

**CITY OF SPRINGFIELD ELECTRIC DEPARTMENT  
1000 CENTRAL AVENUE  
SPRINGFIELD, TENNESSEE 37172**

**PROPOSAL CONTRACT**

**SUBSTATION BATTERIES & SPILL CONTAINMENT  
FOR  
MT. DENSON SUBSTATION**

**BID OPENING DATE: August 10, 2015**

**TIME: 2:00 p.m.**

Contents:

- I. Proposal/Bid Preparation
- II. Base Bid
- III. Specifications
- IV. Non-Collusion Affidavit
- V. Business Relationships Affidavit

**I. PROPOSAL**

**A. Preparation**

BIDDER shall submit two (2) copies of bid proposal in a sealed envelope addressed to:

Lisa Crockett  
City Recorder  
City of Springfield  
405 North Main Street  
Springfield, TN 37172

Bids will open **August 10, 2015 at 2:00 p.m. CST.** No telephone or faxed bids will be considered.

**B. Pricing**

The BIDDER declares that this proposal is made without connection with any other person or persons bidding for the same work. Bids shall not contain any unbalanced prices, unauthorized additions, alterations, limitations, conditions, or provisions. Non-Collusion Affidavit and Business Relationships Affidavit must be returned with bid.

***BIDDER shall use Section II Base Bid of this document to list all prices, terms, conditions, exceptions, and warranties.***

Pricing shall include delivery and installation to Mt. Denson Substation, Hwy 161 & Charles Ralph Drive, Springfield, Tennessee.

Springfield Electric reserves the right to reject any or all bids.

**C. Inspections and Tests**

Unless otherwise specified in the contract or purchase order, BIDDER shall be responsible for the performance of all inspection and test requirements necessary to insure compliance with this specification. This action does not preclude subsequent inspection and testing by OWNER to further determine conformance to specification requirements of quality standards of workmanship, material, and construction techniques.

**D. Questions**

Any questions concerning these specifications should be directed to:

Gary Noel  
Technical Services Supervisor  
Springfield Electric Department  
1000 Central Avenue  
Springfield, Tennessee 37172  
(615) 384-6770 ext. 118  
(615) 382-1642 (Fax)  
[gnoel@springfield-tn.org](mailto:gnoel@springfield-tn.org)

## II. BASE BID

Proposal of \_\_\_\_\_, herein called "BIDDER", to the City of Springfield Electric Department, herein called "OWNER":

That for and in consideration of the mutual agreements and covenants herein contained, the parties agree and bind themselves as set out below:

The BIDDER, in compliance with the invitation to bid for SUBSTATION BATTERIES & SPILL CONTAINMENT for MT. DENSON SUBSTATION, having examined the plans and specifications with the related documents, and being familiar with all the conditions surrounding the proposed project including the availability of materials and labor, hereby proposes to furnish all labor, materials, and supplies, and to install the equipment in accordance with the contract documents, within the time set forth therein, at the price stated therein.

Bidder agrees to perform work in compliance with all codes applicable to this project. All work is to be performed in a neat and professional manner.

**This project is to be bid by BIDDER as a LUMP SUM BID for all work described in this specification.**

BIDDER hereby agrees to complete work under this contract within sixty (60) calendar days after receipt of order.

Prior to commencement of work, the successful bidder shall be required to provide OWNER the following:

- a. All executed documents related to this project returned to OWNER, and;
- b. Written guarantee of material and workmanship for all work to be performed under this contract including any terms and conditions of guarantee.

**ANY EXCEPTIONS OR SUBSTITUTIONS FROM THESE SPECIFICATIONS ARE TO BE NOTED AND EXPLAINED WITH ALL DOCUMENTATION SUPPLIED.**

**SUBSTATION BATTERIES & SPILL CONTAINMENT  
FOR  
MT. DENSON SUBSTATION  
BID OPENING**

Date: August 10, 2015      Time: 2:00 p.m.



Quantity	Part Number	Description	Price Each	Total
20	3DJU-155	C&D Flooded Battery	\$ _____	\$ _____
1	RDB0803	C&D 2-Step EQ Rack	\$ _____	\$ _____
1		Spill Containment Pan & Absorbent Pillows	\$ _____	\$ _____
1	Labor	Installation Cost	\$ _____	\$ _____

**TOTAL BID: \$ \_\_\_\_\_**

Delivery/Installation Date: \_\_\_\_\_

Terms and Length of Warranty/Guarantee: \_\_\_\_\_

Other Terms and Conditions: \_\_\_\_\_

Exceptions/Substitutions:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_



Notes:

