CITY OF COFFEYVILLE
BOARD OF COMMISSIONERS AGENDA ITEM

MEETING DATE	April 28, 2015	
RESOLUTION OR ORDINANCE NUMBER	R-15-51	
AGENDA TITLE	**Auxiliary Transformer Package – CMLP Generation Facility No.2**	
REQUESTING DEPARTMENT	Electric	
PRESENTER	Tony Lawson, Generation Superintendent	
FISCAL INFORMATION	Cost as recommended:	$229,441.00
	Budget Line Item:	810-5-030-862 PLANT IMPROVEMENTS
	Balance Available	
	New Appropriation Required:	[ ] Yes [x] No
PURPOSE	Execute an agreement to supply (2) 13.8kV/480V Transformers and (1) 12.47kV/480V Transformer.	
BACKGROUND	The Electric Utility used the competitive and cooperative bid process issued by the Stillwater Utility Authority, Stillwater, Oklahoma to obtain bid packages to supply Auxiliary Transformers for the Coffeyville Municipal Light & Power New Generation Project.	
SPECIAL NOTES		

ANALYSIS	Stillwater Utility Authority issued Request for Proposals through a public bid process to provide Auxiliary Transformers, as described in the detailed Burns & McDonnell specification. Proposals were received from: • Eaton $313,656.00 • Gexpro $304,700.00 • Hunzicker Bros. $395,000.00 • Siemens $315,511.00 • WEG $229,441.00 Proposals were evaluated by Stillwater Utility Authority Staff, Burns & McDonnell Engineers, and City of Coffeyville electric Utility Staff. The Proposal comparison/analysis is attached for your review.
PUBLIC INFORMATION PROCESS	
BOARD OR COMMISSION RECOMMENDATION	
STAFF RECOMMENDATION	Staff recommends that the Mayor be authorized to enter into an agreement with WEG Electric Corp. for a Transformer Package of (2) 13.8kV Transformers and (1) 12.47kV Transformer for the amount of $229,441.00.
REFERENCE DOCUMENTS ATTACHED	WEG Transformer Package Agreement Stillwater Invitation to Bid Bid Summary/Analysis Coffeyville Submittal – Agreement Addendum

RESOLUTION NO. R-15-51

A RESOLUTION TO ENTER INTO AN AGREEMENT WITH WEG ELECTRIC CORPORATION FOR (2) – 13.8kV/480V TRANSFORMERS AND (1) – 12.47kV/480V TRANSFORMER FOR THE CITY OF COFFEYVILLE ELECTRIC UTILITY.

BE IT RESOLVED by the Board of Commissioners of the City of Coffeyville, Kansas that the Mayor be and is hereby authorized to enter into an agreement with WEG Electric Corporation in the amount not to exceed $229,441.00 for (2) – 13.8kV/480V Transformers and (1) 12.47kV/480V Transformer for the City of Coffeyville Electric Utility.

ADOPTED THIS 28th DAY OF April, 2015.

_____
Christopher V. Williams, Mayor

ATTEST:

_____
Cindy Price, City Clerk

APPROVED AS TO FORM AND LEGALITY:

_____
Paul Kritz, City Attorney

BURNS McDONNELL

Project No.:75644

Stillwater Energy Center

C5120-Auxiliary Transformers

Budget: $149,591	#1	#2	#3	#4	#5
Bidder's Name (Contractor/ Supplier)-->	Eaton	Gexpro	Hunzicker Bros.	Siemens	WEG
Bidder's Contact Party-Name-->	Daniel Drew	Paige Pillen	Steve Raine	Tony Zito	Graham Garrison
Bidder's Contact Party-Phone-->	224-279-7587	303-572-7117	405-372-0542	919-463-8700	404-805-4817
Quote/Proposal No.-->	14Q2417814	TUS15-283TL	Q003192	M144102A	2052-4646-4655
Price Breakdown Specified					
Base Requirements Specified					
Two (2) 2000/2667 kVA 13.8kV/480V cast-coil dry-type distribution transformers	$ 213,781.00	$ 210,108.00	Did not provide line items costs.	$ 208,710.00	$ 155,122.00
One (1) 1500/2000 kVA 12.47kV/480V cast-coil dry-type distribution transformer	$ 92,927.00	$ 89,096.00		$ 96,853.00	$ 60,790.00
Transportation (DDP jobsite, Stillwater, OK)	$ 5,790.00	$ 5,985.00		$ 11,550.00	$ 12,000.00
Requested Performance and Statutory Bonds	$ 1,158.00	$ 4,120.00		$ 3,198.00	$ 5,680.00
Total Base Amount	$ 313,656.00	$ 309,309.00	$ 395,000.00	$ 320,311.00	$ 233,592.00
Options Specified					
Recommended Spare Parts	None	None	None	None	None
50% of deduct for duplicate order	$ -	$ (4,609.00)	Not provided	$ (4,800.00)	$ (4,235.00)
Total Option Amount	$ -	$ (4,609.00)	$ -	$ (4,800.00)	$ (4,235.00)
Commercial Comments					
Payment Terms	Final payment shall be at acceptance date	Vendor Standard Pricing Terms and Conditions	30% Release to manufacturing, 70% balance due at shipment	20% ARO, remaining 80% within 30 days of DDP delivery	90% due upon shipment from WEG plant; 10% due on final acceptance of the transformer no later than 30 Days after on-Site
Cancellation Terms	Reimbursement of the following percentages: 15% if factory order complete 25% if factory drawings issued 50% within week after approval and release of advance purchase material 80% if construction drawings complete and released to factory for mfr. 100% for construction either complete or equipment arrived at jobsite	Reimbursement of the following percentages: 5% after order complete 10% if factory approval drawings issued **20% of selling price plus the following values for milestones after materials purchased but prior to production** 50% of selling price after release for manufacture. 100% of selling price once production begins.	Right to cancel at any time by written notice for any material breach of contract by Purchaser, including material delays in releasing equipment for manufacture or approval drawings and excessive changes to specifications or drawings	Graduated cancellation fee based on delivery time and remaining time prior to scheduled delivery.	negotiable - actual costs incurred
Sub-Total Evaluated Amount (w/o Options)	**$ 313,656.00**	**$ 309,309.00**	**$ 395,000.00**	**$ 320,311.00**	**$ 233,592.00**
Sub-Total Evaluated Amount (w/ Options)	**$ 313,656.00**	**$ 304,700.00**	**$ 395,000.00**	**$ 315,511.00**	**$ 229,357.00**
Ranking	3	2	5	4	1

RECOMMENDATION

Project No.:	75644
Project Name:	Stillwater Utilities Authority - Stillwater Energy Center Project
Package No./Name:	C5120 - Auxiliary Transformers

BASIS OF RECOMMENDATION

Lowest Evaluated Cost:	■	
Single/Sole Source:	☐	
Lead Time/Delivery:	☐	
Only Technically Acceptable Supplier:	☐	
Other (Please Explain):	☐	
Recommended Supplier/Subcontractor:		WEG

SUMMARY AND RECOMMENDATION

Five proposals in total were received from the following vendors: Eaton, GexPro, Hunzicker Bros, Siemens, and WEG.

All five bids were considered for evaluation.

The base prices for all evaluated proposals are higher than budgeted by SUA for the purchase of the transformers due to the addition a transformer to separately feed the LV common bus from a source external to the plant.

WEG, the lowest evaluated cost bidder, took no commercial or technical exceptions, accepted liquidated damages, stated they will meet guaranteed delivery dates, and was responsive in post-bid correspondence. It is recommended that WEG be awarded SUA Bid #23-14/15 C5120 - Auxiliary Transformers.

SUA Bid #23-14/15 - C5120 - Auxiliary Transformers
WEG Correspondence Log

Item	Category	Date Rcv'd	RFP Section	Technical Exception, Clarification or Question	Resp. Initials	SUA Response	Response Date	Bidder Reply	Response Date	SUA Response	Response Date
1					RAE	For bid Item 2, conflicting HV winding voltages (13.8 kV and 12.47 kV) were provided with the bid technical information. Please confirm that HV winding voltage will be 12.47 kV for the transformer listed in Item 2.	10-Feb-2015	Confirmed: HV winding will be 12.47 kV as required for item 2	11-Feb-2015		
2					RAE	Test procedures described within ANSI C57.12.90 apply to liquid-filled transformers. Please confirm that testing shall be performed per ANSI C57.12.91, which applies specifically to dry-type transformers.	10-Feb-2015	Confirmed: Testing shall be per C57.12.91	11-Feb-2015		

Table of Contents

Contract C5120

Auxiliary Transformers

Contract 2
Bond and Insurance Supplement 3
Performance Bond 4
Statutory Bond 6
Non-Collusion Affidavit 8
Non-collusion Affidavit for Payment for Invoice Payment Over $25,000 9
Certificate of Non-Discrimination 10
Business Relationships Affidavit 11

ATTACHMENT A – Commercial Terms & Conditions

ATTACHMENT B – Technical Specifications

Contract

THIS CONTRACT AND AGREEMENT, made and entered into this ___ day of _____, 2015, (the "Effective Date") by and between Coffeyville Municipal Light & Power, Coffeyville, Kansas, and WEG Electric Corp., hereinafter called the "Supplier",

WITNESSETH:

THAT WHEREAS, Coffeyville Municipal Light & Power has caused to be prepared in accordance with the law, certain plans, Specifications, and other documents for the Work hereinafter described, and has approved and adopted all of said Contract documents, and has caused solicitation for Bids to be given and advertised as required by law, and has received sealed Bids for the furnishing of all labor and materials for

C5120 – Auxiliary Transformers
Bid #23-14/15

as outlined and set out in the Contract documents and in accordance with the terms and provisions of this Contract; and,

WHEREAS, the Supplier, in response to said solicitation for Bids; has submitted Coffeyville Municipal Light & Power in the manner and at the time specified, a sealed Bid in accordance with the terms of this Contract; and,

WHEREAS, Coffeyville Municipal Light & Power has duly awarded this Contract to said Supplier, for the sum named in the proposal to wit:

Two hundred twenty-nine thousand four hundred forty-one dollars and no cents
($229,441.00)

The Contract Price includes, and is broken down as follows:

Two (2) 2000-2667kVA 13.8kV/480V cast-coil dry-type distribution transformers	$ 152,019.00
One (1) 1500/2000 kVA 12.47kV/480V cast-coil dry-type distribution transformer	$ 59,742.00
Transportation (DDP Project Site, Coffeyville, KS)	$ 12,000.00
Performance and Statutory Bonds	$ 5,680.00

NOW THEREFORE, for and in consideration for the mutual agreements and covenants herein contained, the Parties to this Contract have agreed, and hereby agree as follows:

1. The Supplier shall, in a good and workmanlike manner, at his own cost and expense, furnish all labor, materials, tools, and equipment required to complete the Work in strict accordance with the Contract and the following Contract documents: Summary Bid Form, Non-Collusion Affidavit, Certificate of Non-Discrimination, Non-Collusion Affidavit for Invoice Payment over $25,000, Contract, Business Relationship Affidavit, Performance Bond, Statutory Bond, Commercial Terms and Conditions, Specifications, and addenda for Bid #23-14/15 are made a part of this Contract as fully as if the same were herein set out at length.
2. On completion of agreed Work, but prior to the acceptance thereof by Coffeyville Municipal Light & Power, it shall be the duty of a Coffeyville Municipal Light & Power representative to determine, by examination that said agreed Work has been completely and fully performed in accordance with the Contract documents. Upon completion and acceptance of such Work, any remaining amount due for that Work shall be paid to Supplier in accordance with Article 6 Payment of the Commercial Terms and Conditions.
3. Terms used in this Contract have the meaning defined in *Commercial Terms and Conditions* Article 1 Definitions.

IN WITNESS WHEREOF, the Parties hereto have caused this instrument to be executed, in three duplicate originals, the day and year first above written.

SUPPLIER:

By:_____

Print Name:_____

Title:_____

Date:_____

OWNER:

By:_____

Print Name:_____

Title:_____

Date:_____

Performance Bond

KNOW ALL MEN BY THESE PRESENTS:

That we, _____ as Principal, and _____,as Surety, a corporation organized and existing under the laws of the State of _____, and duly authorized to do business in the State of Kansas, are held and firmly bound unto COFFEYVILLE MUNICIPAL LIGHT & POWER, in the penal sum of

_____

_____ Dollars ($_____) lawful money of the United States of America, such sum being equal to 100 % of the Contract Price for the payment of which, well and truly to be made, we, and each of us, bind ourselves, our successors, and assigns, jointly and severally, firmly by these presents.

Dated this _____ day of _____, 20_____.

The condition of this obligation is such that whereas, the above named Principal did, on the _____ day of _____, 20_____, enter into a Contract with the COFFEYVILLE MUNICIPAL LIGHT & POWER for the construction/services of _____

_____

_____

All in compliance with the plans and Specifications therefore, made a part of said Contract, and on file in the Office of the City Clerk of the City of Coffeyville; and said Contract is hereby made a part and parcel of this bond as if literally written herein.

NOW, THEREFORE, if said Principal shall, fully and faithfully execute the Work and perform said Contract according to its terms and conditions, and covenants, and in exact accordance with the Bid of said Principal, and according to certain plans and Specifications heretofore made, adopted, and placed on file in the Office of the City Clerk of the City of Coffeyville, as set out in the Specifications herein, and shall promptly pay, or cause to be paid, all labor, material and/or repairs and all Bids for labor performed on

said Work, whether by Subcontract or otherwise, and shall protect and save harmless Coffeyville Municipal Light & Power and all interested property owners against all claims, demands, causes of action, losses or damage, and expense to life or property suffered or sustained by any person, firm, or corporation by reason of negligence of the Principal or his or its agents, servants, or employees in the construction/services of said Work, or by or in consequences of any improper execution of the Work or act of omission or use of inferior materials by said Principal, or his or its agents, servants, or employees and shall protect and save Coffeyville Municipal Light & Power harmless from all suits and claims of infringement or alleged infringement of patent rights or processes, then this obligation shall be void; otherwise this obligation shall remain in full force and effect.

It is further expressly agreed and understood by the Parties hereto that no changes or alterations in said Contract and no deviations from the plan or mode of procedure herein fixed shall have the effect of releasing the sureties, or any of them, from the obligation of this bond.

IN WITNESS WHEREOF, the said Principal has caused these presents to be executed in its name and its corporate seal to be hereunto affixed by its duly authorized officer, and the said Surety has caused these presents to be executed in its name, and its corporate seal to be hereunto affixed by its Attorney-in-Fact, duly authorized so to do, the day and year first above written.

ATTEST: _____

_____ _____

Secretary Surety

(Accompany this bond with Attorney-in-Facts Authority from the Surety Company certified to include the date of the bond.)

Statutory Bond

KNOW ALL MEN BY THESE PRESENTS:

That we, _____as Principals and_____as Surety, a corporation organized and existing under the laws of the State of _____, And duly authorized to do business in the State of Kansas, are held and firmly bound unto the COFFEYVILLE MUNICIPAL LIGHT & POWER, Coffeyville, KS, in the penal sum of _____ _____Dollars ($_____), in lawful money of the United States, such sum being equal to 100 % of the Contract Price for the payment of which sum, well and truly to be made, we and each of us, bind ourselves, our successors, and assigns, jointly and severally, firmly by these presents:

Dated this _____ day of _____, 20_____.

