

"RE-BUILDING THE CITY'S WATER SYSTEMS FOR THE 21ST CENTURY"

Sewerage & Water Board of New ORLEANS

625 ST. JOSEPH STREET NEW ORLEANS, LA 70165 • 504-529-2837 OR 52-WATER www.swbno.org

Addendum No. <u>4</u>

Date: 10/24/2023

Your reference is directed to **Contract Number**: <u>1435 West Power Complex Electrical and Control Cable</u> which is scheduled to open at <u>11:30 a.m.</u> **CST** on <u>October 20, 2023</u>.

This addendum provides for the following:

- 1. Bids are due on **October 31, 2023, at 11:00 a.m.** Any Bids received after the specified time will be rejected.
- 2. Bids will then be publicly opened and read on **October 31, 2023, at 11:30** a.m. at Sewerage and Water Board of New Orleans, 625 St. Joseph Street, Purchasing Conference Room 131, New Orleans, Louisiana.
- 3. Bid Form Unit Price
- 4. Bidder's Questions & Responses

The above revisions shall be incorporated in and take precedence over any conflicting part of the original proposal documents. This addendum is hereby officially made a part of the referenced proposal.

Receipt of this addendum shall be acknowledged by inserting its number and date in the space provided in the Form of Proposal.

This addendum consists of one (1) page plus attachments.

*** END OF ADDENDUM ***

UNIT PRICE MATERIAL BID FORM SEWERAGE AND WATER BOARD OF NEW ORLEANS (SWBNO) WEST POWER COMPLEX (WPC) ELECTRICAL AND CONTROL CABLE Project No: C1435

BID ITEM #	CABLE CODE	DESCRIPTION	CTL SPECIFICATION CABLE		ESTIMATED	UNIT OF MATERIAL	UNIT PRICE	TOTAL PRICE	NOTEO	
			(YES / NO)	SECTION	PRIMARY SUBSECTION	QUANTITY	(UOM)	(\$ / UOM)	(\$)	NOTES
1	B01SXLTMMF	1 x SX LOOSE TUBE MULTIMODE FIBER OPTIC CABLE	NO	27.13.23	2.01.C/D	15,000	FT			
2	B02ACSDCOS	ACS DOOR CONTACT 2/C 300V OVERALL SHIELD	NO	28.13.00	Pt. 1, 1.04.C Pt. 2, 2.12	1,000	FT			
3	B04TP023CAT6A	4 SHIELDED TWISTED PAIR #23 CAT6A PATCH CORD	NO	27.15.13	2.03	2,000	FT			
4	B16ACSCRDOS	ACS CR DOOR 16/C 300V OVERALL SHIELD	NO	28.13.00	Pt. 1, 1.04.C Pt. 2, 2.12	2,000	FT			
5	B18ACSCRIOOS	ACS CR IN/OUT 18/C 300V OVERALL SHIELD	NO	28.13.00	Pt. 1, 1.04.C Pt. 2, 2.12	4,000	FT			
6	C01010SIS	1/C #10 600V SIS	NO	26.05.19	2.02.B	1,000	FT			
7	C01014SIS	1/C #14 600V SIS	NO	26.05.19	2.02.B	2,000	FT			
8	C02010	2/C #10 600V	NO	26.05.19	2.02.B	1,000	FT			
9	C02014	2/C #14 600V	NO	26.05.19	2.02.B	1,000	FT			
10	C04010	4/C #10 600V	NO	26.05.19	2.02.B	5,000	FT			
11	C05014	5/C #14 600V	NO	26.05.19	2.02.B	1,500	FT			
12	C07014	7/C #14 600V	NO	26.05.19	2.02.B	12,000	FT			
13	C12014	12/C #14 600V	NO	26.05.19	2.02.B	1,000	FT			
14	D01SMFP	1 FIBER SINGLE MODE FIBER OPTIC PATCH CABLE	NO	27.13.23	2.02	5,000	FT			
15	D01SXLTSMF	1 x SX LOOSE TUBE SINGLE MODE FIBER OPTIC CABLE	NO	27.13.23	2.01.C/D	8,000	FT			
16	D04SXLTSMF	4 x SX LOOSE TUBE SINGLE MODE FIBER OPTIC CABLE	NO	27.13.23	2.01.C/D	12,000	FT			
17	D04TP023CAT6A	4 SHIELDED TWISTED PAIR #23 CAT6A PATCH CORD	NO	27.15.13	2.03	5,000	FT			
18	D04TP024	4 TWISTED PAIR #24	NO	27.15.13	2.05	1,000	FT			
19	D08SXLTSMF	8 x SX LOOSE TUBE SINGLE MODE FIBER OPTIC CABLE	NO	27.13.23	2.01.C/D	12,000	FT			
20	F02014FPLP	2/C #14 SOLID 300V FPLP	NO	28.31.11	3.02.B	2,000	FT			
21	F02018FPLP	2/C #18 SOLID 300V FPLP	NO	28.31.11	3.02.B	2,000	FT			
22	G01006SDBC	1/C #6 SOFT DRAWN BARE COPPER	NO	26.05.19	2.02.A	4,000	FT			
23	G011/0I	1/C #1/0 INSULATED GROUND	NO	26.05.19	2.02.A	70,000	FT			
24	G01250I	1/C 250MCM INSULATED GROUND	NO	26.05.19	2.02.A	100,000	FT			
25	G014/0I	1/C #4/0 INSULATED GROUND	NO	26.05.19	2.02.A	12,000	FT			
26	G014/0SDBC	1/C #4/0 SOFT DRAWN BARE COPPER	NO	26.05.19	2.02.A	80,000	FT			
27	H01250S	1/C 250MCM 25KV SHIELDED	YES	26.05.13	2.02.A	5,000	FT			30 Cuts; Nominal Cut Length Basis: 400 feet
28	H01750S	1/C 750MCM 25KV SHIELDED	YES	26.05.13	2.02.A	135,000	FT			150 Cuts; Nominal Cut Length Basis: 4,000 feet
29	J01002S	1/C #2 5KV SHIELDED	YES	26.05.13	2.02.A	1,000	FT			20 Cuts; Nominal Cut Length Basis: 500 feet
30	J01250S	1/C 250MCM 5KV SHIELDED	YES	26.05.13	2.02.A	10,000	FT			30 Cuts; Nominal Cut Length Basis: 500 feet
31	J01500S	1/C 500MCM 5KV SHIELDED	YES	26.05.13	2.02.A	38,000	FT			20 Cuts; Nominal Cut Length Basis: 4,000 feet
32	J01750S	1/C 750MCM 5KV SHIELDED	YES	26.05.13	2.02.A	10,000	FT			30 Cuts; Nominal Cut Length Basis: 500 feet
33	J031/0GS	3/C #1/0 W/G 5KV SHIELDED	YES	26.05.13	2.02.B	1,500	FT			10 Cuts; Nominal Cut Length Basis: 600 feet
34	K01PR014OS	1 PR #14 NON-SH 600V OVERALL SHIELD	NO	26.05.19	2.02.C	20,000	FT			
35	K02PR014OS	2 PR #14 NON-SH 600V OVERALL SHIELD	NO	26.05.19	2.02.C	1,000	FT			
36	K02PR016OS	2 PR #16 NON-SH 600V OVERALL SHIELD	NO	26.05.19	2.02.C	1,000	FT			

