### SECOND AMENDMENT TO GOODS AND SERVICES AGREEMENT (Substation Prefabricated Control House)

THIS SECOND AMENDMENT ("Amendment") to the Agreement for Goods and Services Substation Prefabricated Control house is made as of \_\_\_\_\_\_\_\_\_, 2021, by and between the **City of Lake Worth Beach**, Florida, a ("CITY") and **KVA, Inc., dba KVA Power Protection & Control** ("CONTRACTOR"), with its principal office located at 3307 Brushy Creek Rd. Greer, SC 29650.

**WHEREAS**, on August 25, 2020, the CITY and CONTRACTOR entered into the Goods and Service Agreement for CONTRACTOR to provide Substation Prefabricated Control House to the CITY ("Agreement"); and

**WHEREAS,** the Agreement is for the CONTRACTOR to design and fabricate up to six (6) units and these additional units may have updated specifications and be in different sizes to maintain the CITY's standards; and

**WHEREAS,** on September 28, 2021, the CITY and the CONTRACTOR signed the First Amendment to fabricate the second unit; and

**WHEREAS**, the CONTRACTOR has provided a proposal for the third unit which is attached hereto as Exhibit "A" and incorporated herein; and

WHEREAS, the CITY finds the proposal to be acceptable; and

**WHEREAS**, the CITY and CONTRACTOR desire to increase the total maximum cost to be paid by the CITY under this Amendment to a not to exceed amount of \$766,913.00 (Seven Hundred Sixty Six Thousand Nine Hundred Thirteen Dollars) and a contingency amount of no more than \$76,000 (Seventy Six Thousand Dollars); and

**WHEREAS**, the CITY finds amending the Agreement as set forth herein is in the best interest of the CITY and serves a valid public purpose.

**NOW, THEREFORE,** in consideration of the mutual promises contained herein, the sufficiency of which is hereby acknowledged by each party hereto, the CITY and the CONTRACTOR agree to amend the Agreement, as follows:

- 1. **Recitals.** The above recitals are true and correct and are incorporated herein by reference.
- 2. **Amount Not To Exceed.** The maximum not to exceed amount for the third unit to be purchased under the Agreement and by this Amendment is \$766,913.00 (Seven Hundred Sixty Six Thousand Nine Hundred Thirteen Dollars). Since additional items and costs may be necessary to complete the scope of work identified in the CONTRACTOR's proposal, the CITY's Electric Utility Director or designee is authorized a contingency amount of no more than \$76,000 (Seventy Six Thousand Dollars) to complete the scope identified in the CONTRACTOR's proposal. Use of the contingency amount must be pre-approved in writing by Electric Utility Director or designee before any additional costs are added to the CONTRACTOR's proposal and before the CITY is responsible or liable for payment of any sums from the contingency amount to the CONTRACTOR.
- 3. **Entire Agreement.** The CITY and the CONTRACTOR agree that the Agreement (as previously amended) and this Amendment set forth the entire agreement between the parties, and that there are no promises or understandings other than those stated herein. None of the provisions, terms and

conditions contained in this Amendment may be added to, modified, superseded or otherwise altered, except by written instrument executed by the parties hereto. All other terms and conditions of the Agreement (except as previously amended and amended herein) remain in full force and effect.

4. **Counterparts.** This Amendment may be simultaneously executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument. Either or both parties may sign this Amendment via facsimile, email, or electronically and such signature is as valid as the original signature of such party.

Remainder of this page intentionally left blank – signature page follows

IN WITNESS WHEREOF, the parties hereto have made and executed this Second Amendment to the Good and Service Agreement for Substation Prefabricated Control House on the day and year first above written.

#### CITY OF LAKE WORTH BEACH, FLORIDA

ATTEST:	By:Betty Resch, Mayor
By: Melissa Ann Coyne, City Clerk	
APPROVED AS TO FORM AND LEGAL SUFFICIENCY:	APPROVED FOR FINANCIAL SUFFICIENCY
By: Glen J. Torcivia, City Attorney	By:Bruce T. Miller, Financial Services Director
[Corporate Seal]  STATE OF SOUTH CANOTHE COUNTY OF SOURCE	RVA, INC.  By:   Print Name:   Title:   PLANT MANAGER
THE FOREGOING instrument we online notarization on this day of day of title of K. Florida, who is personally known to identification, and who did take an oath the and bind the CONTRACTOR to the same	as acknowledged before me by means of physical presence of MAV 2022, by WTOLYDW (Day), as the VA, Inc, a Corporation authorized to do business in the State of the or who has produced MAJAMS LECTUSE at the or she is duly authorized to execute the foregoing instrument.
Notary Seal:	Robins Permy  Notary Public Signature  exp: 9.17.2023

## Exhibit "A" (Contractor's Proposal 21 pages)



# Revision 1 PROPOSAL City of Lake Worth Beach Electric Utilities Canal Transmission Substation

Prepared for City of Lake Worth Beach Electric Utilities
April 6, 2022
KVA Quote # 11651-R1



KVA Inc. 864.801.4430 info@kva-emc.com www.kva-emc.com



**Scope of Work:** To provide (1) Control House and (6) Relay Control Panels and equipment fabricated, assembled, wired, tested, and delivered in accordance with the City of Lake Worth Beach Electric Utilities.

#### 1) Canal Transmission Substation

#### A) Pricing for (1) Control Enclosure, (6) Relay panels and equipment.

A1	\$	58,155.00
A2	\$	58,155.00
A3	\$	42,236.00
A4	\$	42,236.00
A5	\$	47,594.00
A6	\$	45,061.00

#### B) Delivery:

Delivery will be 32-34 weeks after the receipt of a Purchase order and all necessary engineering information. Due to supply chain issues the above delivery date may change. For reference the ATS has a 28-30-week lead time for delivery.

#### **Bill of Material for Panel A1:**

Component	STYLE #	Manufacturer	Quantity
Panel - Grey on Grey	Panel	KVA	1
Schweitzer; Type 421, Line Protection Relay, 125/250Vdc, five-amp current inputs, conventional terminal blocks, 3 hybrid output contacts, 8 fast hybrid output contacts, 15 form-A contacts, 5 form-C contacts, 23 Inputs, DNP 3.00 protocol, enhanced faceplate, five rack			
units. (421)	04215615XC1X4H78424XX	SEL	1
Schweitzer; Type 311L, Line Protection Relay, five-amp current inputs, 8 Inputs, 8 High-Speed High-Current Interrupting Outputs 125/250Vdc, 4RU, DNP 3.00 protocol. With OUT105, OUT106,			
OUT107 normally closed. (311L)	0311L1JDD425454XX	SEL	1
Ametek UPLC-II, Carrier Set, 125/250Vdc, 3RU	US2NEM9AFSX	Ametek	1
connectors for the cable from the UPLC to			
the tuner.	RG-58/U		1
Two SEL-9510 cutouts, 19" Rack-Mount Panel—	915900113	SEL	1