1. Bidder must submit with bid proposal complete specifications, pictures, and literature describing and illustrating the proposed equipment.
2. Include all shipping charges with bid proposal. Pricing shall include delivery to Mt. Denson Substation, Hwy 161 & Charles Ralph Drive, Springfield, Tennessee.
3. Bidder must provide 130 volt temporary backup during installation.
4. Sales tax is not to be included. We are a tax-exempt local government agency.
5. Final payment shall be made to successful BIDDER by OWNER within thirty (30) days after:
  - a. Delivery of product, and assembly if applicable, and;
  - b. The approval by the OWNER of all work performed under the proposal, and;
  - c. An affidavit has been submitted to OWNER by BIDDER stating that payment has been made for all labor, materials, and subcontractors under this proposal.
6. BIDDER agrees to be bound by the bid price in this proposal for a period of sixty (60) days from the date of the opening of the bid.
7. The OWNER reserves the right to reject any or all bids, to waive any informality in bids, and to accept in whole or part such bid or bids as may be deemed in the best interest of OWNER.

\_\_\_\_\_  
Signature – BIDDER

\_\_\_\_\_  
Date

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Address

\_\_\_\_\_  
Telephone No.

\_\_\_\_\_  
SPECIFICATIONS FOLLOW THIS PAGE  
\_\_\_\_\_



# DJU Lead-Calcium Battery

**FOR SWITCHGEAR & CONTROL APPLICATIONS  
CAPACITIES FROM 110 TO 200 AMPERE-HOURS**

**INDIVIDUAL POSTS IN A MULTI-CELL BATTERY**



Every battery  
**100%**  
capacity tested

DJU SERIES BATTERY

C&D Technologies' flooded batteries are engineered to provide superior performance and reliability over the life of the product. These batteries are designed using proprietary techniques and quality components and materials for reduced maintenance and extended battery life.

## APPLICATIONS

- Electric Utility Substations
- Manufacturing Facilities
  - Assembly Lines
  - Process Controls
  - Communication Systems
- Petrochemical Processing Plants
- Pipelines
- Emergency Systems

## FEATURES & BENEFITS

### RELIABILITY

- Reliable tongue and groove jar-to-cover seal design provides increased adhesive coverage area — offering unprecedented seal integrity during service
- Top suspended positive plate design allows free downward growth without pressure on jar, cover, or post seal — extending reliability and product life
- Recessed vent area to collect water and acid spills, keeping them away from posts and cover — lowering maintenance and clean-up costs
- Wrapped separator design extends cycle life — improving product reliability
- Enhanced post seal design allows post growth without transmitting forces to cover

### SAFE OPERATION

- Self extinguishing features (LOI >32) of flame retardant (FR) cover and jar material — providing added protection
- Low evaporation, flame arrestor vents protect against an external source igniting hydrogen gas within the cells — improving safety

### COST SAVINGS

- Unique jar design facilitates installation
- Compact, optimized product size nets up to 40% floor space reduction — saving valuable space

### EASY MAINTENANCE

- All posts and connectors reside above the jar cover
- Individual posts allow monitoring of individual cell performance in a multi-cell container
- Individual posts use standard lead-plated copper connectors decreasing connection resistance
- Optional terminal and connector cover available (P/N RD00907-"L")

The new 20-year design life DJU batteries incorporate these benefits in a transparent container for visual inspection of plates and has individual posts for cell voltage readings.

## SPECIFICATIONS

<b>Recommended float voltage range</b>	2.20–2.25 volts per cell (1.215 specific gravity)
<b>Specific gravity of electrolyte @77°F (25°C)</b>	1.215 (standard)
<b>Cover material</b>	High impact, PVC, LOI>32, UL94-V0
<b>Container material</b>	Transparent, high-impact PVC, LOI>32, UL94-V0
<b>Separator material</b>	U-wrapped, microporous with fibrous mat
<b>Terminal type</b>	Rectangular lead post, two for every cell
<b>Safety vent</b>	Flame arrestor/low evaporation type

C&D capacity tests every DJU battery to 100% of published rating which ensures 100% capacity out-of-the-box (no need to field cycle the batteries to reach rated capacity). This saves time and money for users.