UNIT PRICE MATERIAL BID FORM SEWERAGE AND WATER BOARD OF NEW ORLEANS (SWBNO) WEST POWER COMPLEX (WPC) ELECTRICAL AND CONTROL CABLE Project No: C1435

BID ITEM #	CABLE CODE	DESCRIPTION	CTL CABLE (YES / NO)	SPECIFICATION		ESTIMATED	UNIT OF MATERIAL	UNIT PRICE	TOTAL PRICE	NOTES
				SECTION	PRIMARY SUBSECTION	QUANTITY	(UOM)	(\$ / UOM)	(\$)	NOTES
37	K02TR016OS	2 TR #16 NON-SH 600V OVERALL SHIELD	NO	26.05.19	2.02.C	1,000	FT			
38	K04PR014OS	4 PR #14 NON-SH 600V OVERALL SHIELD	NO	26.05.19	2.02.C	1,000	FT			
39	K06PR014OS	6 PR #14 NON-SH 600V OVERALL SHIELD	NO	26.05.19	2.02.C	1,000	FT			
40	K12PR014OS	12 PR #14 NON-SH 600V OVERALL SHIELD	NO	26.05.19	2.02.C	10,000	FT			
41	L01750	1/C 750MCM 600V	NO	26.05.19	2.02.E	20,000	FT			
42	L031/0G	3/C #1/0 W/G 600V	NO	26.05.19	2.02.F	1,400	FT			
43	L03250G	3/C 250MCM W/G 600V	NO	26.05.19	2.02.F	1,000	FT			
44	L034/0G	3/C #4/0 W/G 600V	NO	26.05.19	2.02.F	8,000	FT			
45	L03500G	3/C 500MCM W/G 600V	NO	26.05.19	2.02.F	2,000	FT			
46	P02004G	2/C #4 W/G 600V	NO	26.05.19	2.02.F	1,000	FT			
47	P02008G	2/C #8 W/G 600V	NO	26.05.19	2.02.F	1,000	FT			
48	P02010	2/C #10 600V	NO	26.05.19	2.02.F	1,500	FT			
49	P02010G	2/C #10 W/G 600V	NO	26.05.19	2.02.F	15,000	FT			
50	P02012G	2/C #12 W/G 600V	NO	26.05.19	2.02.F	28,000	FT			
51	P03002G	3/C #2 W/G 600V	NO	26.05.19	2.02.F	1,000	FT			
52	P03004G	3/C #4 W/G 600V	NO	26.05.19	2.02.F	2,000	FT			
53	P03006G	3/C #6 W/G 600V	NO	26.05.19	2.02.F	2,000	FT			
54	P03008G	3/C #8 W/G 600V	NO	26.05.19	2.02.F	1,400	FT			
55	P03010G	3/C #10 W/G 600V	NO	26.05.19	2.02.F	10,000	FT			
56	S01500S	1/C 500MCM 15KV SHIELDED	YES	26.05.13	2.02.A	18,000	FT			50 Cuts; Nominal Cut Length Basis: 500 feet
57	S01750S	1/C 750MCM 15KV SHIELDED	YES	26.05.13	2.02.A	300,000	FT			300 Cuts; Nominal Cut Length Basis: 4,000 feet
58	X01PR016OS	1 PR #16 SH 600V OVERALL SHIELD	NO	26.05.19	2.02.1	5,000	FT			
59	X04PR016OS	4 PR #16 SH 600V OVERALL SHIELD	NO	26.05.19	2.02.1	5,000	FT			
60	N/A	CABLE MANAGEMENT SERVICES (CMS)	N/A	26.05.10		1	LUMP SUM			