SEL-9510 Pushbutton Guard Kit	9252001	SEL	2
SEL-9510 Lens Color Kit (2 Green, 2 Red)	9252004	SEL	2
SecuControl ST Switch, 10 Pole, All			
Potential. (TD3, TD5, TD6, TD7, TD8, TD9)	STSA10002AX	SecuControl	6
SecuControl ST Switch, 10 Pole, Current			
Shorting. (TD4)	STSA10061AA	SecuControl	1
SecuControl ST Switch, 10 Pole, 2			
Potential, 8 Current Shorting. (TD1, TD2)	STSA10023AA	SecuControl	2
SecuControl 19" Panel slot covers, ANSI Grey,			
3U, 3-10 Pole cuts	FTX3UA101010G	SecuControl	3
Cover for ST switches, 10 pole, clear (TD1-	577.040		
TD9) - provided with each test switch	FTDC10		0
Spare Disconnect Pins 10%		SecuControl	1
Eaton FAZ Series, DIN rail type, 10 amperes,			
125VDC	FAZC10/1SP	EATON	2
Eaton FAZ Series, DIN rail type, 5 amperes,			
125VDC	FAZC5/1SP	EATON	3
States; Terminal Block 24-point Type NT sliding			
Link point. (A, B, C, E, F, G)	M-25024	States	6
States; Terminal Block NT Type, 6 point. (D,			
H)	M-25006	States	2
Din mounting rail Type NS 35/7.5 Steel			
perforated	801733	PHEONIX	2
Phoenix; Type UBE/D, Terminal Strip Marker	4004076		
Carrier with cover (Z)	1004076	PHEONIX	2
Phoenix; E/NS 35 N End Clamp	800886	PHEONIX	4
Phoenix; D-UDK 4 End Cover	2775113	PHEONIX	4
Phoenix; UDK4 Terminal Block (1-180)	2775016	PHEONIX	180
Phoenix: ZB6 White Number Strip Label mount			
on both sides of block, printed horizontally with sequential numbers. (1-180	1051016	PHEONIX	36
Phoenix: ZB6 Orange Number Strip Label, mount	1031010	PHEONIX	30
on both sides of block, printed horizontally,			
decade labeling (10,20,30)	1051210	PHEONIX	4
Din mounting rail Type NS 35/7.5 Steel			
perforated	801733	PHEONIX	1
Phoenix; Type UBE/D, Terminal Strip Marker			
Carrier	1004076	PHEONIX	1
Phoenix; E/NS 35 N End Clamp	800886	PHEONIX	2



Phoenix; D-UDK 4 End Cover	2775113	PHEONIX	2
Phoenix; UDK4-MTK-P/P Terminal Block (Z181/Z182 to Z359/Z360)	2775210	PHEONIX	90
Phoenix: ZB6 White Number Strip Label mount on both sides of block, printed horizontally with sequential numbers. (181-360)	1051016	PHEONIX	18
Phoenix: ZB6 Orange Number Strip Label, mount on both sides of block, printed horizontally, decade labeling. (190, 200, 210)	1051210	PHEONIX	2
J-Hook, stainless steel with hex nuts and #10-32 thread		KVA	1
Abbatron/H.H. Smith; binding post, Black hex head, 10-32, gold plated.	257-103	H.H. Smith	2
Abbatron/H.H. Smith; binding post, Green hex head, 10-32, gold plated.	257-104	H.H. Smith	1
Ohmite; Series 90, wire wound resistor, $10k\Omega$ , 5 watts. (RES 1, RES 2)	95J10K	Ohmite	2
Ground Bar	Ground Bar	KVA	1

#### **Bill of Material for Panel A2:**

Component	STYLE#	Manufacturer	Quantity
Panel - Grey on Grey	Panel	KVA	1
Schweitzer; Type 421, Line Protection Relay, 125/250Vdc, five-amp current inputs, conventional terminal blocks, 3 hybrid output contacts, 8 fast hybrid output contacts, 15 form-A contacts, 5 form-C contacts, 23 Inputs, DNP 3.00 protocol, enhanced faceplate, five rack units. (421)	04215615XC1X4H78424XX	SEL	1
Schweitzer; Type 311L, Line Protection Relay, five-amp current inputs, 8 Inputs, 8 High-Speed High-Current Interrupting Outputs 125/250Vdc, 4RU, DNP 3.00 protocol. With OUT105, OUT106, OUT107 normally closed. (311L)	0311L1JDD425454XX	SEL	1
Ametek UPLC-II, Carrier Set, 125/250Vdc, 3RU	US2NEM9AFSX	Ametek	1
connectors for the cable from the UPLC to the tuner.	RG-58/U		1
Two SEL-9510 cutouts, 19" Rack-Mount Panel— 2U	915900113	SEL	1
SEL-9510 Pushbutton Guard Kit	9252001	SEL	2



SEL-9510 Lens Color Kit (2 Green, 2 Red)	9252004	SEL	2
SecuControl ST Switch, 10 Pole, All			
Potential. (TD3, TD5, TD6, TD7, TD8, TD9)	STSA10002AX	SecuControl	6
SecuControl ST Switch, 10 Pole, Current			
Shorting. (TD4)	STSA10061AA	SecuControl	1
SecuControl ST Switch, 10 Pole, 2			
Potential, 8 Current Shorting. (TD1, TD2)	STSA10023AA	SecuControl	2
SecuControl 19" Panel slot covers, ANSI Grey,			
3U, 3-10 Pole cuts	FTX3UA101010G	SecuControl	3
Cover for ST switches, 10 pole, clear (TD1-			
TD9) - provided with each test switch	FTDC10		0
Spare Disconnect Pins 10%		SecuControl	1
Eaton FAZ Series, DIN rail type, 10 amperes,			
125VDC	FAZC10/1SP	EATON	2
Eaton FAZ Series, DIN rail type, 5 amperes,	, -	_	
125VDC	FAZC5/1SP	EATON	3
		2	
States; Terminal Block 24 - point Type NT sliding	M-25024	States	6
Link point. (A, B, C, E, F, G) States; Terminal Block NT Type, 6 point. (D,	IVI-23024	States	0
H)	M 25006	Ctatas	2
	M-25006	States	
Din mounting rail Type NS 35/7.5 Steel	004722	BUEDAWY	
perforated	801733	PHEONIX	2
Phoenix; Type UBE/D, Terminal Strip Marker	1004076	DUEONIV	1
Carrier with cover (Z)		PHEONIX	2
Phoenix; E/NS 35 N End Clamp	800886	PHEONIX	4
Phoenix; D-UDK 4 End Cover	2775113	PHEONIX	4
Phoenix; UDK4 Terminal Block (1-180)	2775016	PHEONIX	180
Phoenix: ZB6 White Number Strip Label mount			
on both sides of block, printed horizontally with	4054046	2	
sequential numbers. (1-180	1051016	PHEONIX	36
Phoenix: ZB6 Orange Number Strip Label, mount on both sides of block, printed horizontally,			
decade labeling (10,20,30)	1051210	PHEONIX	4
Din mounting rail Type NS 35/7.5 Steel	1001210	THEOMA	7
perforated	801733	PHEONIX	1
Phoenix; Type UBE/D, Terminal Strip Marker	301733	THEOMA	
Carrier	1004076	DHEONIV	1
		PHEONIX	1
Phoenix; E/NS 35 N End Clamp	800886	PHEONIX	2
Phoenix; D-UDK 4 End Cover	2775113	PHEONIX	2