**SPECIFICATIONS**

Nominal rates, 1.215 specific gravity @ 77°F (25°C) (includes connector voltage drop)  
Amperes

Models	FV/Cell	1 min	15 min	30 min	1 hr	2 hr	3 hr	4 hr	5 hr	8 hr	12 hr
DJU-110	1.75	158.1	117.4	87.9	59.6	37.9	28.3	22.9	19.5	13.8	9.9
	1.78	139.3	105.0	80.1	55.5	35.9	27.0	22.1	18.8	13.3	9.7
	1.81	120.5	92.6	72.4	51.4	33.9	25.8	21.2	18.2	12.9	9.4
	1.85	94.9	78.2	62.4	44.8	30.6	23.9	19.8	17.0	12.1	8.8
* DJU-155	1.75	226.3	168.0	125.8	85.4	54.3	40.5	32.8	27.9	19.5	14.2
	1.78	199.5	150.3	114.7	79.5	51.4	38.7	31.6	26.9	19.0	13.8
	1.81	172.6	132.5	103.6	73.6	48.5	37.0	30.4	26.0	18.5	13.5
	1.85	135.9	112.0	89.4	64.2	43.8	34.2	28.4	24.4	17.3	12.6
DJU-200	1.75	287.4	213.4	159.8	108.4	68.9	51.4	41.7	35.4	25.0	18.0
	1.78	253.3	190.8	145.7	100.9	65.3	49.2	40.2	34.2	24.1	17.6
	1.81	219.2	168.3	131.5	93.5	61.6	47.0	38.6	33.0	23.4	17.1
	1.85	172.6	142.2	113.5	81.5	55.6	43.5	36.1	31.0	22.0	15.9

Additional ratings and application information are available in the Battery Selection Program found at [www.cdstandbypower.net](http://www.cdstandbypower.net)

Note: Data based on discharge from float at 77°F (25°C) in accordance with IEEE-450

**SPECIFICATIONS**

Type of battery	Part number	Cells per unit	Plates per cell	Dimensions			Approx. wt. lbs (kgs)		Electrolyte per cell gal. (l)
				L in (mm)	W in (mm)	H in (mm)	Net filled	Dom. packed	
3DJU-110	CW18267-PVC	3	5	8.09 (205.5)	13.58 (344.9)	15.22 (386.6)	101 (46)	112 (51)	1.23 (4.66)
* 3DJU-155	CW18266-PVC	3	7				120 (54)	131 (59)	1.09 (4.13)
3DJU-200	CW18265-PVC	3	9				139 (63)	150 (68)	0.95 (3.60)
2DJU-110*	CW18270-PVC	2	5				71 (32)	82 (37)	1.23 (4.66)
2DJU-155*	CW18269-PVC	2	7				83 (38)	94 (43)	1.09 (4.13)
2DJU-200*	CW18268-PVC	2	9				96 (44)	107 (49)	0.95 (3.60)

\* 2 cells in a 3 cell jar. Use with 3 cell jars to obtain desired string voltage.

**DJU COMMON RACK SELECTION MATRIX**

	Non-seismic racks			Seismic racks		
	1 Tier, 1 Row	2 Tier, 1 Row	2 Step	1 Tier, 1 Row	2 Tier, 1 Row	2 Step
48 V (8 Jars)	RDB0800-06P	RDB0801-03P	RDB0803-03P	RDB0800-06EP1P RDB0800-06EP2P	RDB0801-03EP1P RDB0801-03EP2P	RDB0803-03EP1P RDB0803-03EP2P
120 V (20 Jars)	RDB0800-15P	RDB0801-7.3P	RDB0803-7.3P	RDB0800-15EP1P RDB0800-15EP2P	RDB0801-7.3EP1P RDB0801-7.3EP2P	RDB0803-7.3EP1P RDB0803-7.3EP2P

120 V (20 Jars)	2 Step/2 Tier	
	Non-seismic racks	Seismic racks
	RD04452-04	RD04452-04EP1

3 Tier/1 Row and other lengths of 2 Step/2 Tier racks are also available. Contact your local C&D representative for details.

See brochure 12-660 for more information on seismic ratings of racks

Two digit number following hyphen indicates length in feet. Example -06 = six foot rack

**C&D TECHNOLOGIES, INC.**

1400 Union Meeting Road  
P.O. Box 3053 • Blue Bell, PA 19422-0858  
(215) 619-2700 • Fax (215) 619-7899 • (800) 543-8630  
customersvc@cdtechno.com  
[www.cdtechno.com](http://www.cdtechno.com)

Any data, descriptions or specifications presented herein are subject to revision by C&D Technologies, Inc. without notice. While such information is believed to be accurate as indicated herein, C&D Technologies, Inc. makes no warranty and hereby disclaims all warranties, express or implied, with regard to the accuracy or completeness of such information. Further, because the product(s) featured herein may be used under conditions beyond its control, C&D Technologies, Inc. hereby disclaims all warranties, either express or implied, concerning the fitness or suitability of such product(s) for any particular use or in any specific application or arising from any course of dealing or usage of trade. The user is solely responsible for determining the suitability of the product(s) featured herein for user's intended purpose and in user's specific application.