THE CONDITION OF THIS OBLIGATION ARE SUCH THAT WHEREAS, the above named Principal did, on the _____ day of _____, 20_____, enter into a Contract with COFFEYVILLE MUNICIPAL LIGHT & POWER, Coffeyville, KS, for

_____

All in compliance with the plans and Specifications therefore, made a part of said Contract and on file in the Office of the City Clerk of the City of Coffeyville.

NOW, THEREFORE, if said Principal shall fail or neglect to pay all indebtedness incurred by said Principal or Sub-Suppliers of said Principal who perform Work in the performance of said Contract, for labor and materials furnished by any Supplier and consumed in the performance of said Contract, and such repairs to and rental of machinery and equipment as may be furnished by a Sub-Supplier to the person or persons Contracting with Coffeyville Municipal Light & Power, within Fifteen (15) Days after the same becomes due and payable, the person, firm or corporation entitled thereto may sue and recover on this bond the amount so due and unpaid.

NOW, THEREFORE, it is expressly agreed and understood by the Parties hereto that no changes or alterations in said Contract and no deviations from the plan or mode of procedure herein fixed shall have the effect of releasing the sureties, or any of them from the obligations of this bond.

IN WITNESS WHEREOF, the said Principal has caused these presents to be executed in its name, and its corporate seal to be hereunto affixed by its duly authorized officers, and the said Surety has caused these presents to be executed in its name, and its corporate seal to be hereunto affixed by its Attorney-in-Fact, duly authorized thereunto so to do, the day and year first above written.

ATTEST:

Secretary	Surety

(Accompany this bond with Attorney-in-Fact's Authority from the Surety Company certified to include the date of the bond.)

Non-Collusion Affidavit

Coffeyville Municipal Light & Power

STATE OF _____)
) ss
COUNTY OF _____)

I, _____, of lawful age, being first duly sworn, on oath says:

1. (S)He is the duly authorized agent of _____, the Supplier under the Contract which is attached to this statement, for the purpose of certifying the facts pertaining to the giving of things of value to government personnel in order to procure said Contract;

2. (S)He is fully aware of the facts and circumstances surrounding the making of the Contract to which this statement is attached and has been personally and directly involved in the proceedings leading to the procurement of said Contract; and

3. Neither the Supplier nor anyone subject to the Supplier's direction or control has paid, given or donated or agreed to pay, give or donate to any officer or employee of the State of Kansas or City of Coffeyville any money or other thing of value, either directly or indirectly, in procuring the Contract to which this statement is attached.

_____
(Company Name)

_____
PRESIDENT

This instrument was subscribed, acknowledged, and sworn to before me this ____day of _____, 20__, by _____, the person signing above, as the above-named Supplier's duly authorized agent.

_____
Notary Public

My Commission Expires:_____
My Commission No.: _____

Non-collusion Affidavit for Payment
for Invoice Payment Over $25,000
Coffeyville Municipal Light & Power

Please note: This form must be completed before payment can be issued for any payment over $25,000. Bidders are requested to complete this form (with exception of invoice number and date), including notarization, as part of their Bid, as, this will help insure prompt payment should the Bidder be selected as the Successful Bidder.

Bidder Name: _____

_____

Bidder Address: _____

City _____ State _____ Zip _____

DESCRIPTION:

Invoice Number: _____ Invoice Date: _____

Item/s purchased or service/s provided: _____

_____

_____

_____

The undersigned person, of lawful age, being first duly sworn, on oath says that this invoice is true and correct and is authorized to submit the invoice pursuant to a Contract or purchase order. Affiant further states that the work, service/s or material/s as shown by this invoice have been supplied or completed in accordance with the plans, Specifications, orders, requests, or Contract furnished or executed by the affiant. Affiant further states that he/she has made no payment directly or indirectly to any elected official, officer or employee of Coffeyville Municipal Light & Power or money or any other thing of value to obtain payment of the invoice or procure the Contract or purchase order pursuant to which an invoice is submitted.

_____
Signature of Supplier

Subscribed and sworn to before me this _____ day of _____ 20__ .

_____
Notary Public (or officer having power to administer oaths)

My Commission
Expires: _____ Notary Number: _____

Certificate of Non-Discrimination

Coffeyville Municipal Light & Power

In connection with the performance of Work under this Contract, the Supplier agrees as follows:

A. The Supplier agrees not to discriminate against any employee or applicant for employment because of race, creed, color, sex, national origin, ancestry, age or physical disability. The Supplier shall take affirmative action to insure that employees are treated without regard to their race, creed, color, national origin, sex, or ancestry. Such actions shall include, but not be limited to the following: Employment, upgrading, demotion or transfer, recruiting or recruitment advertising, layoff or termination, rates of pay or other forms of compensation and selection for training, including apprenticeship. The Supplier and Subcontractor shall agree to post in a conspicuous place, available to employees and applicants for employment, notices to be provided by the Owner setting forth provisions of this section.

B. In the event of the Supplier's non-compliance with this non-discrimination clause, the Contract may be canceled or terminated by the Owner. The Owner may declare the Supplier ineligible for further Contracts with the said agency until satisfactory proof of intent to comply shall be made by the Supplier.

C. The Supplier agrees to include this non-discrimination clause in any Subcontracts connected with the performance of this Agreement.

I have read the above stated clause and agree to abide by its requirements.

_____
(Company Name)

_____
PRESIDENT

(Seal)

_____
Secretary

STATE OF _____)
) ss:
COUNTY OF _____)

On this _____ day of _____, 20__, before me, the undersigned, a Notary Public in and for the County and State aforesaid, personally appeared _____, to me known to be the identical person who signed the name of the maker thereof to the within and foregoing instrument as its _____ and acknowledged to me that ____ executed the same as _____ free and voluntary act and deed, and as the free and voluntary act and deed of said corporation, for the uses and purposes therein set forth.

Given under my hand and seal the day and year last above written.

_____
Notary Public

My Commission Expires:_____
My Commission No.: _____

Business Relationships Affidavit

Coffeyville Municipal Light & Power

STATE OF _____)

COUNTY OF _____)

_____ , OF LAWFUL AGE, BEING FIRST DULY SWORN, ON OATH SAYS THAT (S) HE IS THE AGENT AUTHORIZED BY THE BIDDER TO SUBMIT THE ATTACHED BID. Affiant further states that the nature of any partnership, joint venture, or other business relationship presently in effect or which existed within one (1) year prior to the date of this statement with the architect, engineer, or other party to the project is as follows:

_____

_____

Affiant further states that any such business relationship presently in effect or which existed within one (1) year prior to the date of this statement between any officer or director of the Bidding company and any officer or director of the architectural or engineering firm or other party to the project is as follows:

_____

_____

Affiant further states that the names of all persons having any such business relationships and the positions they hold with their respective companies or firms are as follows:

_____

_____

(If none of the business relationships hereinabove mentioned exist, affiant should so state.)

_____
Signature of Authorized Agent

Subscribed and sworn to before me the _____ day of _____ 20_____.

_____
Notary Public

My Commission Expires: _____ Notary Number: _____

Attachment A

Commercial Terms and Conditions

ATTACHMENT A

COMMERCIAL TERMS & CONDITIONS

Table of Contents

Attachment A 1
1. DEFINITIONS 3
2. DELIVERY 5
3. WARRANTY 5
4. LIQUIDATED DAMAGES 6
5. INSPECTION AND TESTING 7
6. PAYMENT 7
7. SECURITY FOR PERFORMANCE 8
8. TAXES 8
9. NOT USED 8
10. TERMINATION 8
11. CHANGES 9
12. INDEMNIFICATION 9
13. PERFORMANCE OBLIGATIONS 10
14. INSURANCE 10
15. OTHER REMEDIES 12
16. FORCE MAJEURE 13
17. MISCELLANEOUS 13
EXHIBIT 1 – GUARANTEED DATES 15
EXHIBIT 2 – MILESTONE PAYMENT & CANCELLATION SCHEDULE 16
EXHIBIT 3 – PARTIAL WAIVER OF LIEN AND RELEASE OF CLAIMS 17
EXHIBIT 4 – FINAL WAIVER OF LIEN AND RELEASE OF CLAIMS 18

1. DEFINITIONS

"Acceptance Date" means the first date by which all of the following have occurred: (a) Supplier has delivered all the Goods and paid all Liquidated Damages due to late delivery; and (b) Owner has formally accepted all the Goods.

"Alternate" means an amount proposed by Bidder as stated on the *Summary Bid Form* for certain Work activities that may be added to or deducted from the Bid amount if Owner decides to accept a corresponding change in the Work.

"Bid" means the formal offer of the Bidder submitted on the prescribed bid forms together with the required Bid security and all information submitted with the Bid that pertains to performance of the Work.

"Bidder(s)" means any person(s), firm(s), or corporation(s) submitting a Bid for the Work, or their duly authorized representatives.

"Bidder's Total Price" means the total price in the Bid for the Work without Alternates.

"Change Order(s)" means any change(s) made to the Contract in accordance with Article 11 CHANGES.

"Closeout" means the contractual requirements that apply after Substantial Completion of the Work and before final payment, as described in SECTION 017801

"Contract" means the contract and agreement made and entered on the Effective Date by and between the Owner and Supplier, including all appendices, attachments, exhibits, Change Orders and all amendments and modifications agreed to and signed by both Owner and Supplier.

"Contract Delivery Date" means the Day when Supplier shall deliver the Equipment as stipulated in the Contract.

"Contract Price" means the total price for the Work agreed between the Parties, as modified by Change Orders.

"Contract Time" means the period of time starting from the Effective Date that is allowed under the Contract for the Supplier to complete the Work.

"Day(s)" means (a) calendar day(s) of 24 hours measured from midnight to the next midnight.

"Deliverables" means the Submittals and other documents delivered to the Owner in performance of Work hereunder including, without limitation, design plans, models, drawings, prints, samples, transparencies, specifications, reports, manuscripts, working notes, documentation, manuals, photographs, negatives, tapes, discs, databases, software, and other information, data, and items embodied in any tangible form.

"Engineer" or "Resident Project Representative" or " CM Agent" means Burns & McDonnell Engineering Company, Inc., a Missouri Corporation, or its duly authorized representatives.

"Effective Date" means the date that the Parties entered into the Contract.

"Equipment" means a Product supplied by Supplier, with operational or nonoperational parts, whether motorized or manually operated, that may require service connections, such as wiring or piping.

"Guaranteed Dates" means the 'No Later Than' dates for delivery of the Equipment to the Site and for Substantial Completion as guaranteed by Supplier in Exhibit 1.

"Goods" means Submittals, supplies, Materials, Equipment, consumables, reports, documents, drawings, specifications and all other items that Supplier is required to furnish to complete this Contract.

"Liquidated Damages" means sums due from Supplier in lieu of actual damages in accordance with Article 4 LIQUIDATED DAMAGES.

"Materials" means Products that must be substantially cut, shaped, worked, mixed, finished, refined or otherwise fabricated, processed, or installed to form parts of the Work.

"Owner" means Coffeyville Municipal Light & Power.

"Party" or "Parties" means the Owner or Supplier, or both together, as the context or the usage of such term(s) may require.

"Product(s)" means item(s) purchased by Supplier for incorporation in the Work, regardless of whether they were specifically purchased for the Project or taken from the previously purchased stock, and includes Material, Equipment, system, and other terms of similar intent.

"Project" means the total construction of which the Work to be provided under this Contract is a part.

"Project Site" or "Site" means the Project location as indicated in Specifications SECTION 011100, 1.02, B.

"Point of Delivery" means the Project Site.

"Repair Work" means the materials, labor, equipment and supervision required to refinish, redesign, repurchase, repair or replace non-conforming Goods or Work including, without limitation, the disassembling, removing, replacing and re-inspecting of any equipment or obstruction preventing such Work and re-performance, repair, replacement or testing such other part of the Work, the Site or work performed by others as shall be necessary to cause the applicable portion of the Work to conform to the Contract.

"Specifications" means those portions of the Contract Documents in Attachment B, consisting of written technical descriptions of the Work, and covering the Goods, workmanship, and certain administrative details applicable thereto.

"Submittals" means all shop drawings, product data, and samples which are prepared by Supplier, a Sub-Supplier, or manufacturer, and submitted by Supplier to Owner as a basis for approval of the use of Equipment and materials proposed for incorporation in the Work or needed to describe proper installation, operation and maintenance, or technical properties.

"Submittal Schedule" means the table in the Specifications SECTION 013301 Appendix A.

"Substantial Completion" means the event when (i) All Goods have been delivered to the Project Site and the Owner Acceptance Date has been established, (ii) the Equipment and Materials are operating safely, (iii) all testing of the Work has been completed and all test data properly evaluated, (iv) the Warranty Period has started, and (v) Supplier has delivered to Owner all operating instructions, maintenance manuals, and warranties.

"Sub-Supplier" means an individual, firm, or corporation having a direct contract with Supplier or with any other Sub-Supplier for the performance of a part of the Work, on or off the Site.

"Successful Bidder" means the Bidder selected by the Owner for award of the Contract.

"Supplier" means the Successful Bidder that has entered into the Contract with Owner.

"Warranty Period" means the period of time specified in Article 3 WARRANTY.

"Week" means a period of seven consecutive Days.

"Work" means any and all labor, supervision, services, Goods, consumables, valuations, inspections, engineering, delivery, testing, and all other activities performed by Supplier (or the subcontractors of Supplier at any tier) in connection with the execution and timely completion of Supplier's obligations under this Contract, including incidental Work such as start-up, inspections, programming, installation, erection or assembly of the Goods.

2. DELIVERY
    a. Goods shall be delivered by Supplier DDP Incoterms® 2010 to the Project Site.
    b. Price shall include cost to deliver to the Project Site, including packing per good practice and transport insurance.
    c. Risk of loss shall pass to the Owner upon delivery of the Goods to the Project Site.
    d. Title to the Goods shall pass to the Owner upon the Owner's acceptance of the Goods.
    e. Goods shall not be manufactured or delivered without prior approval of the required Submittals.
3. WARRANTY
    a. The Supplier warrants that the Goods shall be new, fit for the intended purpose and free of defects in design, workmanship and materials. Supplier also warrants to the Owner that for elements of any Work for which this Contract does not establish express standards of quality and fitness, such Work shall be in accordance with good industry practices and standards for the specific application.

b. Warranty Period shall be for an eighteen (18) month period starting on the Acceptance Date by the owner.
c. If any Work fails to comply in any respect to the warranties set forth herein and Supplier has been given written notice of such noncompliance within the Warranty Period, Supplier shall, at its sole expense, promptly perform all Repair Work.
d. Supplier shall be responsible for all costs to perform Repair Work including, without limitation, all freight and insurance charges. If Supplier does not commence correction of the Repair Work within two (2) Days following receipt of written notice from the Owner or if Supplier does not proceed diligently to complete the Repair Work, the Owner shall, at its sole discretion, have the right to perform some or all of the necessary Repair Work to remedy the defect, or have third parties perform the necessary Repair Work. In the event the Owner rejects the Goods and chooses to obtain replacement or substitute Goods or Work from someone other than Supplier, Supplier shall also be responsible to pay the Owner the increased costs, if any, between the Contract price for such Goods or Work and the cost to the Owner of obtaining the replacement or substitute Goods including, without limitation, costs incurred by the Owner to manufacture, produce or provide such Goods or Work; or engage other persons to manufacture, produce or provide such Goods or Work. The Owner shall be entitled to set off all costs incurred by the Owner related to such Repair Work from amounts owed to Supplier or to back charge and invoice Supplier for such cost.
e. Supplier shall bear the risk of loss or damage for Work requiring Repair Work during the period of such Repair Work. If any Work must be removed from the Site, transportation charges associated with any Repair Work shall be borne by Supplier. Supplier shall revise any and all drawings and other documents, as appropriate; to reflect any changes or modifications made during Repair Work. Work required to be corrected, repaired or replaced shall be subject to the warranties of this Contract in the same manner and to the same extent as Work originally delivered under this Contract.
f. The foregoing warranties shall survive the Owner's inspection, acceptance, use and subsequent dispossession or sale of the Work.