Phoenix; UDK4-MTK-P/P Terminal Block (Z181/Z182 to Z359/Z360)	2775210	PHEONIX	90
Phoenix: ZB6 White Number Strip Label mount on both sides of block, printed horizontally with sequential numbers. (181-360)	1051016	PHEONIX	18
Phoenix: ZB6 Orange Number Strip Label, mount on both sides of block, printed horizontally, decade labeling. (190, 200, 210)	1051210	PHEONIX	2
J-Hook, stainless steel with hex nuts and #10-32 thread		KVA	1
Abbatron/H.H. Smith; binding post, Black hex head, 10-32, gold plated.	257-103	H.H. Smith	2
Abbatron/H.H. Smith; binding post, Green hex head, 10-32, gold plated.	257-104	H.H. Smith	1
Ohmite; Series 90, wire wound resistor, $10k\Omega$ , 5 watts. (RES 1, RES 2)	95J10K	Ohmite	2
Ground Bar	Ground Bar	KVA	1

#### Bill of Material for Panel A3:

Component	STYLE #	Manufacturer	Quantity
Panel - Grey on Grey	Panel	KVA	1
Schweitzer; Type 421, Line Protection Relay, 125/250Vdc, five-amp current inputs, conventional terminal blocks, 3 hybrid output contacts, 8 fast hybrid output contacts, 15 form-A contacts, 5 form-C contacts, 23 Inputs, DNP 3.00 protocol, enhanced faceplate, five rack units. (421)	04215615XC1X4H78424XX	SEL	1
Schweitzer; Type 311L, Line Protection Relay, five-amp current inputs, 8 Inputs, 8 High-Speed High-Current Interrupting Outputs 125/250Vdc, 4RU, DNP 3.00 protocol. With OUT105, OUT106, OUT107 normally closed. (311L)	0311L1JDD425454XX	SEL	1
Schweitzer, Type 735, Meter, Four-wire Wye, 3-PTs, 3 CTs, 110-240 Vac, 110-250VDC, 125VDC/VAC input, Single 10/100 BASE-T, EIA-485, EIA-232 (735)	0735LX20944EXXXXXX16201CX	SEL	1
Two SEL-9510 cutouts, 19" Rack-Mount Panel—2U	915900113	SEL	1
SEL-9510 Pushbutton Guard Kit	9252001	SEL	2



SEL-9510 Lens Color Kit (2 Green, 2 Red)	9252004	SEL	2
SecuControl ST Switch, 10 Pole, All			
Potential. (TD3, TD5, TD6, TD7, TD8, TD9)	STSA10002AX	SecuControl	8
SecuControl ST Switch, 10 Pole, Current			
Shorting. (TD4)	STSA10061AA	SecuControl	1
SecuControl ST Switch, 10 Pole, 2			
Potential, 8 Current Shorting. (TD1, TD2)	STSA10023AA	SecuControl	2
SecuControl 19" Panel slot covers, ANSI Grey,			
3U, 3-10 Pole cuts	FTX3UA101010G	SecuControl	4
SecuControl ST Switch, 10 Pole, 4			
Potential, 6 Current Shorting. (TD10)	STSA10020AA	SecuControl	1
Cover for ST switches, 10 pole, clear (TD1-			
TD9) - provided with each test switch	FTDC10		0
Spare Disconnect Pins 10%		SecuControl	1
Eaton FAZ Series, DIN rail type, 10			
amperes, 125VDC	FAZC10/1SP	EATON	2
Eaton FAZ Series, DIN rail type, 5			
amperes, 125VDC	FAZC5/1SP	EATON	1
States, Terminal Block 24 point Type NT			
States; Terminal Block 24 - point Type NT sliding Link point. (A, B, C, E, F, G)	M-25024	States	6
States; Terminal Block NT Type, 6 point.	W 23024	States	•
(D, H)	M-25006	States	2
Din mounting rail Type NS 35/7.5 Steel	WI 25000	States	
perforated	801733	PHEONIX	2
Phoenix; Type UBE/D, Terminal Strip Marker	001733	THEONIX	
Carrier with cover (Z)	1004076	PHEONIX	2
Phoenix; E/NS 35 N End Clamp	800886	PHEONIX	4
Phoenix; D-UDK 4 End Cover	2775113	PHEONIX	4
Phoenix; UDK4 Terminal Block (1-180)	2775016	PHEONIX	180
Phoenix: ZB6 White Number Strip Label	2773010	THEONIX	100
mount on both sides of block, printed			
horizontally with sequential numbers. (1-180	1051016	PHEONIX	36
Phoenix: ZB6 Orange Number Strip Label,			
mount on both sides of block, printed			
horizontally, decade labeling (10,20,30)	1051210	PHEONIX	4
Din mounting rail Type NS 35/7.5 Steel			
perforated	801733	PHEONIX	1
Phoenix; Type UBE/D, Terminal Strip			
Marker Carrier	1004076	PHEONIX	1
			l



800886	PHEONIX	2
2775113	PHEONIX	2
2775210	PHEONIX	90
1051016	PHEONIX	18
1051210	PHEONIX	2
	KVA	1
257-103	H.H. Smith	2
257-104	H.H. Smith	1
95J10K	Ohmite	2
Ground Bar	KVA	1
	2775113 2775210 1051016 1051210 257-103 257-104 95J10K	2775113 PHEONIX  2775210 PHEONIX  1051016 PHEONIX  1051210 PHEONIX  KVA  257-103 H.H. Smith  257-104 H.H. Smith  95J10K Ohmite