C1435 - Cable Management

Questions and Responses during Bidding

Response Version 0 included in Addendum 1, Dated October 6, 2023 [Questions - 3] Response Version 1; Dated October 23, 2023 [Questions - 65]

BIDDER QUESTION 1: No details on the MV Medium Voltage Cable - is there a spec for those? RESPONSE 1: See RFP; 26.05.13 -- Medium Voltage Cable and updated Unit Price Material Bid Form (UPMBF)

BIDDER QUESTION 2: Some says PVC jacket, and "same" wire they want XLPO Low Smoke Zero Halogen. Can you confirm? There will be a big difference in cost & availability between these. **RESPONSE 2: See updated Unit Price Material Bid Form (UPMBF).**

BIDDER QUESTION 3: Unless you have a listing of cable codes? RESPONSE 3: See RFP; 26.05.10 Supplement 1 -- CABLE CODE INDEX

END OF VERSION 0.

BIDDER QUESTION 4: We can not locate the Excel sheet referenced in the Prebid that shows which cables are cut to length (CTL). This is not shown in attachment "C" OR IN Section 26 05 10 Cable Management Specification. Please advise.

RESPONSE 4: A "Cut-to-Length" (CTL) column has been added to the Unit Price Material Bid Form (UPMBF) with a simple "Yes" or "No" for relevant cable types. See revised UPMBF.

BIDDER QUESTION 5: In Section 01 29 00 Payment Procedures Table 1 shows reference number 60 for cable management services. Says that this "may be billed on a monthly basis". Line 60 is not listed on the bid form. Please advise.

RESPONSE 5: See revised Unit Price Material Bid Form (UPMBF) that includes Bid Item (Item #60) for Cable Management Services (CMS). Section 01 29 00 (Payment Procedures) Table 1 will be modified to match Unit Price Material Bid Form (UPMBF).

BIDDER QUESTION 6: Can a line item be added to the bid for a unit price on a number of, to be determined, cable cuts that will need to be made per the future contract C1420 winner? RESPONSE 6: Bid basis of nominal cable cut quantity and cut length has been added to the Unit Price Material Bid Form (UPMBF). The 500-foot length within the specification will be removed and is superseded by the above bid basis. Cut-to-Length (CTL) services shall be built into the unit rate of cable length.

BIDDER QUESTION 7: Can a line item be added to the bid for a unit price for testing the, to be determined, cable cuts that will need to be made per the future contract C1420 winner? **RESPONSE 7: CABLE TESTING shall be ancillary to CTL services. See response to RFQ Question 6.**

BIDDER QUESTION 8: DBE requirement goal for this project is 10% and by definition this has to be done by subcontractors. Since this bid is just a material/goods line item purchase there would be no subcontractors. Will DBE participation be waived because of this?

RESPONSE 8: Per the ITB, Attachment I, prime contractor is required to make a good faith effort to award 10 percent of the amount of the contract to certified disadvantage business enterprises (DBE).

BIDDER QUESTION 9: Is Southwire and/or general cable an approved equal for medium voltage cable spec section 26 05 13.

RESPONSE 9: If a cable manufacturer meets the requirements of the specifications, it is an approved equal.

BIDDER QUESTION 10: Spec section 26 05 13. 3.01 Packaging and Shipping. Does this apply only to master reels from the factory or to all CTL reels shipped to the jobsite as well? Particular, 3.01 A. and B. **RESPONSE 10: This applies to all shipments. See response to Question 29 for further clarification on shipping requirements.**

BIDDER QUESTION 11: Spec section 27 13 23 Communications Optical Fiber Backbone Cabling does not list any approved manufacturers. Are all manufactures that meet the spec acceptable? **RESPONSE 11: Manufacturer information is provided in the specification as noted by "Source Limitations"**.

