are amended herein which adds to and/or supersedes conflicting or additional information in the Request for Proposal.**

1. Work covered by this Addendum shall be subject to the Introduction, Terms and Conditions and Technical Specifications.
2. Acknowledge this Addendum on the Cost Analysis Worksheet and include the cost of the work herein specified in the Bid.
3. **Notice:** The required electronic copies of the proposal must be in every way a duplicate of the hard copy. Provide the electronic copy in separate PDFs by tabular section as required by the hard copy. Failure to provide a duplicate of all information in both formats will be grounds for non-compliance and disqualification.

**A1-2 Questions**

*Q. The bid list the output connections as follows*

- a. (1) NEMA L5-30R (Battery Backup)
- b. (3) NEMA 5-15R (Battery Backup)
- c. (3) NEMA 5-20R (Battery Backup)
- d. *Do you want each UPS to have this configuration regardless of the load IE the central office MDF load is 600W. You still want the UPS to have the above outputs correct?*

A. Yes, except delete all requirements for 30A. The district does not have 30A circuits available.

*Q. The district is responsible for all input receptacles correct?*

A. If asking about receptacles for input to the UPS, then yes. If asking about input PLUGS to the UPS, then yes.

*Q. The spec asks for 20 min of run time (see below). At what load? For the central office example above is it 20 min at 600W?*

A. Full load for 20 minutes.

*Q. Do you have a current count of how many UPS are installed, model, brand? Extended batteries that need to be removed?*

A. No.

*Q. Is the installation simply taking out the old UPS / batteries and installing new? Is any actual electrical work needed?*

A. Yes, simply replacing old with new. No electrical work is required.

*Q. Are the racks 2 post or 4 post?*

A. Cabinets with rear rails.

*Q. Is there a central warehouse that all equipment can be shipped to & used as a hub?*

A. Assuming contractors keep area clean we can provide space to utilize as a hub at our technology warehouse

*Q. Is there a loading dock at the warehouse?*

A. Yes - rollup garage door and ground level loading bay.

*Q. Is an elevator available if a unit is not on the first floor?*

A. Every multilevel building includes an elevator

*Q. Is there a pallet jack on site we can use?*

A. The main warehouse has a pallet jack and forklift. The building sites may or may not.

*Q. Is floor protection needed at any sites?*

A. If referring to floor protection from moving equipment - only if contractors felt they were going to damage the floor. In most cases this would NOT be the case.

*Q. Can the install occur during normal business hours?*

A. As this will require taking down business critical applications, work must start at EOB at each site.

*Q. Could you please clarify the KW/kVA, run time of the UPS, and total amount of UPS needed.*

A. See requirements in the RFP

*Q. Will you consider LiON technology options in place of traditional lead acid?*

A. Yes

## **End of Addendum 1**

**BID TABULATION SHEET**  
**Troy School District**  
**UPS Refresh - Bid #9913**  
**1/19/2021 @ 2:30 PM**

Bidder	Bond	Familial Affidavit	Iran Affidavit	Base Bid Total	Mandatory Alternate 1	Mandatory Alternate 2	Voluntary Alternate
Capricorn	x	x	x	\$ 125,300.00	No Change	No Change	
Power Techniques	x	x	x	\$ 153,508.00	\$30,834.00	No Change	\$294/Unit
Presidio	x	x	x	\$ 84,462.00	\$33,362.00	No Change	

NOTE: PUBLIC BID OPENING AND READING WAS CONDUCTED VIRTUALLY USING MICROSOFT TEAMS

Signed \_\_\_\_\_

Verified \_\_\_\_\_

Bid Opening Attended By:  
 Todd Hensley  
 Beth Soggs  
 Alan Wilson  
 John Foster