#### **Bill of Material for Panel A4:**

Component	STYLE #	Manufacturer	Quantity
Panel - Grey on Grey	Panel	KVA	1
Schweitzer; Type 421, Line Protection Relay, 125/250Vdc, five-amp current inputs, conventional terminal blocks, 3 hybrid output contacts, 8 fast hybrid output contacts, 15			
form-A contacts, 5 form-C contacts, 23 Inputs, DNP 3.00 protocol, enhanced faceplate, five			
rack units. (421)	04215615XC1X4H78424XX	SEL	1
Schweitzer; Type 311L, Line Protection Relay, five-amp current inputs, 8 Inputs, 8 High-Speed High-Current Interrupting Outputs 125/250Vdc, 4RU, DNP 3.00 protocol. With OUT105, OUT106, OUT107 normally closed.			
(311L)	0311L1JDD425454XX	SEL	1
Schweitzer, Type 735, Meter, Four-wire Wye, 3-PTs, 3 CTs, 110-240 Vac, 110-250VDC, 125VDC/VAC input, Single 10/100 BASE-T,			
EIA-485, EIA-232 (735)	0735LX20944EXXXXXX16201CX	SEL	1



Two SEL-9510 cutouts, 19" Rack-Mount	045000443		
Panel—2U	915900113	SEL	1
SEL-9510 Pushbutton Guard Kit	9252001	SEL	2
SEL-9510 Lens Color Kit (2 Green, 2 Red)	9252004	SEL	2
SecuControl ST Switch, 10 Pole, All			
Potential. (TD3, TD5, TD6, TD7, TD8, TD9)	STSA10002AX	SecuControl	8
SecuControl ST Switch, 10 Pole, Current			
Shorting. (TD4)	STSA10061AA	SecuControl	1
SecuControl ST Switch, 10 Pole, 2			
Potential, 8 Current Shorting. (TD1, TD2)	STSA10023AA	SecuControl	2
SecuControl 19" Panel slot covers, ANSI Grey,			
3U, 3-10 Pole cuts	FTX3UA101010G	SecuControl	4
SecuControl ST Switch, 10 Pole, 4			
Potential, 6 Current Shorting. (TD10)	STSA10020AA	SecuControl	1
Cover for ST switches, 10 pole, clear (TD1-			
TD9) - provided with each test switch	FTDC10		0
Spare Disconnect Pins 10%		SecuControl	1
Eaton FAZ Series, DIN rail type, 10			
amperes, 125VDC	FAZC10/1SP	EATON	1
Eaton FAZ Series, DIN rail type, 5			
amperes, 125VDC	FAZC5/1SP	EATON	2
States; Terminal Block 24 -point Type NT			
sliding Link point. (A, B, C, E, F, G)	M-25024	States	6
States; Terminal Block NT Type, 6 point.			
(D, H)	M-25006	States	2
Din mounting rail Type NS 35/7.5 Steel			
perforated	801733	PHEONIX	2
Phoenix; Type UBE/D, Terminal Strip Marker			
Carrier with cover (Z)	1004076	PHEONIX	2
Phoenix; E/NS 35 N End Clamp	800886	PHEONIX	4
Phoenix; D-UDK 4 End Cover	2775113	PHEONIX	4
Phoenix; UDK4 Terminal Block (1-180)	2775016	PHEONIX	180
Phoenix: ZB6 White Number Strip Label			
mount on both sides of block, printed			
horizontally with sequential numbers. (1-180	1051016	PHEONIX	36
Phoenix: ZB6 Orange Number Strip Label,			
mount on both sides of block, printed			
horizontally, decade labeling (10,20,30)	1051210	PHEONIX	4
Din mounting rail Type NS 35/7.5 Steel			
perforated	801733	PHEONIX	1



Phoenix; Type UBE/D, Terminal Strip			
Marker Carrier	1004076	PHEONIX	1
Phoenix; E/NS 35 N End Clamp	800886	PHEONIX	2
Phoenix; D-UDK 4 End Cover	2775113	PHEONIX	2
Phoenix; UDK4-MTK-P/P Terminal Block			
(Z181/Z182 to Z359/Z360)	2775210	PHEONIX	90
Phoenix: ZB6 White Number Strip Label mount on both sides of block, printed horizontally with sequential numbers. (181-			
360)	1051016	PHEONIX	18
Phoenix: ZB6 Orange Number Strip Label, mount on both sides of block, printed horizontally, decade labeling. (190, 200,	4054240	DUFONN	
210)	1051210	PHEONIX	2
J-Hook, stainless steel with hex nuts and #10- 32 thread		KVA	1
Abbatron/H.H. Smith; binding post, Black hex head, 10-32, gold plated.	257-103	H.H. Smith	2
Abbatron/H.H. Smith; binding post, Green hex head, 10-32, gold plated.	257-104	H.H. Smith	1
Ohmite; Series 90, wire wound resistor, 10kΩ, 5 watts. (RES 1, RES 2)	95J10K	Ohmite	2
Ground Bar	Ground Bar	KVA	1

#### **Bill of Material for Panel A5:**

Component	STYLE #	Manufacturer	Quantity
Panel - Grey on Grey	Panel	KVA	1
Jemstar II Switchboard Meter 09: Form 9 R: Switchboard 60: 60Hz 10: Class 10 1B: Dual Serial, RS-232/485 2A: Single ethernet port 3A: Internal analog modem DIO: Internal 6 CH D I/O	ISH 000C010 10/24/24		
AO1: Internal 4 CH AO IB: IRIG-B Time Sync PQ: Power Quality Ready	JSII-09R6010-1B/2A/3A- DIO/AO1-IB-PQ	Jemstar	4
SecuControl ST Switch, 10 Pole, All Potential. (TD3, TD4, TD7, TD8)	STSA10002AX	SecuControl	4
SecuControl ST Switch, 10 Pole, 4 Potential, 6 Current Shorting. (TD1, TD2, TD5, TD6)	STSA10018AA	SecuControl	4
Cover for ST switches, 10 pole, clear (TD1-			
TD9) - provided with each test switch	FTDC10		0
Spare Disconnect Pins 10%		SecuControl	1



Flasting avoidable Carriage 24 Cambrid Covidable 2 deader			
Electroswitch: Series 24 Control Switch, 3 decks, MWH MTR Selection Control Switch (43CS)	24203C-009	ELECTROSWITCH	2
General Electric; lamp Type ET-16, 120VAC,			
1900 $\Omega$ .	0116B6708G5	GE	6
Incandescent Bulb -48 to 125VDC and 70 to	01100070003	GL	
240VAC. Clear transparent color cap	286A5443PC4	GE	c
·			6
Data Display Products; Clear White Cap	BB4-CW	data display	6
Solid State Instrument, Repeating Pulse Relay,	DDD 2DC CD2	Calid Ctata	4
125VDC SS05142B-00902 (CS1, CS2, CS3, CS4)	RPR-2PS-SP2	Solid State	4
Eaton FAZ Series, DIN rail type, 10 amperes,			
125VDC	FAZC10/1SP	EATON	6
Eaton FAZ Series, DIN rail type, 5 amperes,			
125VDC	FAZC5/1SP	EATON	0
States; Terminal Block 24 - point Type NT sliding			
Link point. (A, B, C, E, F, G)	M-25024	States	6
States; Terminal Block NT Type, 6 point. (D,			
H)	M-25006	States	2
Din mounting rail Type NS 35/7.5 Steel			
perforated	801733	PHEONIX	2
Phoenix; Type UBE/D, Terminal Strip Marker			
Carrier with cover (Z)	1004076	PHEONIX	2
Phoenix; E/NS 35 N End Clamp	800886	PHEONIX	4
Phoenix; D-UDK 4 End Cover	2775113	PHEONIX	4
Phoenix: UDK4-MTK-P/P Knife Disconnect	2775210	PHEONIX	72
Phoenix; UDK4 Terminal Block (1-180)	2775016	PHEONIX	16
Phoenix: ZB6 White Number Strip Label mount		-	
on both sides of block, printed horizontally with			
sequential numbers. (1-180	1051016	PHEONIX	32
Phoenix: ZB6 Orange Number Strip Label, mount			
on both sides of block, printed horizontally,			
decade labeling (10,20,30)	1051210	PHEONIX	2
Ground Bar	Ground Bar	KVA	1