BIDDER QUESTION 12: Section 27 15 23 COMMUNICATIONS COPPER HORIZONTAL CABLING is included but not listed out on any bid items. Can this spec section be excluded? **RESPONSE 12: No. See updated Unit Price Material Bid Form (UPMBF).**

BIDDER QUESTION 13: Section 28 13 00 SECURITY SYSTEMS sections 1.01-1.11 and 1.13-3.19 are not related to cable. This is related to the existing security system and install. Can this spec section be excluded for Bid item #4 and #5.

RESPONSE 13: See updated specification in "Unit Price Material Bid Form" with detailed subsection references.

BIDDER QUESTION 14: SECTION 28 31 11 ADDRESSABLE FIRE ALARM SYSTEM sections 1.01-1.11 and 2.02-3.08 does not apply to the cable. Can this spec section be excluded for Bid item #20 and #21. **RESPONSE 14: See updated specification in "Unit Price Material Bid Form" with detailed subsection references.**

BIDDER QUESTION 15: Would liquidated damages specified in Article 11 start to apply if the dates in Section 01 11 01 Item 1.02 Item B are not met?

RESPONSE 15: Yes. The dates specified in Section 01 11 01 are the Transfer Dates referenced in Contract Article 11.

BIDDER QUESTION 16: Section 01 29 00 Payment Procedures Line 1.09 Item B states that contract winner can be paid for 90% of stored material assuming all requirements are met. This contradicts spec section 26 05 10 Item 2.03 Line C. This also contradicts Jacobs Engineering statement in the Prebid that the SWB would not be responsible for any excess cable. The large majority of this cable is made to order and non returnable. Please clarify if 90% of the scrap is eligible to be paid for or not? **RESPONSE 16: Per Section 01 29 00 (Payment Procedures), the Supplier will be paid per the Contract terms.**

Per Section 26 05 10 (Cable Management), subsections 2.03.C and 3.02, the Supplier takes all risk for unuseable portions of residual cable subject to Cut-to-Length (CTL) services.

The Pre-Bid statement is consistent with Section 26 05 10 (Cable Management) specification.

Per Section 26 05 10, subsection 3.03, a restocking service is required for ALL cable types being purchased. Further, "requisitioned", as used in subsection 3.03, is equivalent to Cable Delivery Request (CDR).

Any residual material will be dispositioned per the specification. Excess materials shall be restocked and final payment amount per item shall be adjusted accordingly.

BIDDER QUESTION 17: Please confirm that no license, electrical or otherwise, is required to bid this **RESPONSE 17: Correct.**

BIDDER QUESTION 18: Vendor requests additional clarification. Will the board consider compensation for extended storage periods, additional inventories, and additional storage space that could be required to accommodate extended period?

RESPONSE 18: Additional compensation to accommodate extended contract duration will be in accordance with Contract Modification Procedures - Specification 01 26 00.

BIDDER QUESTION 19: Will all cables on master reels from the manufacturers need to be provided with test reports? If so, what is the testing requirement?

RESPONSE 19: Supplier is referencing Section 01 33 00 (Submittal Procedures), subsection 1.04.L. Yes. At a minimum, cable Manufacturers (and Suppliers) will provide testing data/results as called out in the relevant specification sections and associated subsections per relevant standards, codes, and recommended practices called out in those specifications.

An example, but NOT limited to this specification only, is that of Section 26 05 13 (Medium Voltage Cable), Part 1, subsections 1.02.A, 1.03.A; and Part 2, subsection 2.03.A.

Other testing is required for cable types called out in Section 26 05 10 (Cable Management Specification), Part 1, subsection 1.02.C for those cables.

BIDDER QUESTION 20: Most manufacturers provide certified test reports, which include AC Withstand test results, for 5kv and higher, supplied on master lengths shipped from the factory. Attenuation of compliance documents would be provided for LV cables (600V). Is this sufficient? RESPONSE 20: Supplier is referencing Section 01 33 00 (Submittal Procedures), subsection 1.04.L. Question has been reworded for clarification. If Supplier accepts the rewording of the question as follows: "Most manufacturers provide certified test reports, which include AC Withstand test results, for 5kv and higher, supplied on master lengths shipped from the factory. Attachment or Addition of compliance documents would be provided for LV cables (600V). Is this sufficient?" Answer based on rewording of question: This meets the intent of the requirement for both Medium Voltage (MV) and Low Voltage (LV) cables.

BIDDER QUESTION 21: Will all cables be required to be tested per individual cut? If so, what is the testing requirement?

Typically, a continuity test performed in the field for cut lengths is acceptable. Certified Tests Reports (MV Cables) and Attenuation of Compliance (LV Cables) for the parent reel would be available. **RESPONSE 21: Supplier is referencing Section 01 33 00 (Submittal Procedures), subsection 1.04.L. Yes, for every cut. See answer to previous question. Follow direction given in that answer for applicable tests.**

BIDDER QUESTION 22: What are the exact parameters of individual reel protection when shipped from the manufacturer or cut/repackaged lengths? Does each individual CTL require end caps and both ends **RESPONSE 22: Follow Manufacturer's recommended practice at a minimum. Follow the specification and use more restrictive requirements.**

BIDDER QUESTION 23: Is it a correct assumption that none of the cable supplied on this project can be stored outdoors throughout the cable management/storage process? RESPONSE 23: Section 26 05 10 (Cable Management Specification), subsection 2.02.B will be modified to require INDOOR storage of cable.

