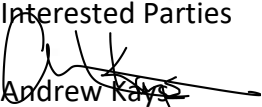


MEMORANDUM

TO: Interested Parties

FROM: 
Andrew Kays
Executive Director

Date: December 15, 2021

Re: Addendum No. 2 to the RFP for Power Infrastructure Replacement at the Montgomery County Transfer Station (issued November 4, 2021)

The Northeast Maryland Waste Disposal Authority (the "Authority"), a multi-jurisdictional agency, is requesting proposals from firms or contractors qualified to determine the most cost-effective approach to address the electrical capacity issues at the Transfer Station in Montgomery County, Maryland (the "County").

This Addendum No. 2 is to issue the following amendments to the RFP

- Attached is drawing E.300 that was inadvertently left out of Addendum No. 1.
- The due date for the proposals is moved out to January 4, 2022 by 11:59 p.m.

Attachment

MCTS119153SSMU.DOCX

410.333.2730 / 410.333.2721 fax / authority@nmwda.org
nmwda.org / Business-to-Business Recycling: mdrecycles.org
Tower II – Suite 402, 100 S. Charles Street, Baltimore, MD 21201-2705

Comprehensive Waste Management Through Recycling, Reuse, Resource Recovery and Landfill

MEMBERS:

Rhody R. Holthaus, Anne Arundel County / Vacant, Baltimore City / D'Andrea L. Walker, Baltimore County / Jeffrey D. Castonguay, Carroll County
Phillip S. Harris, Frederick County / Joseph J. Siemek, Harford County / Mark A. DeLuca, Howard County / Guillermo Wainer, Montgomery County
Charles Glass, Maryland Environmental Service / Andrew Kays, Executive Director



TABLE A: SOURCE CIRCUIT CONDUCTOR AND CONDUIT IDENTIFICATION

CONDUCTOR LOCATION A	NUMBER OF MODULES IN SERIES	Isc (A)	Imp (A)	Voc (VDC)	Vmp (VDC)	MAX ONE WAY LENGTH (FT)	VOLTAGE DROP %	CURRENT CARRYING CONDUCTOR SIZE	CONDUCTOR TYPE	BONDING CONDUCTOR	CONDUIT	NOTES
MODULE TO CB (1 - 15)	13	8.30	7.65	567.84	373.75	225	1.19%	#10	USE-2	#10	SEE NOTES	CONDUCTORS SHALL BE FASTENED TO FRAMES FOR PROTECTION. CONDUCTORS MAY BE RUN IN 1/2" CONDUIT WHERE NOT POSSIBLE TO FASTEN TO MODULE FRAMES.

TABLE B: OUTPUT CIRCUIT CONDUCTOR AND CONDUIT IDENTIFICATION

CONDUCTOR LOCATION B	# SOURCE CIRCUITS IN PARALLEL	1.56 * Isc (A)	Imp (A)	Voc (VDC)	Vmp (VDC)	ONE WAY LENGTH (FT) TO INVERTER	VOLTAGE DROP %	CURRENT CARRYING CONDUCTOR SIZE	CONDUCTOR TYPE	GROUNDING CONDUCTOR	CONDUIT	NOTES
COMBINER TO INVERTER												SEE DC WIRING SCHEDULE FOR PV ARRAY COMBINERS ON PAGE E.310 USE JUNCTION BOX TO ROUTE CONDUCTORS OUT OF UP TO THREE DISCONNECTING COMBINERS INTO CONDUIT FOR RUN TO INVERTER.

TABLE C: AC CONDUCTOR AND CONDUIT IDENTIFICATION

CONDUCTOR LOCATION	NOMINAL VOLTAGE (VAC)	PHASES	GENERATION AMPACITY (A)	DISTANCE INVERTER TO POCC (FT)	VOLTAGE DROP %	CURRENT CARRYING CONDUCTOR SIZE	NUMBER OF CONDUCTORS PER PHASE	CONDUCTOR TYPE	NEUTRAL CONDUCTOR SIZE	EQUIPMENT GROUNDING CONDUCTOR	CONDUIT	NOTES
D	480	3	301	15*	0.09%	500mcm	1	THWN-2	1/0	1/0	(1) 3.0" EMT	SCHEDULE 40 PVC FOR UNDERGROUND ROUTING
E	480	3	301	25*	0.16%	500mcm	1	THWN-2	1/0	1/0	(1) 3.0" EMT	DISCONNECT TO FACILITY SWITCHGEAR
F	120	1	10	25	0.83%	#12	1	THHN/THWN-2	N/A	#12	(1) 3/4" EMT	120 VAC POWER SUPPLY
C	DATA	N/A	N/A	N/A	N/A	N/A	N/A	CAT V SHIELDED	N/A	N/A	(1) 3/4" EMT	DATA/COMM. CABLE

*NOTE: THIS RUN OF CONDUCTORS TO BE KEPT AS SHORT AS POSSIBLE.