#### **Bill of Material for Panel A6:**

Component	STYLE #	Manufacturer	Quantity
Panel - Grey on Grey	Panel	KVA	1



		_	
Schweitzer: Type 2488, Satellite-Synchronized			
Network, 2 125/250Vdc Power Supplies, IRIG-B			
and Network Time Protocol (NTP), 4			
10/100BASE-T Ethernet Ports, 8 BNC Time			
Outputs, TNC Antenna Input, 1 Form-C			
mechanical conventional alarm contact, 1 Form			_
A solid-state timer, one rack unit high (2488)	24880RAX1181AX23X	SEL	1
Smart DVS Digital Video Server, single 105-			
300VDC power supply, (2) 10/100/1000T ethernet ports, 1TB flash memory, (8) 100FX	DVS2500-HIS-XXX-2C10-		
1300nm multimode fiber ports, (4) RS232 via	HD002-8LC1-SXXX-4S01-		
DB9 module, Fail safe relay	SXXX-SXXX-SXXX-HR00	Smart DVS	1
·	3//// 3//// 3//// TINOO	Silial C D V S	
Schweitzer; Type 3530, SCADA Data			
Concentrator/RTU, 48/125Vdc Power Supply, 1			
EIA-485 Serial Port, 33 EIA-232 Serial Ports, 2			
10/100 Base-T RJ-45 Ethernet Ports, 24DI/8DO 3U high	3530#78HB	SEL	1
	3330#76ПВ	SEL	1
Schweitzer: Type 2440, 125Vdc/Vac Wetting			
Power Supply, 1 EIA-485 Serial Port, 16DI/32 (16			
Standard/16 High-Current) DO, 2 10/100 Base-T	244021144 4 6444 620	CEI	4
Ethernet Ports, 3U high	24402H11A6111630	SEL	1
Transition Networks, Ethernet Rack Mounted			
Switch, (24) 100/1000Mbps RJ-45 ports, (4)			
100/1000 Mbps SFP slots, (4) 1G/10G Mbps			
SFP+ slots, (1) Console RJ-45 port	SISPM1040-3248-L	Transition Networks	1
Optimum, Fiber Patch Panel, 2RU, 4 adapter			
plates, LC Duplex 12 SM, no pigtails, 2 splice			
trays, 1 strain relief clamp	PRO-2B-1-B53-N2-1	Optimum	2
Eaton FAZ Series, DIN rail type, 10 amperes,			
125VDC	FAZC10/1SP	EATON	5
Eaton FAZ Series, DIN rail type, 5 amperes,			
125VDC	FAZC5/1SP	EATON	0
States; Terminal Block 24 - point Type NT sliding			
Link point. (A, B, C, E, F, G)	M-25024	States	6
States; Terminal Block NT Type, 6 point. (D,			
H)	M-25006	States	2
Din mounting rail Type NS 35/7.5 Steel			
perforated	801733	PHEONIX	2
Phoenix; Type UBE/D, Terminal Strip Marker		-	
Carrier with cover (Z)	1004076	PHEONIX	2
Phoenix; E/NS 35 N End Clamp	800886	PHEONIX	4
Phoenix; D-UDK 4 End Cover	2775113	PHEONIX	4
THOCHIA, DODK T LING COVER	2113113	FILCINIA	4



Phoenix: ZB6 White Number Strip Label mount on both sides of block, printed horizontally with sequential numbers. (1-180 1051016 PHEONIX 36 Phoenix: ZB6 Orange Number Strip Label, mount on both sides of block, printed horizontally, decade labeling (10,20,30) 1051210 PHEONIX 4 Din mounting rail Type NS 35/7.5 Steel perforated 801733 PHEONIX 1 Phoenix; Type UBE/D, Terminal Strip Marker Carrier 1004076 PHEONIX 1 Phoenix; E/NS 35 N End Clamp 800886 PHEONIX 2 Phoenix; D-UDK 4 End Cover 2775113 PHEONIX 2 Phoenix; UDK4-MTK-P/P Terminal Block (Z181/Z182 to Z359/Z360) 2775210 PHEONIX 90 Pheonix: ZB6 White Number Strip Label mount on both sides of block, printed horizontally with sequential numbers. (181-360) 1051016 PHEONIX 18 Phoenix: ZB6 Orange Number Strip Label, mount on both sides of block, printed horizontally, decade labeling. (190, 200, 210) 1051210 PHEONIX 2 Abbatron/H.H. Smith; binding post, Black hex head, 10-32, gold plated. 257-103 H.H. Smith 1 J-Hook, stainless steel with hex nuts and #10-32 thread Ground Bar KVA 1 Ground Bar Ground Bar KVA 1	Phoenix; UDK4 Terminal Block (1-180)	2775016	PHEONIX	180
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(Z181/Z182 to Z359/Z360)  Phoenix: ZB6 White Number Strip Label mount on both sides of block, printed horizontally with sequential numbers. (181-360)  Phoenix: ZB6 Orange Number Strip Label, mount on both sides of block, printed horizontally, decade labeling. (190, 200, 210)  Abbatron/H.H. Smith; binding post, Black hex head, 10-32, gold plated.  Abbatron/H.H. Smith; binding post, Green hex head, 10-32, gold plated.  J-Hook, stainless steel with hex nuts and #10-32 thread  EVA 19  PHEONIX 90  PHEONIX 18  PHEONIX	Phoenix; D-UDK 4 End Cover	2775113	PHEONIX	2
on both sides of block, printed horizontally with sequential numbers. (181-360)  Phoenix: ZB6 Orange Number Strip Label, mount on both sides of block, printed horizontally, decade labeling. (190, 200, 210)  Abbatron/H.H. Smith; binding post, Black hex head, 10-32, gold plated.  Abbatron/H.H. Smith; binding post, Green hex head, 10-32, gold plated.  J-Hook, stainless steel with hex nuts and #10-32 thread  KVA  18  PHEONIX  18  PHEONIX  2  PHEONIX  1  Abbatron/H.H. Smith; binding post, Green hex head, 10-32, gold plated.  KVA  1		2775210	PHEONIX	90
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hex head, 10-32, gold plated.  J-Hook, stainless steel with hex nuts and #10-32 thread  KVA 1	,	257-103	H.H. Smith	2
thread KVA 1	, , ,	257-104	H.H. Smith	1
Ground Bar KVA 1			KVA	1
	Ground Bar	Ground Bar	KVA	1

#### **Bill of Material for Concrete Control House:**

VFP has proposed our standard concrete relay vault to fulfill your request. Our proposal is based solely on the following suppled information from City of Lake Worth.