BIDDER QUESTION 24: Can the cable be stored in multiple locations as long as covered in the cable storage plan?

RESPONSE 24: Cable can be stored at different locations so long as included and approved in the Cable Storage Plan.

BIDDER QUESTION 25: Individual manufacturers may have varying warranty processes, but as a general rule, their warranty covers a period of time starting from the time of shipment of the cable from the manufacturer. This section states a 12-month period after acceptance by owner. Would the NOSWB have a timeline of when this period will begin? Is the NOSWB willing to consider the additional cost **RESPONSE 25: The 12-month Warranty period for ALL cable shall simultaneously begin upon Contract Substantial Completion.**

BIDDER QUESTION 26: "In Reserve" terminology indicates that the product is not subject to commitment to other parties procuring cable from a supplier or manufacturer. Please define further the owners' expectation of "In Reserve". What evidence is required to show the material is truly "In Reserve"? Does the material have to be in a dedicated inventory solely for this bid award?

A rough calculation is that this BOM would require roughly 100,000 sq ft of warehouse/storage space, reflecting approx. 2 million product pounds or 1.4 million copper pounds of product. RESPONSE 26: Yes. The material must be in a DEDICATED inventory solely for this Contract and as outlined in the Supplier's Cable Storage Plan.

BIDDER QUESTION 27: Define cable manufacturer's compliant storage RESPONSE 27: Supplier should follow, at a minimum, the Manufacturer's storage requirements. However, the Supplier should follow the more-restrictive storage requirements between those in the specification or that of the Manufacturer.

BIDDER QUESTION 28: Would the owner consider extending the 75-mile radius of the service center reach for the cable management group to an extended radius of 400 miles? Again, can the storage and management of cable be covered over multiple approved storage/management facilities? RESPONSE 28: Section 26 05 10 (Cable Management Specification), subsection 2.02.D will be modified to allow a 150 mile distance within the State of Louisiana. Regarding storage and management of cable, see previous replies.

BIDDER QUESTION 29: Will the contractor pay for and coordinate freight costs and necessary details for successful delivery? What is the estimated number of deliveries from the cable manager to the job site over the duration of the project?

RESPONSE 29: The 1435 Contractor is responsible for delivery to 1435 Contractor's facility. Shipping to Site is by Others.

BIDDER QUESTION 30: A metric was presented at the mandatory pre-bid meeting to assume 500' cuts for the estimated number of total cuts on the project. The total BOM on page 15 represents 1,020,300' of miscellaneous cable / 500' assumed = approximately 2041 cuts. Is this the correct assumption based on the information provided in the pre-bid meeting for the number of cuts on the job? **RESPONSE 30: No. Not all of the estimated total feet of cable is subject to Cut-to-Length (CTL) services.**

Please refer to Section 26 05 10 (Cable Management Specification), subsection 2.03 (Cable Management – Cut to Length Service). Where cables are indicated in the "Unit Price Material Bid Form" (UPMBF) as CTL.

In the NOTES column of the UPMBF, a "Nominal Cut Length Basis" was provided. This is the equivalent to a maximum cut length.

UPMBF was updated to indicate which cables are subject to CTL services.

BIDDER QUESTION 31: What is the defined tolerance of +/- for the cable ordered on this project? Most manufacturers are 0/+5% tolerance on varying footage. Will the owner be compliant to standard cable tolerances set by the manufacturer?

RESPONSE 31: + 5%/-0% is acceptable for CTL cable. Manufacturers are required to supply estimated cable lengths per the "Unit Price Material Bid Form" UPMBF). Alternately, +5%/-5% tolerance is acceptable for NON-CTL cable quantities. However, cable SHORTAGES identified by Owner will be reconciled with Supplier.

BIDDER QUESTION 32: Are there going to be any parallel requirements? If so, please define. **RESPONSE 32: None for the Cable Management Supplier.**

BIDDER QUESTION 33: Are there any size or weight restrictions for any reel requirements? If so, please RESPONSE 33: No. A reel's size and weight are matters for the Supplier's consideration as it relates to the Cable Storage Plan and Common Product Requirements (i.e., transportation and delivery of reels to site, loading and unloading of reels, storage of reels, handling of reels, identification, etc.).

BIDDER QUESTION 34: Are we to assume the CTL services are to be provided under normal work week and standard business hours? Should the contractor require services outside of standard operating hours, is there a method defined for reimbursement for that call-out?

RESPONSE 34: CTL services are expected to be provided as required to meet the three business day availability requirement.

BIDDER QUESTION 35: In general, Cable manufacturers do not accept returns of products unless it is in resalable/good condition. All returns would be subject to inspection by the manufacturer. 2.5B seems to be an unrealistic expectation.