KEYED NOTES:

- SOLON 225 MODULES INCLUDES #12 AWG OUTDOOR RATED QUICK CONNECTS WITH MC CONNECTORS FOR MODULE INTERCONNECTION. DO NOT REMOVE THE QUICK CONNECTS, OTHERWISE THE MODULE WARRANTY AND THE UL LISTING MAY BE INVALIDATED.
- #10 AWG BARE COPPER GROUND WILL BE USED AS AN EQUIPMENT GROUND FOR THE MODULE FRAMES. USE MODULE GROUNDING METHODS PER MANUFACTURER'S INSTALLATION REQUIREMENTS. THE MODULE EQUIPMENT GROUND SHALL GROUND ALL OTHER EQUIPMENT AND SHALL TERMINATE IN THE INVERTER CABINET. SEE DETAIL "B" ON PAGE E.500 FOR DETAILS.
- NEMA 3R JUNCTION/GUTTER BOX. USE WEATHERPROOF STRAIN RELIEFS TO BRING USE-2 SOURCE CIRCUIT CONDUCTORS INTO THE JUNCTION/GUTTER BOX. TRANSITION TO THHN / THWN-2 CONDUCTORS IN JUNCTION BOX.
- FUSED DISCONNECTING COMBINER BOX, NEMA 4 ENCLOSURE, RATED AT 600VDC. 8 POLE COMBINERS ARE RATED FOR 100A, 16 POLE COMBINERS ARE RATED FOR 200A. EACH STRING IS PROTECTED BY A 15 AMP FUSE. MANUFACTURED BY ONESOURCE DISTRIBUTORS, SEE DETAIL B ON SHEET E.330 FOR COMBINER DETAILS AND PART NUMBER.
- PULL BOX (IF USED). USE TO GROUP OUTPUT CIRCUIT CONDUCTORS FROM DISCONNECTING COMBINERS TO SINGLE CONDUIT HOME RUNS TO INVERTER. USE PULL BOX TO COMBINE UP TO THREE #6 GROUND WIRES INTO ONE MINIMUM #2 GROUND WIRE FOR HOME RUN TO INVERTER.
- SATCON 250 kW INVERTER. UL1741 LISTED WITH INTEGRAL ANTI-ISLANDING PROTECTION FEATURES. UL1741 LISTING INCLUDES COMPLIANCE WITH IEEE519 FOR POWER QUALITY, IEEE929 FOR INTERCONNECTION SAFETY AND THE NATIONAL ELECTRICAL CODE. TIED TO EXISTING FACILITY GROUND. INVERTER HAS AN ISOLATION TRANSFORMER AND INTERNAL DC & AC DISCONNECTING MEANS. INVERTER IS U.L. LISTED AS A UNIT. UNIT IS EQUIPPED WITH UL1741 APPROVED GROUND FAULT DETECTION DEVICE THAT MEETS NEC 250.122 REQUIREMENTS FOR EQUIPMENT GROUNDING.
- NEW 400A/480V RATED C.T. CABINET/METER SOCKET, OUTDOOR RATED UNIT. INCLUDES UTILITY METERING AND C.T. SECTION. METER SOCKET SHALL BE 15 JAW SOCKETS PER UTILITY REQUIREMENTS. SUNEDISON GENERATION METER, IS REVENUE GRADE. C.T.'S SHALL BE REVENUE GRADE, BARTYPE, 200:5 RATIO.
- A SINGLE FUSIBLE 400 AMP DISCONNECT SHALL BE LOCATED ADJACENT TO C.T. CABINET, WITH 400A/480VAC FUSE PER POLE. THE PANEL BOARD SHOP SHALL BE A REGISTERED UL ASSEMBLY HOUSE. SQUARE-D DISCONNECT RATED AT 200kA AIC.
- EXISTING FACILITY SERVICE PANEL LOCATED INSIDE OF THE BUILDING ON THE INDOOR ELECTRICAL ROOM WALL. RATED AT 800 AMP/480VAC.
- POCC MADE IN SPARE LUGS ON 800A BREAKER LOCATED IN TIPPING FLOOR ELECTRICAL ROOM. THIS CONNECTION SHALL BE MADE IN CONFORMANCE WITH NEC 690.64. BREAKER RATED AT 30kA AIC.
- EXISTING UTILITY METER
- 2KVA CONTROL POWER TRANSFORMER TO BE INSTALLED ADJACENT TO C.T. CABINET/METER SOCKET. 480V PRIMARY TO 120V SECONDARY
- NEW SEEDS WIRELESS COMMUNICATION VIA ROUTER /MODEM DATA TRANSMISSION SYSTEM. SEE SHEET E.510 FOR MOUNTING AND WIRING DETAILS.
- SUNEDISON FACILITY NET METERING. ION6200 METER.

SYSTEM DESCRIPTION	
MODULE TYPE	SOLON BLUE 220/01 225Wp
QUANTITY	1248 MODULES TOTAL
SYSTEM SIZE (DC)	280,800 wDC
SYSTEM SIZE (AC)	250,000 wAC
INVERTER	SATCON PVS-250 (480V)