- 1. Appendix B Drawing # CTS-138-SP-001-0- Sheet 1 of 1
- 2. Appendix C Bill of Materials, Equipment Sheet 1 of 1
- 3. Specification –Substation Prefabricated Relay Vault Canal Transmission Substation– Sheets 1 of 18

VFP has included a complete description of the proposed relay vault along with additional clarifications and exceptions below. We will gladly make changes per your request; however, changes may result in a price increase.

VFP is listing the following exceptions and clarifications:



- Relay Vault Canal Transmission Substation Specification. Scope. 1.2: Exception, VFP's standard
  design cannot meet an overall exterior height of 10'. VFP is offering our 10' interior high for this
  proposal. This would give you an estimated exterior height of 10'7" including the base. If
  requested, VFP will gladly make changes any changes made will result in a price adjustment.
  Height has been adjusted per VFP
  - 2. Relay Vault Canal Transmission Substation Specification. Scope. 1.3: Relay vault lead time will be per VFP's lead time section stated below.
- 3. Relay Vault Canal Transmission Substation Specification. Scope. 1.4.1. d, e & f: VFP assumes wiring diagrams is pertaining to VFP provided and installed equipment only. All other wiring diagrams is to be by others.
- 4. Relay Vault Canal Transmission Substation Specification. Scope. 1.7.6: VFP's understanding of CIP is meaning door card readers. VFP will provide wall provisions only for future CIP card readers to be provided and installed by others.
- 5. Relay Vault Canal Transmission Substation Specification. Scope. 2.1 & 2.2: Exception, VFP understanding of this is that relay and control panels and any associated wiring, wiring diagrams, interconnect wire or terminations is to be by KVA.
- 6. Relay Vault Canal Transmission Substation Specification. Scope. 2.3: RTU is to be the responsibility of others and not included. VFP is referring to panel A7 provided by others
- 7. Relay Vault Canal Transmission Substation Specification. Scope. 2.6: VFP assumes panel name plates are to be the responsibility of others and not include. KVA confirms provided by KVA
- 8. Relay Vault Canal Transmission Substation Specification. Scope. 3.2.1 g: Clarification, the walls bullet resistant, doors, hoods, HVAC units etc.... will not be.
- 9. Relay Vault Canal Transmission Substation Specification. Scope. 3.2.4. a: The floor will be 8" thick in lieu of 6" this is due to the width of the relay vault.
- 10. Relay Vault Canal Transmission Substation Specification. Scope. 3.2.4. c: Doors will be bolt on in lieu of cast in. Correct meets water intrusion quality control
- 11. Relay Vault Canal Transmission Substation Specification. Scope. 3.2.5. b: Exception, no interior wall options have been included. KVA confirms interior walls include insulation per the spec. This just means there is no further instructions for the interior walls.
  - 12. Relay Vault Canal Transmission Substation Specification. Scope. 3.2.5. f: VFP has included our standard exterior sealed exposed aggregate with painted trim. If requested, VFP will gladly make changes any changes made will result in a price adjustment. VFP confirms this is standard for FPL



- 13. Relay Vault Canal Transmission Substation Specification. Scope. 3.2.6.iii: VFP takes exception to the missile impact rating and will need further information to determine compliance.
- 14. Relay Vault Canal Transmission Substation Specification. Scope. 3.2.8. a. i & viii & Appendix C: Discrepancies, in specification to Appendix C. Specifications call for load centers and request for AQ & AE panels. VFP takes exception to the DC panel being fused and is offering breakers in lieu of fuses. Additional clarification, AQ & AE panels have been phased out and replaced with RQ & RE panels. The DC panels will have a 10kAlC rating. Please see VFP's offering of panels as described in the power distribution section below. If requested, VFP will gladly make changes any changes made will result in a price adjustment ACSWM-125-035-1 ACS Wall-Mount Charger: 125VDC/4.4KW (35.2A) Input: 208/240VAC/1phase/60Hz Output: 125VDC/35A. Dimensions: 22.25" W x 20.25" D x 21.39"H Consisting of NEMA 1 Enclosure, Wall Mounted, RAL 9005 1 x Cordex Controller, HP 4 x Cordex CXRC 125-1.1Kw 2 x Cordex 1.1Kw Module Blank 1 x Cordex 19" Flush Mount Shelf, 6xCXRC 1 x Breaker Panel, 208/240VAC 1 Phase Input CB 125VDC Output CB 1 x Battery Temperature Compensation Sensor 1 x DNP3 with Power Supply
- 15. Relay Vault Canal Transmission Substation Specification. Scope. 3.2.8. xi: Clarification, VFP will need additional information to provide pricing on service disconnects din mount breakers instead of fuses. VFP at this time has included one (1) AC safety disconnect switch as described per the power distribution section below with LPN-RK-SPI (blown indicator fuses) two (2) DC safety switches and
  - 16. one (1) MTS as described per the power distribution section below. If requested, VFP will gladly make changes any changes made will result in a price adjustment.
  - 17. Relay Vault Canal Transmission Substation Specification. Scope. 3.2.9 & Appendix C: Requested part # does not match the provided description. Based on the provided part number. If requested, VFP is providing 1 ATS based on the part # provides in the scope.
- 18. Relay Vault Canal Transmission Substation Specification. Scope. 3.2.10 & Appendix C: Both battery systems, racks, spill containment and chargers are assumed to be provided by KVA for installation by VFP prior to shipping the control house. Note: CFE batteries are assumed to be shipped directly to site by the customer, to be installed by VFP at site due to DOT regulations.
- 19. Relay Vault Canal Transmission Substation Specification. Scope. 3.2.11: Clarification, VFP has estimated the sizes for the HVAC units. If provided equipment heat loads, VFP will be more than happy to properly size the HVAC units. This may result in a price adjustment. City of lake worth has approved the estimated size.
  - 20. Relay Vault Canal Transmission Substation Specification. Scope. 3.2.12: KVA will wire the below specified alarms to an alarm junction box, where they will be tagged and coiled. KVA confirms
  - 21. Relay Vault Canal Transmission Substation Specification. Scope. 3.2.13: KVA is offering a Fire system as described in the Alarm device contacts section below. If requested, VFP will gladly make changes any changes made will result in a price adjustment.