RESPONSE 35: Section 26 05 10, subsection 2.05 pertains to EMPTY cable reels and this subsection will be updated to say EMPTY CABLE REEL RETURN.

BIDDER QUESTION 36: Are desired cut lengths going to be presented prior to the bid proposal? This information could prove critical if the reel lengths ordered into the "local stock warehouse" are not sufficient to support the cuts needed on the job. As an example, there is a 300,000ft of 750 15KV cable on the BOM. "Manufacturer A" may be able to run master lengths up to 4000'. If the supplier stocks the 300,000' needed for the job in 4000' put-up and the cuts needed are 2200ft, the job will come up short **RESPONSE 36: Please see response regarding "Cut-to-Length" (CTL) services elsewhere in Pre-Bid Question responses.**

BIDDER QUESTION 37: The bid document lists Okonite or an approved alternate. Who are the approved alternates named by manufacturer that will be accepted? As published, the low voltage cable spec portion listed approved manufacturers in detail.

RESPONSE 37: Please see response regarding APPROVED ALTERNATES for MV cable Manufacturers elsewhere in Pre-Bid Question responses. (Please see Question No. 9).

BIDDER QUESTION 38: Confirm the medium voltage cable shield construction desired per page 100 of the official bid document is a helically applied copper wire (concentric neutral drain wire) and advise if Copper Tape shield construction will be accepted

RESPONSE 38: Please see response regarding COPPER TAPE HELICALLY APPLIED elsewhere in Pre-Bid Question responses.

BIDDER QUESTION 39: Will phase print in black/red/blue be acceptable for multi conductor MV cable as it pertains to color coding conductors?

RESPONSE 39: Please see response regarding COLOR CODING OF CONDUCTORS elsewhere in Pre-Bid Question responses.

Yes. Also, specification will be amended to allow for Manufacturer's standard coloring of Medium Voltage (MV) cable phases. Similarly, cable jackets could be solid Black color, where Electrical Contractor, during installation, uses colored tape to identify individual phases.

BIDDER QUESTION 40: In section 26.05.13, 1.02.A.1., it is called out that the material furnished shall be in accordance with, but not limited to:

a. B8, Concentric-Lay-Stranded Copper Conductors, Hard, Medium-Hard, or Soft.

b. B496, Compact Round Concentric-Lay-Stranded Copper Conductors.

Which portion is applicable to the MV cable in question? It is my understanding that this is either/or from the cable manufacturer.

RESPONSE 40: Typically, it is an "either/or" choice of fabrication by the manufacturer, where the operative distinction is "Compact Round" for BOTH fabrications of "Concentric-Lay-Stranded". The ASTM B8 standard, excluding the words "Compact Round", imply a polygonal/WEDGE-like concentric lay conductor fabrication as opposed to round conductor. So, again, either cable conductor fabrication would be acceptable.

BIDDER QUESTION 41: The subset of UL codes in the LV cable spec section (pg 104) cover a wide range of applications. Is there further clarification as to what subset ties to which line item on the BOM on page 15 of the official bid document? As an example, it is unclear if any of the 59-line items on page 15 of the official bid document would need to meet UL E38916 Type MC-HL Cable called out in the LV **RESPONSE 41: Supplier is referencing Section 26 05 19, subsection 1.02.A.7 per reference to "pg. 104" UL standards are the Manufacturer's concern.** They know whether they are in compliance with a particular standard, code, or recommended practice, and whether that Standard/Code/Recommended Practice is applicable to their product. Further, a cable Manufacturer will be able to state whether a particular application of a cable is recommended (by them) or not. BIDDER QUESTION 42: Standard 600V 3-conductor with ground tray cable constructions will have a green insulated copper ground wire for sizes 14awg-6awg. Bare copper ground wires are used for 4awg and larger. Is this acceptable? For 1-conductor configurations, what type of ground wire would be required? (i.e. bare copper, XHHW-2, THHN, etc)

RESPONSE 42: Supplier is referencing Section 26 05 19, subsection 2.02.A.1.c and 2.02.A.2.b Low Voltage (LV) BARE copper ground conductors are NOT allowed regardless of size or number of conductors. How those ground conductors are insulated and/or jacketed and how they are identified (i.e., tape, integral colors, etc.) are identified in this Section and subsection.

BIDDER QUESTION 43: Page 8, item 20 of the official bid document calls out "All bid pricing shall remain firm for a period of ninety (90) days after the date of bid opening." On what COMEX basis are we to quote the medium voltage cable? And will escalation/de-escalation due to market fluctuations be considered between quote submission and order being placed by the NOSWB to the supplier of choice? **RESPONSE 43: Bid pricing shall be based on a COMEX copper price of \$3.60/lb of copper. If the Comex Copper price varies more than +/- 5% from this price at the close of business on the date of NTP, an adjustment in the contract price relating to Copper Wire shall be calculated based upon any amount in excess of +/- 5 %.**

BIDDER QUESTION 44: Will the NOSWB consider buying directly from the manufacturer, bypassing the electrical distribution channel?