4. LIQUIDATED DAMAGES

a. TIME IS OF THE ESSENCE. Supplier acknowledges that the time for performance of the Work is of the essence of this Agreement, and Supplier agrees to see to the performance of the Work, including the Work performed by Supplier's Sub-Suppliers so that the entire Project may be completed in accordance with the Contract Documents and Exhibit 1 Guaranteed Dates
b. If Supplier fails to deliver the Submittals noted as "subject to LDs" in the Submittal Schedule within the time therein specified, or fails to meet the Guaranteed Dates, the parties agree that the Owner would be damaged. As it would be almost impossible to ascertain the actual damages precisely, Supplier agrees to pay Liquidated Damages in the amounts listed herein. Any sums payable under this Article are in the nature of Liquidated Damages and not a penalty. The payment of Liquidated Damages shall be the sole and exclusive remedy for the Owner for the specific performance failure to which the Liquidated Damages applies, except that the Owner shall have the right to terminate the Contract for cause if Supplier reaches the aggregate Liquidated Damages cap defined in 4.d. below.

Requirement	Liquidated Damages
Late Delivery – Submittals	$250/Day per Submittal
Late Delivery - Equipment	$1,000/Day

c. Liquidated damages for Late Delivery – Submittals shall be limited to a maximum of 7.5% of the Contract Price.
d. Aggregate total for all Liquidated Damages shall be limited to a maximum of 10% of the Contract Price.

5. INSPECTION AND TESTING
   a. The Owner reserves the right to review Supplier`s quality assurance and quality control procedures and to inspect and witness all Supplier's operations and tests.
   b. Supplier shall notify the Owner at least thirty (30) Days in advance when portions of the Work are ready for inspection or testing in accordance with the Supplier's inspection and test plan as approved by the Owner.
   c. Failure to inspect and accept or reject the Work shall not relieve the Supplier from responsibility for compliance with the Contract requirements nor impose liability on the Owner. The Owner reserves the right to reject Work that is unsatisfactory, faulty, or defective or does not conform to the requirements of the Contract.
   d. Supplier shall carry out factory tests of the Equipment in accordance with Supplier's procedures for such tests and in accordance with the Specifications. Owner and its representatives including the Engineer shall have the right to witness such factory tests. Date and time of such tests shall be communicated to Owner no later than thirty (30) Days in advance. Supplier shall bear the cost of such tests, but Owner shall bear the cost for its representative to attend them.

6. PAYMENT
   a. Payments shall be made in accordance with the agreed Milestone Payment Schedule in Exhibit 2.
   b. The Owner may require as a condition of payment that the Supplier submit evidence satisfactory to the Owner that any and all claims of subcontractors, Sub-Suppliers or other third parties that have performed services or provided supplies in connection with the Work included in any invoice have been paid or satisfactorily secured prior to making any partial payment, including but not limited to a Partial Waiver of Lien and Release of Claims as set forth in Exhibit 3 from Supplier and all Sub-Suppliers for whose work payment is sought waiving any lien rights for the amount requested in the invoice
   c. Ten percent retention shall be withheld from all invoice payments and shall be released upon Supplier's completion of all Closeout requirements contained within the Contract documents, receipt by the Owner of a Final Waiver of Lien and Release of Claims as set forth in Exhibit 4.
   d. Payment shall be made within thirty (30) Days following receipt of a properly documented invoice; however, in no case shall payment be due prior to the date indicated in the milestone payment schedule, and in particular, final payment shall be no sooner than the Acceptance Date.
   e. All currency and payments shall be in U.S. dollars.

7. SECURITY FOR PERFORMANCE
    a. Coincident with the execution of Contract, the Successful Bidder shall furnish good and sufficient Surety company Performance and Statutory Bond.
        i. The Performance Bond shall guaranty the faithful performance of all the covenants, stipulations and agreements of the Contract, including the guarantying or warranting of all Work and all material included in the Contract against defects in both workmanship and materials; any replacement because of defective materials and workmanship including freight, hauling and installation charges for the Warranty Period to be entirely at Supplier's expense.
        ii. The Statutory Bond shall guaranty payment of all bills and obligations arising from the execution of the Contract, which bills and obligations might or will in any manner become a claim against the Owner. All provisions of the bond shall be complete and in full accordance with Statutory requirements.
        iii. All bonds shall be executed with the proper sureties through a company licensed and duly qualified to operate in the State of Kansas, and approved by the Owner.
        iv. Bonds shall be signed by an agent resident with the State of Kansas who shall furnish evidence of his authority to bind the Surety as valid to the date of the bond. The date of the bond shall be the date of execution of the Contract. If at any time during the continuance of the Contract the Surety on the Company's bond becomes irresponsible, the Owner shall have the right to require additional and sufficient sureties which the Supplier shall furnish to the satisfaction of the Owner within ten (10) Days after notice to do so. In default thereof, the Contract may be suspended and all payments or money due the Supplier withheld.
        v. All bonds shall be U. S. Treasury listed (Circular #570) as acceptable to the US Government. Acceptable bonds shall only be those supplied by "on shore" corporations.

8. TAXES

    The OWNER is a municipal corporation exempt from taxation under the laws of the State of Kansas. Taxes payable for the sale, purchase, or use of materials or equipment should not be included in the Bid price. However, any tariff, duty, impost, fee, or any similar assessment or tax imposed by a governmental entity that does not recognize Owner's sovereign tax exempt status, should be included in the Bid as a separate item in the form of a schedule indicating the name and address of the governmental entity and the specific nature and amount of each such tariff, duty, impost, fee, or any similar assessment or tax thereof.

9. NOT USED

10. TERMINATION
    a. <u>Termination for Cause</u>:
        i. The Owner may terminate this Contract for cause, in whole or in part, by written notice to Supplier if Supplier: fails to deliver the Goods or to perform the Work within the time specified in this Contract; fails to tender conforming Goods; fails to obtain proper licenses, permits and registrations; fails to obtain and maintain required insurance coverage; fails to make progress so as to endanger timely performance of this Contract; fails to comply with the site safety requirements; violates any applicable laws; or fails to provide adequate assurances of performance.

ii. If, after termination, it is determined that Supplier was not in default, or that the default was excusable, the rights and obligations of the parties shall be the same as if the Contract had been terminated for the convenience of the Owner.

iii. Upon issuance of a written notice of termination for cause, Supplier shall proceed as required by this paragraph and the Owner shall be entitled to the rights set forth herein. Supplier shall stop all Work hereunder unless otherwise specified in the notice of termination. The Owner shall not be obligated to make any further payments for the Work. If the Owner has revoked acceptance, then such Work shall be treated as having not been accepted. The Owner shall not be required to accept the tender of any Work that Owner has elected to terminate or cancel. The Owner may take possession of any specialty equipment or specialty tools necessary for completion of the Work. The Owner may complete the performance of this Contract by such means as the Owner selects or may engage any others to complete the performance of this Contract and Supplier shall be responsible for any costs in excess of the Contract value incurred by the Owner in so doing. Any amounts due Supplier for Work completed by Supplier prior to such cancellation shall be subject to offset against such additional costs incurred by the Owner in completing the Work and any other damages incurred by the Owner as a result of Supplier`s default.

b. Termination for Convenience.

i. Upon at least three (3) Days written notice to Supplier specifying the extent to which the Contract is terminated, the Owner shall have the right to terminate this Contract or any portion thereof with respect to Goods not yet shipped or Work not yet performed, without liability and in addition to its other rights and remedies, at any time and for any reason.

11. CHANGES

a. The Owner shall have the right, at any time, to make changes in the Contract that the Owner may deem desirable.

b. Despite any pending dispute with respect to the Contract, Supplier shall proceed, upon written notice from the Owner with the performance of all Work or changes as directed by the Owner.

c. If the Owner issues a directive that causes a material increase in Supplier's cost or time for performance, Supplier shall notify the Owner in writing within three (3) Days from the date of Supplier's receipt of the Owner's directive, and subject to such proper notice, an equitable adjustment in the price or time of performance shall be mutually agreed upon between the Owner and Supplier. Agreement to such adjustment shall constitute a waiver of all claims by Supplier arising out of or related to the change.

12. INDEMNIFICATION

a. Bodily Injury/Property: Supplier agrees to defend, indemnify and hold the Owner and Burns & McDonnell and their respective officers, directors and employees harmless from and against all claims, demands, liabilities, losses, damages, suits, judgments, costs, expenses and reasonable attorney's fees (collectively, "Claims") including those arising, in any manner, out of or resulting from bodily injury, sickness, disease or death of any person or persons, or damage to or destruction of property, including any resulting loss of use arising from breach of Contract or any non-conforming Work, including but not limited to, latent defects or environmental liability, except to the extent that any such Claims are the result of the negligence of the Owner or any of its agents or employees.

b. Intellectual Property: Supplier agrees to defend, indemnify and hold the Owner and Burns & McDonnell and their respective officers, directors and employees harmless from and against all Claims that the Work, in any manner, gives rise to the infringement of any United States patent, trademark, trade dress, copyright or other intellectual property right.

c. Worker's Compensation: Supplier, for itself, its successors, assigns, hereby expressly agrees to waive any provision of any workers' compensation act or other similar law whereby Supplier could otherwise preclude its joinder by the Owner or Burns & McDonnell as an additional defendant, or avoid liability for damages, contribution, or indemnity in any action at law, or otherwise where Supplier's or its subcontractor's employee or employees, heirs, assigns, or anyone otherwise entitled to receive damages by reason of injury or death brings an action at law against the Owner or Burns & McDonnell.

13. PERFORMANCE OBLIGATIONS

a. When performing Work at the Site, Supplier shall comply with safety measures and procedures required by the Owner and shall comply with all applicable laws, ordinances, rules, regulations and orders of public authorities for the safety of persons or property.

b. Supplier acknowledges that the technical documents and information provided in the Contract including, without limitation, all drawings and specifications are sufficient for their intended purpose.

c. No substitution or modification of any Goods or related component parts, materials, or manufacturing locations may be made without prior written consent of the Owner.

d. Review and approval of shop drawings, samples, design and fabrication drawings, catalog data or other submittals from Supplier is for the purpose of determining general compliance with the Contract only and the Owner is not reviewing such documents to evaluate the means or methods of design or fabrication. Such review shall not transfer any liability to the Owner or others for the proper design, fabrication and installation of the Work and shall not release Supplier of its sole liability for the Work.

e. All design drawings custom prepared specifically for this Project shall be sealed/stamped by a licensed professional engineer in accordance with the laws of the state where the Project is located. Said sealing/stamping is the responsibility of the Supplier. Drawings of products, materials, and equipment that are of standard structural designs by the manufacturer, fabricator, supplier, or Supplier need not contain the seal/stamp of a licensed professional engineer.

14. INSURANCE

a. Coincident with the execution of Contract, the Successful Bidder shall purchase and maintain such Liability Insurance as will protect it from claims set forth below which may arise out of or result from its operations under the Contract, whether such operations be by itself or by a sub-Contractor, Sub-Supplier or by anyone directly or indirectly employed by them, or by anyone for whose acts any of them may be liable:

i. Claims under Workers' Compensation, disability, benefits and other similar employee benefits acts: For the duration of this Contract, Supplier shall maintain statutory Workers' Compensation and shall maintain Employer's Liability Insurance with minimum limits to one million dollars ($1,000,000). Supplier shall require sub-Contractors to provide Workers' Compensation and Employer's Liability Insurance with the same minimum limits.

ii. Claims for damages because of bodily injury, occupational sickness or disease, or death of his Employees, and his claims insured by usual personal injury liability coverage: For

the duration of this Contract, Supplier shall maintain statutory Workers' Compensation and shall maintain Employer's Liability Insurance with minimum of one million dollars ($1,000,000).Supplier shall require sub-Contractors to provide Workers' Compensation and Employer's Liability Insurance with the same minimum limits.

iii. Claims for damages because of bodily injury, sickness or diseases or death of any person other than his employees, and claims insured by usual personal injury liability coverage: For the duration of this Contract, Supplier shall maintain occurrence-based Comprehensive General Liability Insurance with minimum bodily injury limits of five-hundred thousand dollars ($500,000.00) for each person and one million dollars ($1,000,000.00) for each occurrence. Supplier shall maintain property damage insurance with minimum limits of five hundred thousand dollars ($500,000.00) for each occurrence and one million dollars ($1,000,000.00) aggregate. The policy shall include Supplier's Protective Liability Insurance with the same minimum limits. Supplier shall require sub-Contractors to provide Comprehensive General Liability Insurance with the same minimum limits.

iv. Claims for damages because of injury to or destruction of tangible property, including loss of use resulting there from: For the duration of this Contract, Supplier shall maintain Comprehensive Liability Insurance with minimum bodily injury limits of five hundred thousand dollars ($500,000.00) for each person and one million dollars ($1,000,000.00) for each occurrence. Supplier shall maintain property damage insurance with minimum limits of five hundred thousand dollars ($500,000.00) for each occurrence and one million dollars ($1,000,000.00) aggregate. The policy shall include Supplier's Protective Liability Insurance with the same minimum limits. Supplier shall require sub-Contractors to provide Comprehensive Liability Insurance with the same minimum limits.

v. For the duration of this Contract, Supplier shall maintain Comprehensive Automobile Liability Insurance for all owned, non-owned, and hired vehicles with minimum limits for bodily injury of five hundred thousand dollars ($500,000.00) for each person and one million dollars ($1,000,000.00) for each occurrrence and property damage minimum limits of five hundred thousand dollars ($500,000.00). Supplier shall require sub-Contractors to provide Comprehensive Automobile Liability Insurance with the same limits

vi. Umbrella or Excess Liability: Contractor shall purchase and maintain occurrence-based Umbrella or Excess Liability Insurance written over the underlying employer's liability, commercial general liability, and automobile liability insurance described in the paragraphs above in the amount of five million dollars ($5,000,000). Subject to industry-standard exclusions, the coverage afforded shall follow form as to each and every one of the underlying policies.

b. Certificates of Insurance acceptable to the Owner shall be filed by Successful Bidder with the Owner prior to commencement of the Work. These certificates shall contain a provision that coverages afforded under the policies will not be canceled until at least fifteen (15) days prior written notice has been given to the Owner. Copies of certificates of insurance shall be filed with the Owner prior to commencing Work. The required insurance must be written by a company licensed to do business in the state where the Work is located, at the time the policy is issued. In addition, the company must be acceptable to the Owner. The City of Coffeyville/Coffeyville Municipal Light & Power, its officers, employees, and agents, shall be named as an additional insured on all liability insurance policies in amounts equal to the

liability limits. Engineer, Burns and McDonnell Engineering Company, Inc. shall be endorsed as an additional insured on CGL, Automotive and any Umbrella insurance to the policy limits. The insurance shall include a waiver of subrogation in favor of the additional insured.