- 22. Relay Vault Canal Transmission Substation Specification. Scope. 7.0: Exception, VFP is offering our standard factory testing. All other testing is assumed to be the responsibility of others and not included.
- 23. **Drawing # CTS-138-SP-001-0:** VFP has included a 12"x12"x6" NEMA 1 Hoffman enclosure to satisfy the requirements for JB#1. If provided more information, VFP will be more than happy to make changes any changes made will result in a price adjustment. This item has been removed per VFP
- 24. **Drawing # CTS-138-SP-001-0:** VFP assumes the fixed station for controller will be supplied and installed by others. KVA is to supply flat table capable of Size D drawing layout and Computer equipment. Must fit space allowed in drawings after VFP design. Must maintain 3' spacing
- 25. **Appendix C:** Requested part # does not match the provided description. based on the provided part number. If requested, VFP will gladly make changes any changes made will result in a price adjustment
- 26. VFP has not included any site work for foundations assumed to be by others. Confirmed supplied by others (CLWB)
- 27. VFP has not included stairs, guardrails, or platforms in this proposal. Confirmed supplied by others (CLWB)
- 28. KVA/VFP takes exception did not include any foundations assumed to be by others. KVA confirms delivery and install of the building, foundation provided by others (CLWB)
- 29. VFP has not included to all local codes, the relay vault will be built to the IBC and state codes only unless the local codes are provided with the bid request. VFP will require full detail of the local codes before determining compliance. CLWB- confirms state codes are acceptable
- 30. KVA/VFP will not be responsible for any permitting other than the factory building permitting and the over the road transportation permitting. All other permits will be the responsibility of the customer.

Unless otherwise stated communication or fiber cables are not provided nor installed. All communications listed in drawings provided by PEI post-award shall be provided and installed by KVA. This includes fiber, cat5/6, IRIG, GPS antennas and associated power and wiring

The proposed relay vault is described below:

#### **Construction - Concrete**

- Size nominal 15'6" wide (16'0" wide with roof overhang) exterior x nominal 33' long exterior x nominal 10' high interior, one room concrete control house
- Standard construction in accordance with VFP product specifications. The structural loads of the proposed concrete relay vault are as follows:
  - ➤ 125 pounds per square foot distributed floor loading while lifting



- 200 pounds per square foot distributed floor loading while on foundation
- > 100 pounds per square foot distributed roof load
- ➤ 200 mph wind load (Meets 194 ultimate wind speed per ASCE 7-10)
- Seismic zone 4
- Exposed aggregate exterior
- The proposed relay vault walls are capable of stopping 30.06 rifle fire per UL752 requirements. Unless otherwise specified, the relay vault doors are not bullet resistant.
- The proposed relay vault walls will provide a two-hour fire rating
- The floor will consist of 8" thick concrete base
- The interior walls and ceiling will be sheathed with ¾" Plywood backed "Class A" white FRP board
- The walls will be insulated to R-11 with hardboard insulation
- The ceiling will be insulated to R-19 with hardboard insulation
- The floor will be insulated using R-8 foam blockouts
- Floor painted with non-slip gray epoxy paint
- One (1) 42" wide x 84" high insulated "Florida Approved" "fire rated" steel exterior door, with "emergency exit" panic bar, exterior key lock lever set and fiberglass weather hood
- One (1) 72" wide x 84" high insulated "Florida Approved" "fire rated" steel exterior double door, "emergency exit" panic bar, exterior key lock lever set and fiberglass weather awning
- Three (3)) hydraulic door closers

#### **Power Distribution**

- One (1) 200 Amp, 42,000 AIC, 120/240 VAC, single phase, 60 Hz, 42 space main breaker, bolt-in utility power distribution panel, in NEMA 1 surface mount enclosure (GE-ReliaGear RQ) (ACLC 1) AC power panel will each be equipped with the following assortment of branch breakers:
  - Twenty-two (22) 30 Amp, single pole breakers
  - Eight- (8) 30 Amp, double pole breakers
- Two (2) 225 Amp main lug, 10,000 AIC, 125/250 VDC, 2-wire, 60 Hz, 60 space main breaker, bolt-in utility power distribution panels, in NEMA 1 surface mount enclosures (GE-ReliaGear RE) (DCLC 1 & 2) DC power panels will each be equipped with the following assortment of branch breakers:
  - Twenty-eight (28) 30 Amp, double pole breakers
- One (1) 200 Amp, 240 VACS, fused, 2-pole, safety disconnect switch in NEMA 1 enclosure with LPN-RK-200SPI fuses
- Two (2) 200 Amp, 250 VDC, non-fused, 2-pole, safety disconnect switches in NEMA 1 enclosures
- One (1) 200 Amp, 250 VDC, non-fused, 2-pole, manual transfer switch in NEMA 1 enclosure
- One (1)) 400 Amp, 120/240VAC, single phase, 2-pole, 60Hz automatic transfer switches in NEMA 3R enclosures model: ATC-900 p# ATC9C2X20400WRU
- One (1) 200 Amp Generator Receptacle Appleton ADJA20034-200RS or equal
- One (1) 200 Amp 240 VAC, non-fused, 2-pole, manual transfer switch in NEMA 1 enclosure Generator transfer switch
- Fourteen (14) 20 Amp specification grade duplex receptacles
- Two (2) 20 Amp specification grade exterior duplex ground fault receptacles

#### Lighting

- Ten (10) four-foot, LED surface mounted light fixtures with motion sensor control
- Two (2) emergency/exit lights



- Four (4) LED, 125 VDC, A21 globe style emergency surface mounted interior light fixtures with timed motion sensor control that only shuts off upon no motion but does not activate on motion and a manual switch control
- Three (3) LED exterior door light fixtures with vandal-resistant lens, photocell control & manual switch override

#### **HVAC**

- Two (2) 3.0 Ton, 240 VAC, single phase, 11 EER wall mount air conditioning units, with low ambient and compressor anti cycle controls, phenolic coated coils, integral 5 kW resistance heat strips and washable dust filters (Removed for shipment per DOT regulations and placed in the relay vault during transit, to be installed on-site by VFP's onsite service personnel)
- One (1) lead/lag controller allowing approximately equal operating time on each air conditioning unit
- One (1) Humidistat
- Two (2) 650 cfm (at 0" of H2O static pressure) battery area exhaust fan systems, including "Florida Approved" intake and exhaust louvers, timer and hydrogen detector controls, fiberglass hoods, permanent filters and exhaust insect screen