RESPONSE 44: Any supplier or vendors that meet the requirements of the solicitation may provide a bid response.

BIDDER QUESTION 45: Would it be possible to separate unit pricing for cable BOM on the unit price material bid form and cable management into two pricing segments? One for cable cost, and another for cable management services.

RESPONSE 45: See revised Unit Price Material Bid Form (UPMBF) that includes Bid Item for Cable Management Services (CMS).

BIDDER QUESTION 46: Would the NOSWB consider additional time to quote this project, pushing the bid opening and bid submittal back to 10/31/23? **RESPONSE 46: Yes.**

BIDDER QUESTION 47: Can we get engineered lengths for all MV cables? RESPONSE 47: No; however, see updated Unit Price Material Bid Form (UPMBF).

BIDDER QUESTION 48: 4. Shield: helically applied Copper wire (concentric neutral – drain wire)

Is this correct? Or should shield be 5 mil bare copper tape helically applied with 12.5% minimum **RESPONSE 48: Specification subsection will be amended to say "or bare Copper tape helically applied..."**

BIDDER QUESTION 49: 3. Shield: helically applied Copper wire (concentric neutral – drain wire)

Is this correct? Or should shield be 5 mil bare copper tape helically applied with 25% minimum overlap? **RESPONSE 49: Specification subsection will be amended to say "or bare Copper tape helically applied..."**

BIDDER QUESTION 50: 6. Color coding says Brown, Orange, and Yellow

Is this correct? Brown, Orange, Yellow are typical commercial color coding, Industrial standard colors are Black, Red, and Blue.

RESPONSE 50: Specification will be amended to allow for manufacturer's standard coloring.

BIDDER QUESTION 51: Can a baseline Comex Copper and Aluminum level be established, so all bids can be evaluated on level field.

RESPONSE 51: See response to Question 43.

BIDDER QUESTION 52: Comment: A firm price for 90 days for a BOM of this size will probably not be possible – quote can be firm, but escalation/de-escalation will almost certainly be necessary. **RESPONSE 52: See response to Question 43.**

BIDDER QUESTION 53: In general, are engineered cable lengths going to be provided? RESPONSE 53: Yes, engineered cable lengths will be part of the Cable Delivery Request (CDR) process per Section 26 05 10 (Cable Management).

BIDDER QUESTION 54: For Item 59 X04PR016OS - please confirm the correct construction of Overall shied or Individual and Overall shield. Note that the other Instrumentation Cables in items 34-40 are specifically that individual pairs are NON SHIELDED but has an Overall shield. Item 59 is not as specific. RESPONSE 54: For Contract Package, CP-1435, in the 'Unit Price Material Bid Form' table, Bid Item for Cable Code = X04PR016OS, this is a 600V, 4-Twisted Shielded Pair (04PR), #16 AWG (016), instrumentation signal cable (X), where each pair is individually shielded ("SH" in description), and there is an Overall Shield (OS) about all four pairs.

BIDDER QUESTION 55: Is the Cable code# in the BOM an indicator of General Purpose Cable or Cables for motors, feeder branch and DC circuits?

RESPONSE 55: The Cable Code is a means of describing voltage segregation level and cable construction.

BIDDER QUESTION 56: Single Conductor

o General requirements section 2.02A section b page 105 states single conductor is XXHW-2

o General Purpose for Interior lighting circuits is Thhn/THWN page 108 section D

o Motors, feeders, branch, and DC circuits EPR (xxhw-2 thickness) w/ XLPO jacket? Page 108 section E. Please clarify.

RESPONSE 56: See revised Unit Price Material Bid Form (UPMBF) that includes a Specification Primary Subsection column indicating which specification subsection applies to which cable types (i.e., Cable Codes).

BIDDER QUESTION 57: Multi conductor LV Power

o General requirements section 2.01a section a page 105 states tray states xlp/pvc option

o Motors, feeders, branch circuits states XLPE or XLPO insulation w/XLPO jacket page 109 o Please clarify.

RESPONSE 57: See revised Unit Price Material Bid Form (UPMBF) that includes a Specification Primary Subsection column indicating which specification subsection applies to which cable types (i.e., Cable Codes).

BIDDER QUESTION 58: Multi conductor for motors fed from adjustable SPEED drives o Is cable code indicator of VFD/CCW cable v. 600v tray cable?

RESPONSE 58: See revised Unit Price Material Bid Form (UPMBF) that includes a Specification Primary Subsection column indicating which specification subsection applies to which cable types (i.e., Cable Codes).

BIDDER QUESTION 59: Control Cable

o General requirements Section202 section b page 106 states xlp/pvc option

o Controls, interlocks, current transformers, voltage transformers and relays xlpe or xlpo insulation w/XLPO jkt page 110. Please clarify.

RESPONSE 59: See revised Unit Price Material Bid Form (UPMBF) that includes a Specification Primary Subsection column indicating which specification subsection applies to which cable types (i.e., Cable Codes).