15. OTHER REMEDIES

a. Setoff/Recoup: The Owner may set off or recoup any amount owed to Owner by Supplier against any amount owed to Supplier by Owner.

b. Withhold Payment: The Owner may withhold payment to Supplier, in whole or in part, to the extent reasonably necessary to protect the Owner from loss on account of any breach including, without limitation, late delivery of the Goods (including Deliverables) or Work; a violation of the law by Supplier; non-conforming or defective Goods or Work not remedied; claims by a third party or evidence reasonably indicating the probable filing of claims (including, without limitation intellectual property claims, bodily injury claims, property damage claims and subcontractor payment claims); failure of Supplier to make payments to any Sub-Supplier; failure to purchase, at least, the minimum insurance required by this Contract; the supply of counterfeit Goods; any cost for which Supplier is responsible under this Contract; a lien or encumbrance filed against the Project that is not removed; a failure to comply with the site safety requirements; or a breach by Supplier of any warranty of this Contract. When the grounds for withholding payments are removed, payment of such withheld amounts shall be made. No interest shall be due or payable by the Owner on amounts withheld in good faith pursuant to this paragraph.

c. Backcharge: The Owner may, at its sole discretion, backcharge and invoice to Supplier all costs it incurs arising from or related to Supplier's breach of this Contract including, without limitation, all costs to correct, repair or replace non-conforming Work not remedied by Supplier; all damage, cost or expense caused by non-conforming Work; all costs associated with lost work time, lost efficiency, idle equipment, additional overhead, and escalation; all costs associated replacing Goods that infringe a third party's intellectual property rights with non-infringing Goods; all costs related to obtaining and maintaining the insurance required by this Contract that the Supplier failed to obtain or maintain; all costs associated with removing any liens filed against the Project or related property; all fines and penalty's assessed that arise out of the Work; and all costs incurred by the Owner arising from a claim that the Work infringes a third party's intellectual property rights.

d. Late Delivery: If Supplier is unable to meet the required delivery schedules for any reason or if the Owner determines in reasonable judgment that Supplier is not adequately progressing the Work, then if Supplier should fail to offer a plan acceptable to the Owner to recover from such delay within five (5) Days after delivery of written notice from the Owner, the Owner may, at its sole discretion, terminate this Contract for cause; or direct Supplier to accelerate the progress of the Work including, without limitation, extending the work week, working additional shifts or overtime, and/or supplying additional manpower, equipment, facilities and other similar measures. Supplier shall be solely liable for the costs associated with such acceleration.

e. Intellectual Property Infringement: If any claim for infringement of intellectual property is brought against the Owner arising from the Work, Supplier shall, in order to avoid such claims, actions, or proceedings, promptly obtain a license (without additional cost to the Owner) to the intellectual property right that has been allegedly infringed; substitute at its own expense non-infringing Work; or to modify the manufacture or design of such infringing

Work so the Work becomes non-infringing provided that such substitutions or modifications meet all the requirements of this Contract.

f. Latent Defects: Acceptance of all or part of the Work shall not deprive the Owner of the right to revoke acceptance and return any of the Goods or the right to make a claim for damages because of any non-conforming Work or later-discovered defects.

g. Properly Insure: If Supplier fails to obtain the insurance required by the Contract or fails to maintain coverage as required by the Contract such failure shall be a material breach and the Owner may, at its sole discretion, terminate the Contract for cause.

h. Not Exclusive. No remedy conferred upon or reserved to the Owner herein is intended to be exclusive of any other available remedy, but each and every such remedy shall be cumulative and shall be in addition to every other remedy given under this Contract or existing at law or in equity.

16. FORCE MAJEURE

a. In case of a force majeure event, the Party rendered wholly or partially unable to perform its obligations under this Contract will be excused from whatever performance is affected by the force majeure event to the extent so affected. The affected Party shall have an obligation to notify in writing the other Party within three (3) Days, and mitigate and work around the force majeure event to the extent commercially practicable. Supplier shall bear all of its own costs in connection with force majeure events it suffers.

b. The following events shall not be considered force majeure:

   i. strikes or labor disturbances involving the employees of Supplier or any of its Sub-Suppliers who are not performing Work at the Site (unless national in nature);

   ii. price fluctuations with respect to labor or materials, supplies or components of equipment related to items to be supplied by Supplier;

   iii. mere economic hardship; or

   iv. fluctuations in currency exchange rates.

17. MISCELLANEOUS

a. Claims: Except where expressly stated otherwise in this Contract, no claim for extra compensation or for additional time for performance of the Work shall be valid unless Supplier shall first have provided written notice of such claim to the Owner within three (3) Days of the start of the event giving rise to the claim. Such notice is a material consideration of this Contract and if Supplier fails to provide the Owner such notice within such time frame, Supplier's claim shall be deemed waived.

b. Confidentiality: This Contract is confidential between the Owner and the Supplier, and the Supplier agrees that none of the information or details connected therewith shall be published or disclosed to any third party without the Owner's written permission, or otherwise provided by law.

c. Limitations: In no event, whether based on Contract, indemnity, warranty, tort (including negligence), strict liability or otherwise shall the Owner be liable for consequential, special or indirect damages, including, without limitation, damages or losses in the nature of business interruption, loss of reputation, loss of or increased costs related to third party financing, loss of anticipated profits or anticipated revenue, or cost of capital.

d. Assignment: Supplier shall not attempt to assign this Contract and any rights or obligations hereunder (by contract, acquisition, merger, operation of law or otherwise) in whole or in part, without the prior written consent of the Owner. Any attempt to assign any rights or obligations hereunder without appropriate consent shall be deemed void.

e. Severability of Provisions: If any term, condition or provision of this Contract or the application thereof to any Party hereto be invalid or unenforceable at law, the offending word(s), sentence(s) or paragraph(s) shall be considered as stricken from this Contract and the remainder of this Contract, shall not be affected thereby, and each remaining term, condition and provision of this Contract shall be valid and be enforced to the fullest extent permitted by law.

f. Survival: The obligations of the Parties hereunder which by their nature should survive the termination of this Contract or the completion of the Work hereunder, including, without limitation, those provisions of this Contract which provide for the protection against liability, shall survive and inure to the benefit of the Parties.

g. Independent Contractor: Supplier is an independent contractor in the performance of the Work specified in this Contract. The Owner retains no control or direction over Supplier, its employees, and Sub-Suppliers or subcontractors or over the detail, manner, or methods of performance of the Work by Supplier, its employees, and sub-suppliers or subcontractors.

h. Governing Law/Venue: The rights of all Parties hereunder and the construction of every provision hereof shall be governed by the laws of the State of Kansas, without giving effect to principles of conflicts of law. The Parties agree that any action arising out of this agreement or in connection with the Work shall be brought in the federal, state, or local court located in or otherwise having jurisdiction over Montgomery County in the State of Kansas and the parties hereby consent to personal jurisdiction in such courts and waive any objection based on jurisdiction or venue of any such action. Each Party waives its right to a jury trial in any court action arising among the Parties under this Contract or otherwise related to this Contract, whether made by claim, counterclaim, third party claim or otherwise.

i. No Waiver: Failure by the Owner to enforce any provision hereof, the Owner's failure or delay in exercising rights or remedies provided herein or by law, the Owner's approval of, acceptance of, or payment for the Work, or any part or combination thereof, shall neither relieve nor release Supplier from any of its obligations under this Contract, shall not be deemed a waiver of any rights of the Owner to insist upon strict performance hereof or of any of the Owner's rights or remedies under this Contract or by law, and shall not operate as a waiver of any of the provisions hereof.

j. Prior Dealings: No course of prior dealing or performance between the Owner and Supplier or usage of trade shall be relevant to supplement, explain, interpret, or modify any term, condition, or instruction used in this Contract.

EXHIBIT 1 – GUARANTEED DATES

ITEM	No Earlier Than* Delivery Date	No Later Than Delivery Date
Two (2) 2000/2667 kVA 13.8kV/480V cast-coil dry-type distribution transformers	March 14, 2016	April 15, 2016
One (1) 1500/2000 kVA 12.47kV/480V cast-coil dry-type distribution transformer	March 14, 2016	April 15, 2016
All associated accessories and spare parts per contract.	March 14, 2016	April 15, 2016
Submittals – As Defined in 013301 Appendix A		

* Supplier may not deliver the Equipment, and Owner will not be obligated to accept delivery of the Equipment before these dates unless prior written approval is provided by Owner or CM Agent.

EXHIBIT 2 – MILESTONE PAYMENT & CANCELLATION SCHEDULE

Upon meeting or successful completion of the set foreth dates for required documents, fabrication, delivery, installation and testing performed by the Supplier, the Owner shall pay the Supplier for a percentage of the contract value as follows:

90% Upon shipment of all transformers from WEG plant
10% Upon Acceptance Date

The Owner may cancel an order only after written notice to Supplier. Should this Contract be cancelled by Owner due to no fault of the Supplier, the Owner shall pay the Supplier a percentage of the contract value as follows:

10% 0-8 Weeks after Effective Date
25% 8-16 Weeks after Effective Date
50% 16-20 Weeks after Effective Date
75% 20-24 Weeks after Effective Date
100% greater than 24 Weeks after Effective Date

EXHIBIT 3 – PARTIAL WAIVER OF LIEN AND RELEASE OF CLAIMS

To: _____ and others, to the extent others have interests secured by the property of said Owner (the "Project") as identified below.

Supplier's name:_____

The Project:_____

Partial Payment Requested: $_____

Supplier, contingent upon the issuance, final clearance and payment of a valuable consideration of $_____, which is currently due and payable states that:

1. The payment amount set forth above constitutes payment in full for Supplier's Work through the date of the last Work covered by the progress payment application for which payment is sought ("Payment Date") on the Project excepting those claims previously made in writing to Owner and remaining unsettled as of the date of this Partial Waiver of Lien and Release of Claims.

2. Supplier represents that payment has been made to the extent of prior progress payments on the Project to all of the undersigned's sub-subcontractors, Sub-Suppliers, equipment providers, materialmen and laborers in connection with the performance of the Project. Supplier shall make further progress payments to its sub-subcontractors, Sub-Suppliers equipment providers, materialmen and laborers out of this progress payment.

Partial Waiver and Release of Claims

NOW, THEREFORE, effective as of receipt of the payment referenced in this progress payment application, Supplier releases and waives, upon receipt of the progress payment, all claims for payment through the Payment Date, except those claims previously made in writing to Owner and remaining unsettled at the time of payment including any and all mechanic's lien rights against the Project.

Supplier:_____

By:_____

Title:_____

Date:_____

EXHIBIT 4 – FINAL WAIVER OF LIEN AND RELEASE OF CLAIMS

To: _____, and others, to the extent others have interests secured by the property of said Owner (the "Project") as identified below.

Supplier's name: _____

The Project: _____

Final Payment Requested: $ _____

Supplier, contingent upon the issuance, final clearance and payment of a valuable consideration of $_____, which is currently due and payable states that:

1. The payment amount set forth above constitutes payment in full for Supplier's work on the Project excepting those claims previously made in writing to Owner and remaining unsettled at the time of final payment.

2. Supplier represents that payment has been made to the extent of prior progress payments on the Project to all of the undersigned's sub-subcontractors, Sub-Suppliers, equipment providers, materialmen and laborers in connection with the performance of the Project. Supplier shall make final payments to its sub-subcontractors, Sub-Suppliers, equipment providers, materialmen and laborers out of this final payment.

Final Waiver and Release of Claims

NOW, THEREFORE, effective as of receipt of the payment referenced in this Application, Supplier releases and waives, upon receipt of final payment, all claims for payment, except those claims previously made in writing to Owner and remaining unsettled at the time of final payment including any and all mechanic's lien rights against the Project.

Supplier:_____

By:_____

Title:_____

Date:_____

Attachment B

Technical Specifications

ATTACHMENT B
SPECIFICATIONS & DRAWINGS

TABLE OF CONTENTS

Revision		SPECIFICATIONS	Number of Pages
	DIVISION 1 – GENERAL REQUIREMENTS		
0	Section 011100	Summary of Work	4
0	Section 013210	Project Meetings, Schedules & Reports	3
0	Section 013301	Submittals	9
0	Appendix A	Submittal Schedule	2
0	Appendix B	Submittal Information Block	1
0	Appendix C	Submittal Description	1
0	Appendix D	Typical Instruction Book Cover or Operating Manual Cover and Spine Layout	1
0	Appendix E	Vendor Submittal Reference Document	11
0	Section 016001	Equipment and Materials	3
0	Section 017801	Contract Closeout	2
	DIVISION 26 – ELECTRICAL		
0	Section 260002	Electrical Equipment – General Technical Requirements	4
0	Section 261200	Small Power Transformers	5

DIVISION 1 - GENERAL REQUIREMENTS

SECTION 011100 - SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY:

A. This Section includes basic identification of the Work covered in detail in the complete Contract Documents.

1.02 PROJECT DESCRIPTION:

A. The Project is a natural gas fired reciprocating engine power plant designed for 55±5 MW (nominal) net electric power output. Final net electric power output will be defined in the Agreement.
B. The Project Site is located at 2601 N 5th St, Liberty, Montgomery County, Kansas 67351.
C. Supplier is responsible for final design including Supplier's Equipment arrangement.

1.03 WORK COVERED BY CONTRACT DOCUMENTS:

A. The Contract includes but is not limited to, engineering, designing, fabricating, factory testing, packaging, delivering, assembling, and field testing the following components of Work, which are listed for the Supplier's convenience in understanding the scope of Work:
   1. Two (2) 2000/2667 kVA 13.8kV/480V cast-coil dry-type distribution transformers.
   2. One (1) 1500/2000 kVA 12.47kV/480V cast-coil dry-type distribution transformer.
B. All Work shall be designed to meet the design data specified herein.
C. The Supplier shall be responsible for furnishing all material, tools, equipment, labor, supervision, and any other incidental items or services necessary to perform all Work described herein.
D. Supplier shall arrange and be responsible for transport of the transformers to the Project Site.

1.04 WORK BY OTHERS:

A. Transformer foundation construction shall be performed by Others.
B. Electrical connections between switchgear and equipment not furnished under this Contract shall be performed by Others.

1.05 SPARE PARTS:

A. Supplier shall include all spare parts and tools required for complete installation and commissioning of all supplied Equipment and Materials.
B. Supplier shall provide a separately priced list of recommended spare parts for each piece of equipment.

1.06 CODES AND STANDARDS

A. Design specifications and construction of the Project shall be in accordance with (1) applicable laws, regulations, codes and standards of the Federal Government and State of Kansas, including those set forth below and, (2) applicable local (including county and city) laws, regulations, codes and ordinances, including those set forth below. Publications from the following nationally recognized organizations are applicable to the engineering, design, manufacture, and testing of the Equipment included in the Specifications to the extent referenced in these Specifications. All references to publications are to the latest issue of each together with all latest addenda, amendments, or additions thereto as of the Effective Date. References shall be made in accordance with the abbreviations listed below. In the event that conflicts arise between the codes, standards of practice, specifications or manufacturer

recommendations described herein and codes, laws, rules, decrees, regulations, standards, etc., of the locality where the equipment is to be installed, the more stringent code shall apply. Supplier shall provide a written position of any such conflict clarifications to Owner in writing.

B. Federal Codes:

CAAA	Clean Air Act and Amendments
CFR	Code of Federal Regulations
FERC	Federal Energy Regulatory Commission
NERC	North American Electric Reliability Corporation
Title 29	Code of Federal Regulations (CFR), Part 1910 Occupational Safety and Health Standards.