#### **Additional Furnished Equipment**

- Two (2) battery racks EQ-SGS2-30 SBS
- Two (2) spill containment systems SC121-34P30 SBS
- Two (2) battery chargers ACSWM-125-035-1 Alpha
- Forty (40) Batteries VLA battery, 6V (3-cell) jar, 200AH- qty 40 STT6V200 SBS

#### **Alarm Device Contacts**

The following alarm device contacts will be wired and brought to a location specified by the customer. The alarm wires will be coiled and tagged for identification per VFP standards. Unless otherwise stated in this proposal, termination at the customer's equipment is assumed to be provided by others. There are no provisions for audible, visual or remote alarm monitoring offered, except where it is integral to the device offered or stated otherwise in this proposal

- Two (2) line voltage smoke detectors with auxiliary contacts
- One (1) Alarm control system model; Cybercast 50 (no duct) with up to three (3) interior photo sensors, two (2) pull stations, two (2) outside strobes and one (1) inside horn strobe. Cybercast 50 wired to a j-box location for connection/final termination by others
- Three (3) intrusion door alarm switches with form "C" contacts
- One (1) high temperature alarm



- One (1) low temperature alarm
- One (1) power failure alarm
- Two (2) hydrogen detectors for alarm and fan control

#### Grounding

- One ground system consisting of a 4/0 AWG stranded bare copper conductor, run through the cable tray with grounding drops to the equipment and a single drop at the cable entrance locations for termination at the final site by others
- One (1) internal copper ground bar near floor level
- Two (2) external copper ground pads on opposite corners

#### **On-Site Services**

To perform on-site support services per the terms and conditions. This will consist of the following:

- attach the control house to the customer furnished foundation
- reinstall all VFP provided items that were removed for shipment
- install the batteries in the battery rack, make interconnections and final wiring terminations (Note:
   \*CFE batteries are assumed to be shipped directly to site by the customer, to be installed by VFP at
   site due to DOT regulations; Battery testing and commissioning is not included and is assumed to
   be by others unless otherwise stated)
- Crane Offloading is included and is based on free and clear access to the jobsite.

#### **Accessories**

- One (1) VFP standard exterior aluminum cable entry hood (shipped loose and placed in the relay vault during transit, to be installed on-site by KVA/VFP's onsite service personnel)
- Up to sixty feet (60') of 36" wide x 6" deep aluminum cable tray
- Two (2) portable 10-pound CO<sub>2</sub> fire extinguishers
- One (1) antenna mount bracket
- One (1) drawing table
- One (1) Porta Stream II, gravity fed, 15 min flow, wall mounted eyewash station with saline concentrate model: Uline H-1142
- One (1) wall mounted drawing rack with six (6) clamps
- One (1) 42" high x 36" wide x 18" deep metal storage cabinet, two doors, lockable
- One (1) service manual



- One (1) year bumper to bumper limited warranty and a ten (10) year structural warranty
- If requested, will provide four (4) sets of relay vault drawings with each relay vault unit order. Typical foundation drawings based upon normal soil conditions are available to support calculations for recommended relay vault tie down locations. No other foundation drawings are offered in the proposed relay vault price.
- All wiring will be installed in surface mounted conduit or wireways if specified and will be in full compliance with ANSI/NFPA-70 The National Electrical Code, latest revision.
- Control houses are to be built according to the latest IBC edition and state requirements of which the relay vault is residing, local and county codes are not applicable unless otherwise stated.

#### **Clarifications:**

- KVA quote is based on the above Bill of Material; any changes to the above bill of material could result in a price change or change order upon the award of purchase order.
- Panel A2, A3, A4 & A5 FTDC10 is not included in this quote. This item in not needed according to the manufacturer. The covers are included with the actual test switches.
- Panel A1, A2, A3, A4 & A5 Marathon Terminal blocks have been changed to States per the customer request.
- Panel A6 Smart DVS DVS2500 is not provided in this quote. KVA was not able to source this item currently.
- Terminal bock quantities are estimated in all panels.

#### KVA Relay Panel testing to include:

- Point-to-point continuity test in accordance with wiring diagrams.
- Current Injection
- Power Up of the SELs
- KVA Shop Quality Audit Checklist
- Visual Appearance Check
- Dimensional checks to fabrication drawings
- Part Number Accuracy
- Quantity Verification
- Panel Layout Verification
- Nameplate and Labeling Accuracy
- Wire Marker Verification to Drawings
- Termination Torque, Crimp and Tensile Integrity

Relay Panel Engineering Drawings: Relay panel Mechanical drawings are included in this proposal.

#### A) Payment:

- a. Payment terms are 100% net 30 days from invoice date.
- b. Payment Schedule for Projects over \$300,000 shall be as follows:



Project Phase:	Contracts over \$300,000
1. Receipt of Purchase Order	10%
2. Receipt of "For Construction" Drawings	30%
3. Delivery	60%

- B) Taxes: Prices shown do not include sales or other taxes imposed on the sale of the goods.
- C) Freight: F.O.B. freight costs to City of Lake Worth, FL are included in the prices shown.
- **D)** Cancellation: With the placement of an Order, Buyer acknowledges that Seller would incur financial damages in the case of a cancellation of an Order and that Seller has the right to charge the Buyer for such damages as specified by the time schedule below.
  - a. Schedule of Fees for Cancellation of Order:

Milestone	Cancellation Charge (% of P.O. value)
After Purchase Order is placed	10%
Receipt of "For Construction" Drawings and procurement start	30%
2 weeks after release for procurement	60%
4 weeks after release for procurement	100%

- b. Higher cancellation fees may be imposed on special or modified equipment up to the entire value of the Order.
- c. Payment of the cancellation fee is to be made within fifteen (15) days of cancellation.
- **E)** Validity: This proposal is valid for acceptance within 90 days.
- **F)** Warranty: KVA shall repair or replace any defective item within 18 months of Acceptance Date or 18 months after shipment (whichever is sooner) and will extend the full manufacturers' warranty on all purchased components.

Limits of Liability: In no event, whether because of a breach of contract, indemnity, warranty, or tort (including negligence), strict liability, or otherwise, shall the Seller be liable to the Buyer for: (i) Loss of profit or revenue, loss of use, cost of capital, downtime costs, cost of substitute products, facilities, services, or replacement power.

- (ii) Property damage external to the product and loss arising out of such damage.
- (iii) Special, indirect, punitive, or consequential damage; or for
- (iv) Any of the foregoing suffered by a customer of the Buyer.

KVA MAKES NO WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE AND KVA SHALL HAVE NO LIABILITY ARISING OUT OF THE ORDER IN EXCESS OF THE AMOUNT OF THE ORDER.

MADE IN THE UNITED STATES

KVA Inc. is a WBE Certified Corporation.

KVA Inc. 3307 Brushy Creek Rd. Greer, SC 29650 (864) 801-4430