BIDDER QUESTION 60: Signal Cable Requirements (Instrumentation)

o General Requirements PLTC 600v XLP/PVC. Page 106 Section 202 section C. PLTC is a 300v rated cable 105 degree C where 600v is TC rated at 90 degree C

Which is required?

o Instrumentation Cable installed Indoor/Outdoor states XLPE or XLPO/ w/ XLPO jacket Page 111 I. Please clarify.

RESPONSE 60: See revised Unit Price Material Bid Form (UPMBF) that includes a Specification Primary Subsection column indicating which specification subsection applies to which cable types (i.e., Cable Codes).

BIDDER QUESTION 61: Thermocouple

o General Requirements XLP/PVC option page 106

o Thermocouple XLPE or XLPO insulation with XLPO jacket Please clarify.

RESPONSE 61: See revised Unit Price Material Bid Form (UPMBF) that includes a Specification Primary Subsection column indicating which specification subsection applies to which cable types (i.e., Cable Codes).

BIDDER QUESTION 62: On the Fiber, Security and Comm cable, do you have resources locally that can identify the correct items? Line item 1 thru 5 and 14 thru 21 **RESPONSE 62: Fire and access security contractors have not been selected yet.**

Fiber cables are to be Corning. For all single mode (SM) fiber, reference Section 27 13 23, subsection 2.01.C and 2.01.D.

For SECURITY SYSTEM cables, reference specification Section 28 13 00, subsection 2.12. Example cable datasheets attached.

For ADDRESSABLE FIRE ALARM SYSTEM cables, reference specification Section 28 31 11, subsection 2.01.A.2

BIDDER QUESTION 63: For Bid Items 1, 14, 15, 16, 19

RESPONSE 63: [ITEM 1] 1 x SX LOOSE TUBE = (1) "Loose-Tube grouping" of SIX (6) MULTIMODE fibers in one overall jacket.

[ITEM 14] 1 FIBER SINGLE MODE...PATCH CABLE = (1) single-mode, SINGLE-FIBER cable with requisite connector on each end.

[ITEM 15] 1 x SX LOOSE TUBE = 1 "Loose-Tube grouping" of SIX (6) single-mode fibers in one overall jacket.

[ITEM 16] 4 x SX LOOSE TUBE = 4 "Loose-Tube groupings" of SIX (6) single-mode fibers EACH, in one overall jacket, for a total of twenty-four (24) single-mode fibers in the cable.

[ITEM 19] 8 x SX LOOSE TUBE = 8 "Loose-Tube groupings" of SIX (6) single-mode fibers EACH, in one overall jacket, for a total of forty-eight (48) single-mode fibers in the cable.

BIDDER QUESTION 64: Please confirm the number of Fiber Strands for each line item. **RESPONSE 64: Please see response to Question 63.**

BIDDER QUESTION 65: For Bid Items 16, 19 RESPONSE 65: Please see response to Question 63. BIDDER QUESTION 66: Please confirm TOTAL estimated quantity (FT) required Example:

Item 16 calls for 4 x SX LOOSE TUBE SINGLE MODE FIBER OPTIC CABLE - 12000 FT. Is that 4 x 3000 FT? or 4 x 12000 FT?

RESPONSE 66: There is no further multiplication of linear feet to arrive at another quantity. The estimated cable length is what is shown in the table column.

BIDDER QUESTION 67: ADSS Cable - We need the following information to build a Corning part number.

• Fiber Count:

• Fiber type:

• Maximum span:

• NESC loading conditions or installation location:

• Near an electrical potential of 12kV or less for standard jacket

OR

• near an electrical potential of 25kV or less for TRPE jacket:

• Installation Sag (can assume 1%)

Special requirements

Significant engineering expertise is required to properly specify ADSS cables. Corning and competitors' ADSS cables are not necessarily interchangeable. Rather, each manufacturer specifies its own cable appropriate for a set of conditions. Please get this information from the customer so that we can provide **RESPONSE 67: Fiber cables are to be Corning. Reference 27 13 23 section 2.01.D for all single mode fiber.**

BIDDER QUESTION 68: Outside plant cable, inside plant cable, indoor/outdoor cable - When it comes to Fiber Optic Cables, please answer following question in order to build Part Number.

- What Fiber type, Multimode or Single Mode?

- If it is SM do they need any special fiber performance of just standard OS2?

- If it is MM then what kind of MM fiber OM1, OM2, OM3, or OM4?

- What kind of cable construction, Indoor, Indoor/Outdoor, or Outdoor?

- Do they need the cable Armored or non-armored? This applies to all Indoor, Outdoor, or Indoor/Outdoor.

-What type of connectors you will be using Beginning/Ending of the cable or no connectors?

- If it is indoor or indoor/outdoor, then do they need Loose Tube or Tight Buffered?

- It is it is Indoor or Indoor/Outdoor what fire rating do they need? Riser, Plenum, or LSZH?

RESPONSE 68: Fiber cables are to be Corning. Reference 27 13 23 section 2.01.D for all single mode fiber.

END OF VERSION 1.