C. Industry Codes:

AA	Aluminum Association
AISC	American Institute for Steel Construction, ASD/LRFD (13th Ed.)
AISI	American Iron and Steel Institute
ANSI	American National Standards Institute
API	American Petroleum Institute
ASHRAE	American Society of Heating, Refrigeration and Air Conditioning
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
ASNT	American Society of Nondestructive Testing
AWS	American Welding Society
DIN	German Standard (Deutsche Institute für Normung)
EJMA	Expansion Joint Manufacturer's Association
EN	European Standard
FCI	Fluid Control Institute
HEI	Heat Exchange Institute
IBC	International Building Code 2009
ICEA	Insulated Cable Engineers Association
IEEE	Institute of Electrical and Electronics Engineers
IES	IES Lighting Handbook
ISO	International Standard Organization
MSS	Manufacturers Standardization Society
NEC	National Electrical Code
NEMA	National Electrical Manufacturers Association
NESC	National Electric Safety Code
NFPA	National Fire Protection Association
SSPC	Steel Structures Painting Council
TEMA UFC	Thermal Insulation Manufacturers Association
UL	Underwriters Laboratories

D. County / City Codes:

Fire Marshall / AHJ	2009 International Fire Code

1.07 PROJECT SITE CONDITIONS:

A. The Project Site has the following Site Conditions:

1. Plant elevation is ~~930~~ 755 feet above mean sea level.
2. Indoor Design Temperatures
   - a. Maximum Dry Bulb — 120°F
   - b. Minimum Dry Bulb — 50°F
3. Outdoor Design Temperatures
   - a. Maximum Dry Bulb (1%) — ~~99.2~~97.1°F
   - b. Mean Coincident Wet Bulb — ~~75.3~~75.8°F
   - c. Minimum Dry Bulb (99.6%) — ~~13.6~~10.3°F
4. Outdoor Extreme Temperatures (n = 10 years)
   - a. Maximum Dry Bulb — ~~110.5~~102.8°F
   - b. Minimum Dry Bulb — ~~2.6~~0.6°F
   - c. Extreme Max Wet Bulb — ~~88.2~~88.9°F

B. IBC Design Criteria:

1. Occupancy Category: III
2. Wind loads – Section 1609
   - a. Basic wind speed: V_{3S} = 90 mph
   - b. Exposure category: C
   - c. Wind Importance Factor: I_w=1.15
   - d. Minimum lateral pressure: p_s = 10 psf
3. Seismic loads – Section 1613
   - a. Seismic Site Class: D
   - b. Seismic Importance Factor: I_E=1.25
   - c. Component Importance Factor: I_P = 1.0 (I_p = 1.5 under specific conditions, see ASCE 7-05 Section 13.1.3)
   - d. Design Spectral Response Acceleration
     - (1) Short Period: S_s = 0.193
     - (2) 1 Second: S_1 = 0.063
     - (3) Max. considered short period: S_{MS} = 0.309
     - (4) Max. considered 1-second: S_{M1} = 0.151
     - (5) 5% damped design short period: S_{DS} = 0.206
     - (6) 5% damped design 1-second: S_{D1} = 0.101
     - (7) Long-Period Transition Period: T_L = 12 seconds
   - e. Seismic Design Category: B
4. Snow loads – Section 1608:
   - a. Snow Importance Factor: I_S = 1.1
   - b. Ground snow load: p_g = ~~10~~15 psf
   - c. Terrain Category: C
5. Ice Loads
   - a. Ice thickness Importance Factor: I_i = 1.25
   - b. Wind Concurrent with ice Importance Factor I_W = 1.0
   - c. Nominal Ice Thickness: t = ~~0.75~~1.0”
   - d. Concurrent wind speed V_C = 40mph

C. Precipitation

1. Minimum Annual: Unknown

2.	Average Annual:	37 inches
3.	Maximum Annual:	Unknown
4.	Maximum 25-year 24 Hour Rain:	8 inches
5.	Maximum 24 Hour Snow:	13 inches

D. Prevailing Wind Direction

1. Annual: South

1.08 SITE UTILITIES:

A. Electrical:

1. Not applicable.

PART 2 - PRODUCTS - Not Applicable.

PART 3 - EXECUTION - Not Applicable.

END OF SECTION 011100

SECTION 013210 - PROJECT MEETINGS, SCHEDULES, AND REPORTS

PART 1 - GENERAL

1.01 SUMMARY:

A. Project Meetings:
   1. Preliminary Conference.
   2. Engineering Coordination Meetings

B. Schedules and Reports:
   1. Initial Coordination Submittals.
   2. Work Progress Schedule.
   3. Work Progress Reports.

C. Related SECTIONS:
   1. Submittals: SECTION 013301.
   2. Equipment and Materials: SECTION 016001.

1.02 PROJECT MEETINGS:

A. Preliminary Conference:
   1. Engineer will conduct a conference call within 10 Days after the Award Date, to review items stated in the agenda and to establish a working understanding between the parties as to their relationships during performance of the Work. The conference shall be attended by:
      a. Supplier.
      b. Owner.
      c. Supplier's principal Sub-Suppliers, at discretion of Engineer.
      d. Engineer
   2. Meeting Agenda:
      a. Projected fabrication/construction schedules.
      b. Project coordination.
      c. Procedures and processing of:
      d. Substitutions.
      e. Submittals.
      f. Change Orders.
      g. Applications for Payment.
      h. Procedures for testing.
   3. Location of Meeting: Conference Call
   4. Reporting: Within five (5) Days after the meeting, Engineer will prepare and distribute minutes of the meeting to each party represented.

B. Engineering Coordination Meetings:
   1. Supplier shall schedule and conduct a conference call at least monthly for coordination during Supplier's equipment engineering and design phase of the Work. Meetings shall be attended by:
      a. Supplier's representative(s) including engineering personnel.
      b. Supplier's principal Sub-Suppliers, at Engineer’s discretion.
      c. Owner
      d. Engineer.
   2. Meeting Agenda:
      a. Review of action items.
      b. Facility design interfaces.
      c. Equipment and Material procurement status.

d. Engineering/fabrication/manufacturing schedules.
e. Requests for information (RFIs).

3. Location of Meetings: Conference Call
4. Reporting: Within five (5) days after the meeting, Supplier will prepare and distribute minutes of the meetings to each party represented.

1.03 SCHEDULES AND REPORTS:

A. Initial Coordination Submittals: Within the time indicated in SECTION 013301 Appendix A, Supplier shall submit to Engineer:
   1. A preliminary Work progress schedule.
   2. A preliminary schedule of Submittals.

B. Work Progress Schedule:
   1. After submittal of preliminary Work progress schedule, submit to Engineer a detailed Work progress schedule and detailed manufacturing schedule for each piece of Equipment within the time indicated in SECTION 013301 Appendix A. Base the schedule on the preliminary Work progress schedule and incorporate review comments and other feedback.
   2. The schedule shall show the Work in a graphic format suitable for displaying scheduled and actual progress.
      a. Prepare schedules as a horizontal bar chart with separate bar for each major portion of the Work or operation.
      b. The schedule shall also show the Work broken down into major phases and key items with the dates Work is expected to begin and be completed. Sequence of listings shall be in the chronological order of the start of each item of Work.
      c. Scale and spacing shall allow space for notations and revisions.
      d. Sheet size: 8.5 x 11 or 11 x 17 inches.
   3. Provide sub-schedules to define critical portions of entire schedules.
   4. Coordinate Work progress schedule with Work progress reports and delivery schedule.
   5. Engineer will review and comment on Work progress schedule and, upon agreement between Engineer and Supplier on necessary changes:
      a. Supplier shall print and distribute copies of the accepted schedule to Owner, Engineer, Sub-Suppliers, and other parties required to comply with scheduled dates.
   6. Supplier shall not change the accepted Work progress schedule without prior written concurrence of Engineer.
   7. Submit to Owner an updated schedule at least once a month. Schedule shall show actual progress and any proposed changes in the schedule of remaining Work.

C. Work Progress Reports:
   1. Submit monthly a report on actual Work progress. More frequent reports may be required should the Work fall behind the accepted schedule.
   2. Work progress reports shall consist of marked copies of prints made from the accepted Work progress schedule, and a narrative report which shall include but not be limited to the following:
      a. A description of current and anticipated delaying factors, if any.
      b. Impact of possible delaying factors.
      c. Proposed corrective actions.
   3. A Work progress report shall accompany each application for partial payment. Work reported complete but not readily apparent to Owner must be substantiated with supporting data.

4. Should operations fall behind accepted schedule to an extent that Supplier's ability to meet the Guaranteed Delivery Dates appears doubtful to Owner, Owner shall so notify Supplier, and Supplier shall, at no change in Contract Price, take corrective action to get back on schedule, and submit an updated Work progress report to Owner.

PART 2 - PRODUCTS - Not Applicable.

PART 3 - EXECUTION - Not Applicable.

END OF SECTION 013210

SECTION 013301 - SUBMITTALS

PART 1 - GENERAL

1.01 SUMMARY:

A. This SECTION includes definitions, descriptions, transmittal, and review of Submittals.

B. Related SECTIONS:

1. Contract Closeout: SECTION 017801.

1.02 GENERAL INFORMATION:

A. Definitions:

1. Shop Drawings, Product Data, and Samples are technical Submittals are defined below and are prepared by manufacturer or Supplier and submitted by Supplier to Engineer as a basis for review and approval of the use of Equipment and Materials proposed for incorporation in the Work or needed to describe installation, operation, maintenance, or technical properties, as specified in each DIVISION of the Specifications.

a. Shop Drawings include custom-prepared data of all types including drawings, diagrams, performance curves, material schedules, templates, instructions, and similar information not in standard printed form applicable to other projects.

b. Product Data includes standard printed information on materials, Products, and systems; not custom-prepared for this Contract, other than the designation of selections from available choices.

c. Samples include both fabricated and unfabricated physical examples of Materials, products, and Work; both as complete units and as smaller portions of units of Work; either for limited visual inspection or for more detailed testing and analysis. Mockups are a special form of Samples which are too large to be handled in the specified manner for transmittal of Sample Submittals.

2. Informational Submittals are those technical reports, administrative Submittals, certificates and guarantees not defined as Shop Drawings, product data, or Samples.

a. Technical reports include laboratory reports, tests, technical procedures, technical records, and Supplier's design analysis.

b. Administrative Submittals are those nontechnical Submittals required by the Contract or deemed necessary for administrative records. These Submittals include maintenance agreements, bonds, photographs, physical work records, statements of applicability, copies of industry standards, Contract record data, schedules, security/protection/safety data, and similar type Submittals.

c. Certificates and guarantees are those Submittals on Equipment and Materials where a written certificate or guarantee from the manufacturer or Supplier is called for in the Specifications.

3. Refer to ARTICLES 1.03 and 1.04 of this PART for detailed lists of documents and specific requirements.

B. Quality Requirements:

1. Shop Drawings and Product Data shall be submitted in electronic format. Every line, character, and letter shall be clearly legible and of suitable quality for reproduction.

2. Documents submitted to Owner and Engineer that do not conform to specified requirements shall be subject to rejection by Owner and Engineer, and upon request, Supplier shall resubmit conforming documents. Documents rejected due to illegibility or failure to comply with non-technical requirements will not satisfy schedule requirements. If conforming Submittals cannot be obtained, such documents shall be retraced, redrawn, or photographically restored as may be necessary to meet such requirements. Supplier’s

failure to initially satisfy the legibility quality requirements will not relieve Supplier from meeting the required schedule for Submittals.

3. Supplier shall be notified of any Submittals rejected prior to review for legibility or formatting reasons by Engineer or Owner. No notification will be provided for Submittals which are not rejected.

C. Language and Dimensions:
   1. All words and dimensional units shall be in the English language.
   2. Metric dimensional unit equivalents may be stated in addition to the English units. However, English units of measurement shall prevail.

D. Submittal Completeness:
   1. Submittals shall be complete with respect to dimensions, design criteria, materials of construction, and other information specified to enable Engineer to review the information effectively.
   2. Where standard drawings are furnished which cover a number of variations of the general class of Equipment, each drawing shall be annotated to indicate exactly which parts of the drawing apply to the Equipment being furnished. Use hatch marks or X-outs to clearly indicate variations, optional equipment, or other items which do not apply to the Submittal and circle or box all selected variations, optional equipment, or other applicable selections. The use of “highlighting markers” will not be an acceptable means of annotating Submittals. Such annotation shall also include proper identification of the Submittal permanently attached to the drawing.
   3. Reproduction or copies of Contract drawings or portions thereof will not be accepted as complete fabrication or erection drawings, but will be acceptable when used by Supplier as a drawing upon which to indicate information on erection or to identify detail drawing references. Whenever the Contract drawings are revised to show that additional Supplier's information, Engineer's title block shall be replaced with Supplier's title block, and Engineer's professional seal shall be removed from the drawing.

E. Form of Submittals:
   1. Supplier shall have one contact person for submitting and retrieving documents.
      a. This person will be responsible for making sure all documents are submitted properly.
      b. This person will be receiving an email every week stating what needs to be resubmitted.
         (1) All submittals with an action status of “B”, “C”, or “D” need to be resubmitted as described herein.
   2. Submittal Documents
      a. Name of file must include:
         (1) Specifications SECTION number in front of filename
         (2) Must be short and specific to the file
      b. Name of file must NOT include:
         (1) Revision number/letter
         (2) Date
         (3) The word “Submittal”
      c. All documents that are supplied by the Supplier must be .PDF formatted
      d. A Submittal Block will be provided to Supplier as a .JPEG file.
      e. The submittal block must be included on:
         (1) Each individual PDF drawing. (one drawing per PDF file)
         (2) The first page of each document that is NOT a drawing.
      f. When submitting:

(1) See Appendix E for submittal instructions on the Webtools site.
(2) Send a transmittal letter by email to: 81799@burnsmcd.com, with cc: dpetersen@burnsmcd.com and reasterling@burnsmcd.com
(3) On the transmittal letter:
1) Include a description for each file
2) State what revision the file is.
(4) State the project number (81799), project description, Contract number CXXXX (where 'XXXX' is to be replaced by the actual 4 digit number), and the number indicating the submittal number (1, 2, 3, etc.) within the e-mail

g. Return Submittal:
(1) Make sure the file name has stayed exactly the same as when you first submitted it.
(2) Pick up any of Engineer's comments and make the necessary changes to the original document/drawing.
(3) If you are making a change or verifying information on any document, provide comment clouding on these items.
(4) If the Engineer has made comments and you need to add or delete pages from your original document:
(a) Place an "X" through the page to delete it
(b) Add additional pages to the end of the PDF.

3. Document Pick-Up
a. Supplier will receive an e-mail stating that your package is ready to be picked up.
b. Click on the Webtools link.
c. Download the package.
(1) Included in the package are:
(a) A return transmittal letter listing the document being returned and what action status they are given.
(b) Documents that are being returned with the submittal block filled out.
d. Pick-up or respond to all comments from the Engineer.
e. Resubmit any required documents as described above. Cloud all changes and increase the revision for all resubmitted documents.

1.03 TECHNICAL SUBMITTALS:

A. Provide required Submittals as specified in Appendix A and in the Specifications. Additional information about Submittals listed in Appendix A is provided in Appendix C. All durations are Days.

B. Schedule of Submittals:
1. Prepare for Engineer's concurrence a schedule for submission of all Submittals specified or necessary for Engineer's approval of the use of Equipment and Materials proposed for incorporation in the Work or needed for proper installation, operation, or maintenance. Submit the schedule with the Work progress schedule. Schedule submission of all Submittals to permit review, fabrication, and delivery in time to not cause delay in the Work of Supplier or its Sub-Suppliers or any other contractors as described herein.
2. In establishing schedule for Submittals, allow 14 Days in Engineer's office for reviewing original submittals and 14 Days in Engineer's office for reviewing resubmittals. For submittals exceeding 20 drawings, Engineer and Owner may request additional time for review within 2 days of submittal receipt.
3. Submittals requiring revision shall be resubmitted within 14 Days after receipt of Engineer's review notations.

4. The schedule shall indicate the anticipated dates of original submission for each item and Engineer's approval thereof, and shall be based upon at least one resubmission of each item.
5. Schedule all Submittals required for submission within the time specified for each in Appendix A.
6. Resubmit Submittals the number of times required for Engineer's action stamp to read either A, F, or G as described below. However, any need for resubmittals in excess of the number set forth in the accepted schedule, or any other delay in obtaining approval of Submittals, will not be grounds for extension of the Contract Time provided Engineer completes its reviews within the times specified. Supplier shall not commence production of any part of the Equipment and Materials affected thereby until such Submittal has been reviewed and approved by Engineer.

C. Transmittal of Submittals:
1. All Submittals (shop drawings, product data, and samples) for Equipment and Materials furnished by manufacturers and Supplier shall be submitted to Engineer by Supplier.
2. Transmit all Submittals to Engineer for approval as follows:
   a. Include Submittal Information Block:
      (1) Electronic files of Submittal Information Blocks will be provided to Supplier for use on electronic Submittals.
      (2) An example of the Submittal Information Block is included as Appendix B to this Section.
   b. Mark each Submittal by Project name and number, Contract title and number, and the applicable Specifications SECTION and Article numbers.
   c. Check and include Supplier's approval for Submittals of Supplier and manufacturers prior to transmitting them to Engineer. Supplier’s approval shall constitute a representation to Owner and Engineer that Supplier has determined and verified all design criteria, quantities, dimensions, materials, catalog numbers, compliance with applicable laws and regulations, and similar data, or Supplier assumes full responsibility for doing so, and that Supplier has coordinated each Submittal with the requirements of the Work and the Contract.
   d. At the time of each submission, call to the attention of Engineer in the transmittal letter any deviations from the requirements of the Contract.
   e. Make all modifications noted or indicated by Engineer and return revised Submittals until approved. Direct specific attention in writing, or on revised Submittals, to changes other than the modifications called for by Engineer on previous Submittals. Previously approved Submittals transmitted for final distribution will not be further reviewed and are not to be revised. If errors are discovered during manufacture or fabrication, correct the Submittal and resubmit for review.
   f. Resubmitted files shall be indicated on the transmittal letter by a later date and revision number than the previous submissions.
   g. Following completion of the Work and prior to final payment, furnish record documents and approved Samples and Shop Drawings necessary to indicate "as constructed" conditions, including field modifications, in the number of copies specified. Furnish additional copies for insertion in Equipment instruction books and operating manuals as required. All such copies shall be clearly marked "PROJECT RECORD."
      (1) Submit a final record copy of a master field drawing list which shall indicate the final revision status of each drawing on the list.

3. Quantity Requirements:
   a. Except as otherwise specified in Appendix A, transmit all Shop Drawings in the following quantities:
      (1) Initial Submittal:
         (a) Per Appendix A, this Section.
      (2) Resubmittals:
         (a) Per Appendix A, this Section.
      (3) Submittal for final distribution:
         (a) Paper - One copy to Owner, One copy to Engineer.
         (b) Electronic - One CD-ROM or flash drive copy to Engineer in native format. Drawings shall be provided as AutoCAD 2012 or later files.
      (4) As-constructed documents:
         (a) Paper - One copy to Owner, one copy to Engineer.
         (b) Electronic - Three CD-ROM or flash drive copies to Engineer in native format. Drawings shall be provided as AutoCAD 2012 or later files.
   b. Transmit Submittals of product data as indicated for Shop Drawings above.
   c. Transmit Submittals of Material Samples, color charts, and similar items as follows:
      (1) Initial Submittal – Two to Engineer. One to Owner.
      (2) Resubmittal – Two to Engineer. One to Owner.
      (3) Upon approval, Sample(s) will not be returned to Supplier.
   d. Except as otherwise specified in Appendix A, transmit Submittals of Equipment instruction books and operating manuals as follows:
      (1) Initial Submittal:
         (a) Paper - No copies to Engineer. One copy to Owner. Only Engineer's comments will be returned to Supplier.
         (b) Electronic - One copy to Engineer. One copy to Owner.
      (2) Resubmittals:
         (a) Paper - No copies to Engineer. One copy to Owner. Only Engineer's comments will be returned to Supplier.
         (b) Electronic - One copy to Engineer. One copy to Owner.
      (3) Submittal for Final Distribution:
         (a) Four paper copies to Owner upon Engineer's written authorization.
         (b) One CD-ROM or flash drive copy to Engineer as PDF files and Two CD-ROM or flash drive copies to Owner.
   e. All Submittals provided in PDF format shall contain searchable text.
   f. When all Submittals have been updated to "as-constructed" conditions, transmit to Engineer three copies and Owner five copies each of manuals on CD-ROM.
   g. Owner may copy and use for internal operations and staff training purposes any and all document Submittals required by this Contract and approved for final distribution, whether or not such documents are copyrighted, at no additional cost to Owner. If permission to copy any such Submittal for the purposes stated is withheld from Owner by manufacturer or Supplier, the Supplier shall provide to Owner 50 copies plus the number of copies required by Supplier at each final distribution issue.
4. Supplier's erection drawings and other Submittals required for installation of Equipment furnished under this Contract for installation under other contracts will be transmitted electronically to installing contractor by Engineer in the final distribution of such Submittals.

5. Information to Manufacturer's District Office: Supplier shall arrange for manufacturers and suppliers of Equipment or Materials to furnish copies of all agreements, drawings, specifications, operating instructions, correspondence, and other matters associated with this Contract to the manufacturer's district office servicing Owner. Insofar as practicable, all business matters relative to Equipment and Materials included in this Contract shall be conducted through such local district offices.

D. Engineer's Review:
1. Engineer will review and take appropriate action on Submittals in accordance with the accepted Schedule of Submittals. Engineer's review and approval will be only to determine if items of Equipment and Materials covered by the Submittals are compatible with the design concept and conform to information given in the Contract.
2. Such review and approval will not extend to design data reflected in Submittals which is peculiarly within the special expertise of Supplier. Review and approval of a component item as such will not indicate approval of the assembly in which the item functions.
3. Engineer's review and approval of Shop Drawings, product data, or Samples will not relieve Supplier of responsibility for any deviation from requirements of the Contract Documents unless Supplier has in writing called Engineer's attention to such deviation at the time of submission, and Engineer has given written concurrence in and approval of the specific deviation. Approval by Engineer shall not relieve Supplier from responsibility for errors or omissions in Submittals.

E. Submittal Action Stamp:
1. Engineer's review action stamp, appropriately completed, will appear on all Submittals of Supplier when returned by Engineer. Review status designations listed on Engineer's action stamp are defined as follows:

A - SUBMITTAL APPROVED Signifies Equipment or Material represented by the Submittal conforms to the design concept and complies with the intent of the Contract and is approved for incorporation in the Work. Supplier is to proceed with fabrication or procurement of the items and with related Work. Copies of the Submittal are to be transmitted to Engineer for final distribution.

B - SUBMITTAL APPROVED AS NOTED (RESUBMIT) Signifies Equipment or Material represented by the Submittal conforms to the design concept and complies with the intent of the Contract and is approved for incorporation in the Work in accordance with Engineer's notations. Supplier is to proceed with fabrication or procurement of the items and with related Work in accordance with Engineer's notations and is to submit a revised Submittal responsive to notations marked on the returned Submittal or written in the letter of transmittal.

C - SUBMITTAL RETURNED FOR REVISION (RESUBMIT) Signifies Equipment or Material represented by the Submittal appears to conform with the design concept and comply with the intent of the Contract but information is either insufficient in detail or contains discrepancies which prevent Engineer from completing its review. Supplier is to resubmit revised information responsive to Engineer's annotations on the returned Submittal or written in the letter of transmittal. Fabrication or procurement of items represented by the Submittal and related Work is not to proceed until the Submittal is approved.

D - SUBMITTAL NOT APPROVED (SUBMIT ANEW) Signifies Equipment or Material represented by the Submittal does not conform to the design concept or comply with the intent of the Contract and is disapproved for use in the Work. Supplier is to provide Submittals responsive to the Contract.

E - PRELIMINARY SUBMITTAL Signifies Submittals of such preliminary nature that a determination of conformance with the design concept or compliance with the intent of the Contract must be deferred until additional information is furnished. Supplier is to submit such additional information to permit layout and related activities to proceed.

F - FOR REFERENCE, NO APPROVAL REQUIRED Signifies Submittals which are for supplementary information only; pamphlets, general information sheets, catalog cuts, standard sheets, bulletins and similar data, all of which are useful to Engineer or Owner in design, operation, or maintenance, but which by their nature do not constitute a basis for determining that items represented thereby conform with the design concept or comply with the intent of the Contract. Engineer reviews such Submittals for general content but not for basic details.

G - DISTRIBUTION COPY (PREVIOUSLY APPROVED) Signifies Submittals which have been previously approved and are being distributed to Supplier, Owner, and others for coordination and construction purposes.

F. Instruction Books and Operating Manuals:
   1. In addition to electronic Submittals specified above, Equipment instruction books and operating manuals prepared by the manufacturer shall include the following:
      a. Index and tabs.
      b. Instructions for installation, start-up, operation, inspection, maintenance, parts lists and recommended spare parts, and data sheets showing model numbers.
      c. Applicable drawings.
      d. Warranties and guarantees.
      e. Name and address of nearest manufacturer-authorized service facility.
      f. All additional data specified.
   2. Each hard copy of the manuals shall be assembled and bound in black three-ring binders designed for rough usage. Binders shall be as specified below.
      a. Front covers and spine of the manuals shall be permanently marked with white lettering indicating Owner's name, plant name, unit number, name of equipment, volume number if applicable, contract number, name of Supplier, Supplier's address, and year of manufacture. See Appendix D of this SECTION for more details.

Manufacturer	ViaTech Publishing Solutions or approved equal 424 North Cedarbrook Avenue Springfield, Missouri 65802 1-800-888-0823
Binder type	Swing Hinge C78 Split Prong
Construction	Stiff binder board
Covering	Supported vinyl skytogen liner

Material and color	Black imitation leather (Material Code NV899)
Font	News Gothic Condensed
Imprinting	Foil stamp in accordance with Appendix D of this section. Imprinting color is to be white.
Capacities available	Split prong swing hinge 2 inch or 3 inch as required.

b. Binder capacities shall not exceed 3 inches, nor shall material included exceed the designed binder capacity. If material to be bound exceeds capacity rating, multiple volumes shall be furnished. Binder capacity should not be more than approximately ½- inch greater than the thickness of the material within the binder.
c. Submit mockup of cover and spine for Engineer's review.

G. Samples:
1. Office Samples shall be of sufficient size and quantity to clearly illustrate the following:
a. Functional characteristics of the product, with integrally related parts and attachment devices.
b. Full range of color, texture, and pattern.
c. Material, manufacturer, pertinent catalog number, and intended use.

1.04 INFORMATIONAL SUBMITTALS:

A. Informational Submittals are comprised of technical reports, administrative Submittals, and guarantees which relate to the Work, but do not require Engineer approval prior to proceeding with the Work. Informational Submittals include:
1. Test reports.
2. Certification on Materials:
a. Steel mill tests.
3. Shipping and/or packing lists.
4. Job progress schedules.
5. Equipment and Material delivery schedules.
6. Warranties and guarantees.
7. Welder qualification records.
8. Welding procedures qualification tests.
9. X-ray and radiograph reports.
10. Hydrostatic testing.

B. Transmittal of Informational Submittals:
1. All informational Submittals furnished by manufacturers and suppliers shall be submitted to Engineer by Supplier unless otherwise specified.
a. Identify each informational Submittal by Project name and number, Contract title and number, and the Specifications SECTION and Article numbers marked thereon or in the letter of transmittal. Unidentifiable Submittals will be returned for proper identification.
b. At the time of each submission, call to the attention of Engineer in the letter of transmittal any deviations from the requirements of the Contract.
2. Quantity Requirements:
a. Technical reports and administrative Submittals except as otherwise specified:
(1) Paper: One copy each to Engineer and Owner.
(2) Electronic: One copy each to Engineer and Owner.
3. Test Reports:

a. Responsibilities of Supplier, Owner, and Engineer regarding tests and inspections of Equipment, Materials, and completed Work are set forth elsewhere in this Contract.
b. The party specified responsible for testing or inspection shall in each case, unless otherwise specified, arrange for the testing laboratory or reporting agency to distribute one electronic copy of the test reports to Owner, Engineer, and Supplier.

C. Engineer's Review:
1. Engineer will review informational Submittals for indications of Work or Material deficiencies.
2. Engineer will respond to Supplier on those informational Submittals which indicate Work or Material deficiency.

PART 2 - PRODUCTS - Not Applicable.

PART 3 - EXECUTION - Not Applicable.

END OF SECTION 013301

SECTION 013301 APPENDIX A
Submittal Schedule
Legend: E = Electronic Copy; P(x) = Paper Copy (no. of copies); ARO = After Receipt of Order or Notice to Proceed

ID	Description	Subject To LD's	With Bid (for bid evaluation and award)	For Acceptance (required prior to fabrication)	For Information / Certification / Construction (conformed including Owner's and Engineer's comments)
1	Notice of Shipment				E – 30 Days prior to shipment
2	Recommended Installation & Commissioning Spare Parts		E		
3	Recommended Spare Parts		E		
4	Preliminary Work Progress Schedule				E – 15 Days ARO
5	Schedule of Submittals		E	E – 15 Days ARO	
6	Detailed Manufacturing Schedule with milestones for each piece of Equipment				E – 30 Days ARO
7	Detailed drawing list with submittal dates				E – 30 Days ARO
8	Detailed commissioning work Progress Schedule				E – 60 Days prior to delivery
9	NOT USED				
10	Preliminary O&M Manuals			E – 60 Days prior to earliest Guaranteed Delivery Date	
11	Installation Manuals			E – 60 Days prior to earliest Guaranteed Delivery Date	P (4), E – 30 Days prior to earliest Guaranteed Delivery Date
12	Final O&M Manuals				P (4), E – 30 Days prior to earliest Guaranteed Delivery Date
13	Packing Lists				P (1) – With each shipment
14	Bills of Materials			E – 60 Days ARO	
15	Unloading, Handling & Storage Requirements and Procedures				P (1), E – With Notice of Shipment
16	Material Safety Data Sheets (if applicable)				P (4), E – With Notice of Shipment and with each Shipment
17	Outline Drawing	Y	E	E – 30 Days ARO	
18	Foundation Loadings and Details	Y	E	E – 30 Days ARO	
19	Anchor Bolt and Setting Drawing	Y	E	E – 30 Days ARO	

Submittal Schedule

Legend: E = Electronic Copy; P(x) = Paper Copy (no. of copies); ARO = After Receipt of Order or Notice to Proceed

ID	Description	Subject To LD's	With Bid (for bid evaluation and award)	For Acceptance (required prior to fabrication)	For Information / Certification / Construction (conformed including Owner's and Engineer's comments)
20	Crane/Hoist Schedule		E	E – 90 Days ARO	
21	Nameplate Drawing	Y	E	E – 30 Days ARO	
22	Electrical Schematics	Y		E – 30 Days ARO	
23	Interconnection Drawings	Y		E – 30 Days ARO	
24	CT Saturation Curves	Y		E – 30 Days ARO	
25	Bushing Drawings			E – 30 Days ARO	
26	Factory Test Schedule				E– 30 Days prior to test
27	Factory Test Procedure				E–21 Days prior to test
28	Factory Test Report				E – 15 Days after test

APPENDIX B

SUBMITTAL INFORMATION BLOCK

Supplier to fill in all blanks without preprinted information

For the use of Engineer

Project Supplier Identification	**Date Engineer Received**
Supplier: _____ Project Name: _____ Project No.: _____ Contract Title: _____ Contract No.: _____ Spec. Section No.: _____ Supplier's Approval: Submission of this document shall represent contractor's approval as specified in the Contract. Supplier remains liable for accuracy of Submittals as provided in the Contract.	**Engineer's Action** (See Contract Documents) Initials & Date **A**_____ **B**_____ **C**_____ **D**_____ Initials & Date **E**_____ **F**_____ **G**_____

1. Use this decal on all shop drawings, whether prepared by Supplier or Sub-Supplier. Place as near as possible to the drawing title in the lower right corner.

2. Affix the gummed edge paper information blocks to all "product data" type Submittals immediately inside the front cover.

APPENDIX C
SUBMITTAL DESCRIPTION

System I/O list
- Tabulation of all inputs and outputs associated with a PLC or DCS to be used to control the supplied system.

Electrical Schematic
- Detailed schematics showing each and every light, switch, controller, relay, timer, etc., associated with a systems control circuit
- All voltage and current ratings
- Special wiring requirements (coax, high temp., etc.)

Control Panel Front View & Internal Wiring Diagram
- Physical diagrams of all supplied control panels (internal and external)
- All light and switches including color
- All wiring internal to the panel
- All Tagging/Labeling
- Panel NEMA rating

Electrical Load List
- Tabulation of all motors (load in hp)
- Tabulation of all variable speed drives (load in kW)
- Tabulation of all 120V vital ac loads (load in kW)
- Tabulation including hp, voltage, and number of phases

Electrical Equipment Layout
- Physical drawing showing the location of each of the electrical interface points and elevation of equipment in respect to the plant elevation
- Location of each device that requires Owner's cable to be run to it

Equipment Installation Details
- Drawings showing how to install all devices that require field installation
- Details including support/mounting devices
- Instrument installation details including tubing installation from root valve to the instrument including tubing size, slope, valve manifold, etc.

Interconnection Wiring Diagrams
- Overall system diagram showing 100% of the field wiring required
- Interface of each device or panel being supplied in the system
- Voltage and current ratings

Control Logic Diagrams
- Normal start/stop sequence
- Alarm development
- Identification of all time delays
- Auto stop/start sequence
- Identification of digital control
- Identification of analog control

P&ID's
- System diagrams of all system piping
- Identification of all instruments, pressure switches, limit switches, temperature elements, etc.
- Identification of interface (PLC, DCS, or hard wired interlocks) for each device
- Identification of valves, pumps, etc.
- Identification of all pipe size, materials, and schedule

General Arrangement Drawings
- Dimension and location (plan and elevation) of all equipment including locating dimensions in respect to the plant columns and elevation of equipment in respect to the plant elevation
- Identification of all pull space requirements
- Identification of all access/maintenance requirements

Foundation Details
- Foundation details/outlines depicting overall dimensions, pad and blockout requirements, anchor bolt locations and details, and any additional information necessary to establish the foundation arrangement
- Either actual or "not-to-exceed" foundation design loads, and their points of application, for all applicable load cases and/or combinations (i.e., dead load, live load, wind, seismic, dynamic, etc.)
- Identification of loading directions, magnitudes, and any other permanent data required for the foundation design

Structural and Miscellaneous Steel
- Certified shop drawings and erection diagrams for all structural steel and miscellaneous steel
- Documents prepared in accordance with the AISC specification for the design, fabrication, and erection of structural steel for buildings

Outline Drawings
- Outline dimensional drawing
- Location of all interface connections (plan and elevation)
- Recommended/required mounting details clearly depicting bolting location, size, material, and projection requirements, or sufficient data such that the Engineer can establish such requirements (for dynamic equipment or machinery data include operating speeds, rotating masses, centers-of-gravity, eccentricities, etc.)
- Weight and center of gravity
- Type of interface connection (e.g., 150 lb. RF flange, welded, weld end preparation, wall thickness or schedule, etc.)
- Allowable loads for all nozzles
- Removal space/maintenance requirements
- Special rigging requirements
- Thermal movements of all nozzles (if applicable)

Piping Information
- Physical drawing showing the routing of all vendor supplied pipe
- Location of pumps, valves, traps, strainers, instrument connections, etc. on the piping drawing
- Location of all Owner/Vendor interface points (plan and elevation) for large and small pipe
- Drawing including locating dimensions in respect to the plant columns and elevation or centerline of equipment
- Allowable loads and movements for all interface points
- Support locations and details
- Identification of pipe sizes, materials, valves, pumps, insulation, etc.
- Field weld locations
- Wall/floor penetration requirements
- Pipe movements in excess of 1 inch
- Design/service conditions (temperature/pressure)

O & M Manuals
- Description of equipment
- Theory of operation
- Troubleshooting
- Equipment drawings
- Installation instructions
- Maintenance instructions
- Sub-supplier component list

APPENDIX D

TYPICAL INSTRUCTION BOOK COVER

(Spine)	(Cover)	
Small Power Transformers	**Coffeyville Municipal Light & Power**	36
	Power Generation Station	24
Coffeyville Municipal Light & Power	**INSTRUCTION BOOK**	36
	FOR	36
	SMALL POWER TRANSFORMERS	36
	VOLUME NUMBER*	36
Power Generation Station	**CONTRACT NUMBER 5120**	24
CONTRACT NUMBER 5120	**SUPPLIER'S NAME**	24
	SUPPLIER 'S ADDRESS	24
	SUPPLIER'S ORDER NUMBER	24
VOLUME NUMBER*	**Equipment Tag Number(s)**	24

NOTES:
1. All lettering shall be a block style font such as Arial.
2. All spine lettering shall be 14 point.
3. Cover lettering shall be point sizes indicated in column to right of cover illustration.
4. *Volume number required only if instructions are contained in more than one volume

Appendix E
Vendor Submittal Reference Document

Overview:

The following procedure is for vendors, suppliers, or contractors who will be issuing submittals to Burns & McDonnell (BMcD). If you have questions about uploading submittals, please email or call your BMcD contact.

It is a step by step guide on:

- Login options
  - Logging in
  - Resetting the Password
  - Forgotten Passwords
- Preparing and Delivering a Submittal
  - Creating a Submittal
  - Notification of Receipt
- Picking up a Reviewed or Rejected Submittal
  - Notification of Completed/Rejected Documents
  - Download of Completed/Rejected Documents

Logging In:

Log into BMcD WebTools at http://webtools.burnsmcd.com using the username and password sent to you by Burns and McDonnell's IT support group.

Note: Accounts are user specific. Do not share the username and password. Others who wish to access the system should request a separate account.

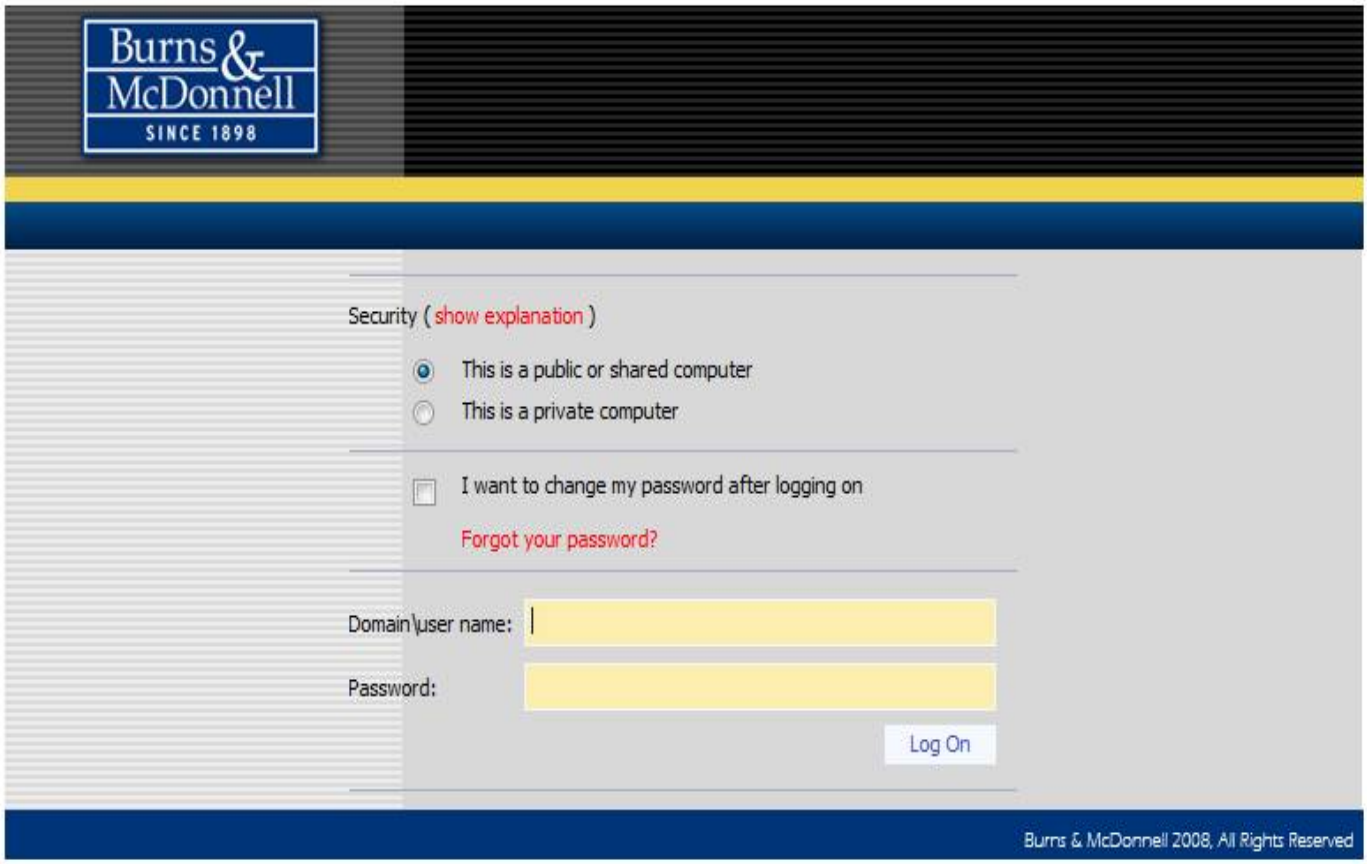
Previously you were not able to change the password you received, but now it can be reset after using the initial password from BMcD. After changing the password it cannot be changed again for 24 hours. Previously used passwords cannot be used again. The Domain is BMCDEXT and should preface your username.

To Login:

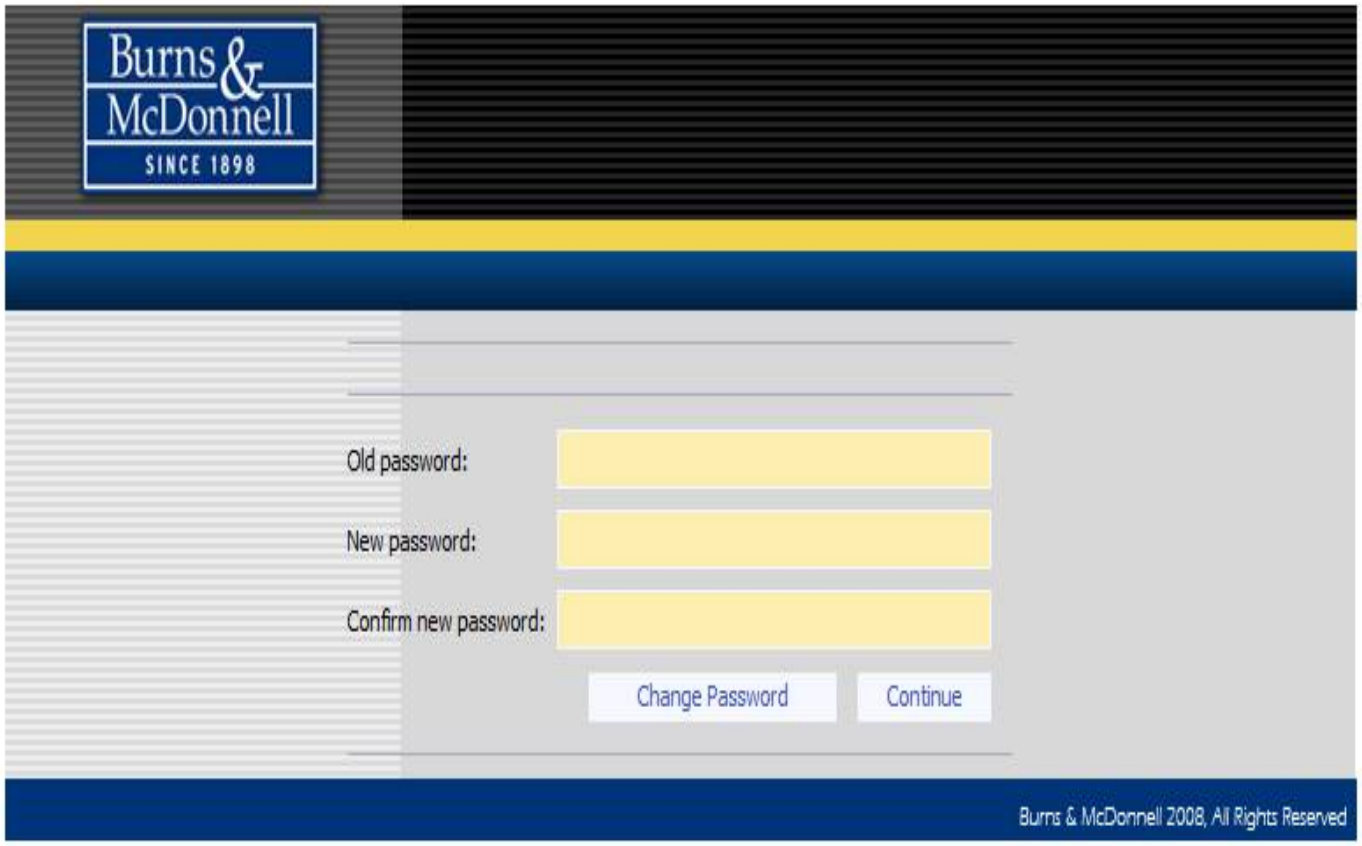
The Domain is BMCDEXTand should be typed in before the user name. **Example: BMcDext\[user ID] so the information would be BMcDEXT\ext_jdoe.**

a. You may change your password by checking the box for I want to change my password after logging on.
b. If you forgot your password you can have a new password sent to you by clicking the "Forgot your password?"

Login Screen:



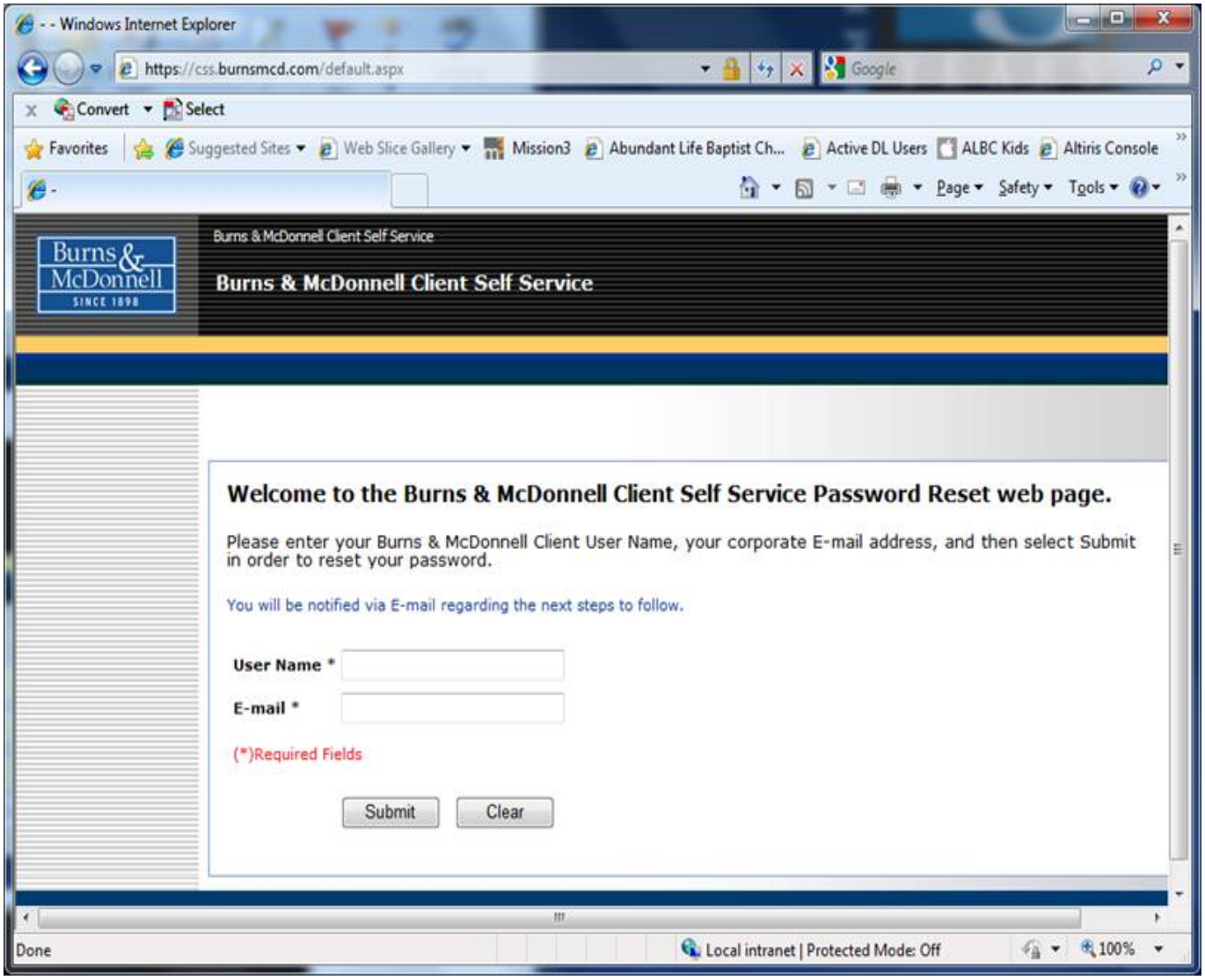
Set New Password screen:



- The new password must meet BMcD password requirements:
- The password has to be at least eight characters long.
- The password must contain characters from at least three of the following categories:
    - English uppercase characters (A - Z)
    - English lowercase characters (a - z)
    - Base 10 digits (0 - 9)
    - Non-alphanumeric (For example: !, $, #, or %)
    - The password cannot contain three or more characters from the user's account name.

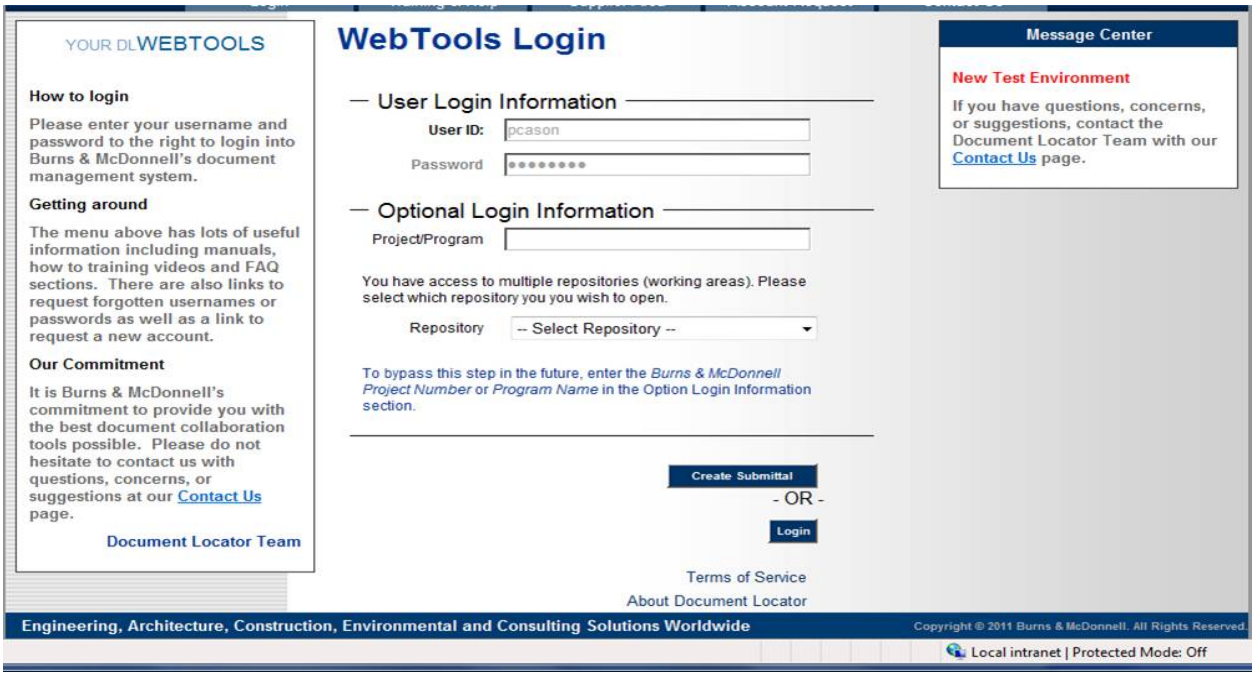
If you forgot your password you can have a new password sent to you by clicking the "Forgot your password". If so, the following screen will appear for requesting a new password.

Request New Password screen:



Creating a Submittal:

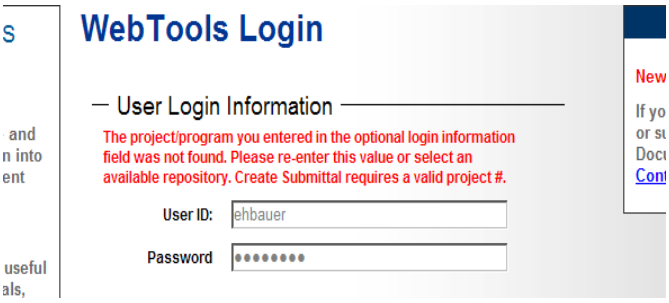
If your password does not need to be changed, use your current User ID and Password to log into WebTools.



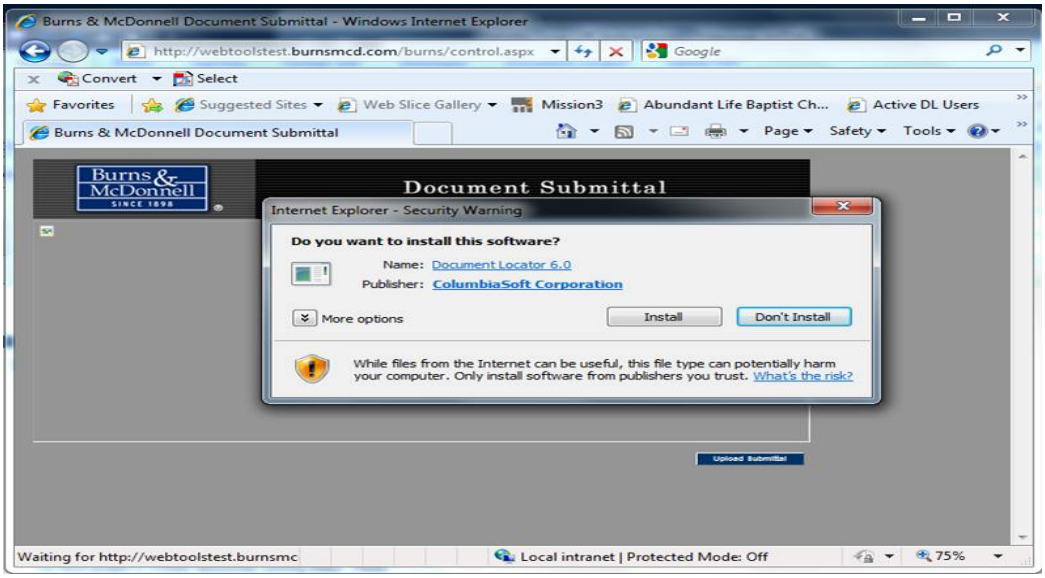
Your username and password information will be automatically populated into the BMcD Login screen.

1. To create a submittal click in the Project/Program text box and fill in with the appropriate project name or program number, then click Create Submittal.
   If a reminder of the appropriate project number is needed, log in to WebTools and view the available project number folders. By clicking on the "Documents" folder the list of available project number will be seen. Descriptions of those projects will be given on the right hand window pane. After the proper project number is verified, log back out to return to the Create Submittal option.
   Note: When creating a Submittal, the Repository information is not needed.

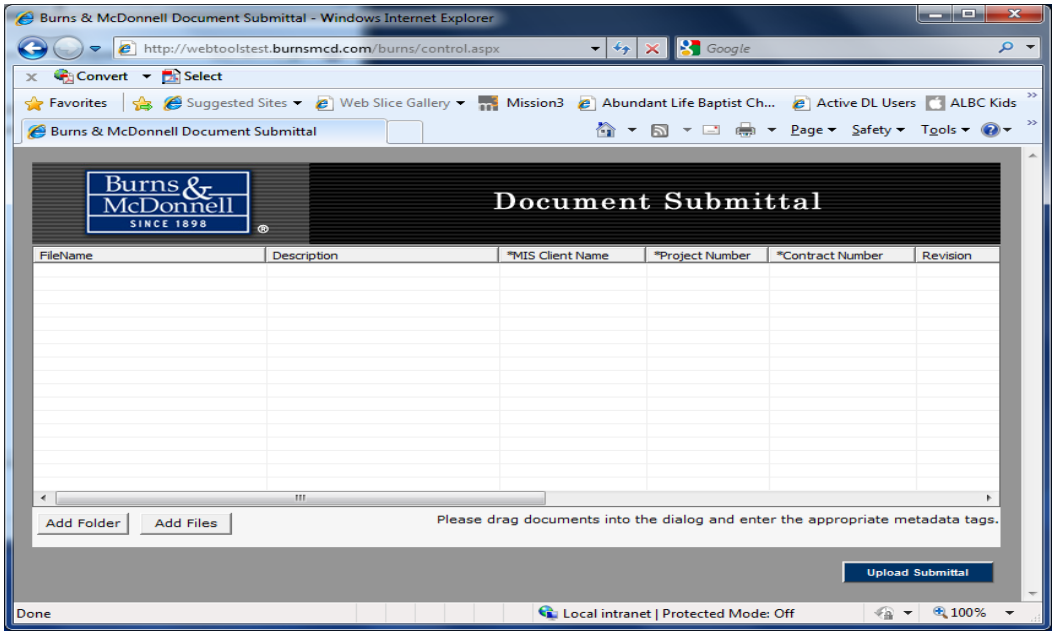
   If the number is incorrectly entered the following error message will be displayed. Check the number, if you believe you received this message in error you will need to contact your BMCD Document Control contact.



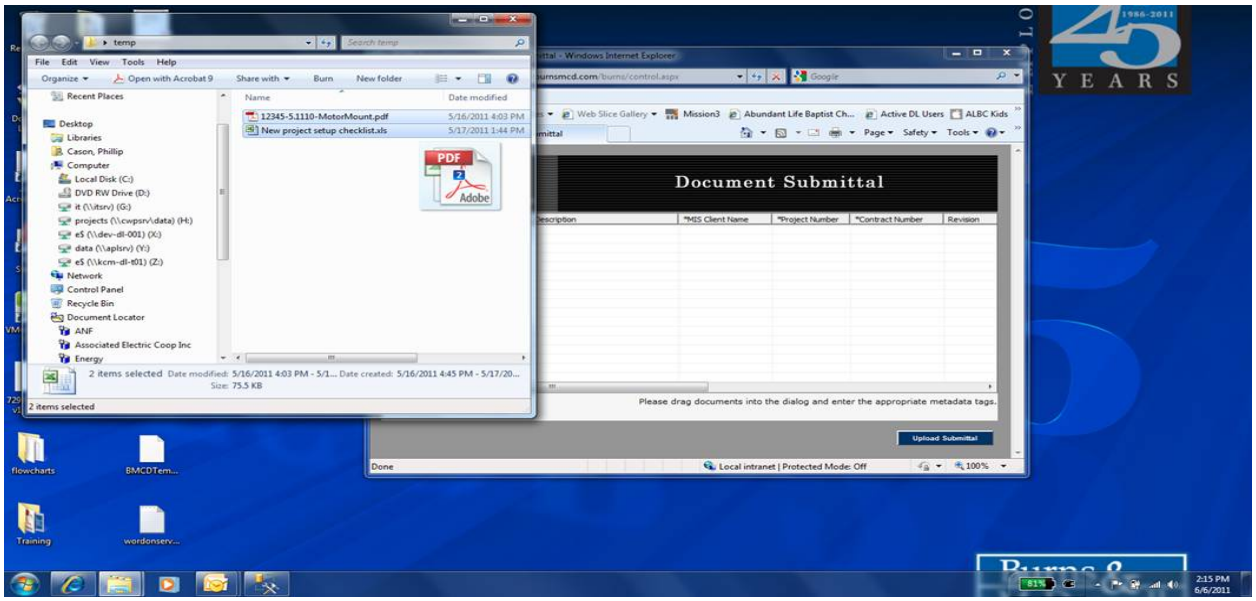
- If this is the first time you are visiting the Submittal screen then you will be prompted to load the ActiveX Add-On that will allow you to drag and drop documents into the screen. Click on Install to load the ActiveX Add-On.
  Note: Some companies prohibit the install of an ActiveX Add-On. If this is the case for your system administrators please contact your BMcD representative.



- After installing the Active X component, the window is now ready for files to be drag and dropped directly into the grid part of the window.



2. Select the files from your system and drag them into the window.



One of two options may be used in the Create Submittal window:

- Drag and drop a File
- Use the Add Folder or Add Files buttons in the Document Submittal window.

A vendor transmittal number will be assigned to the Submittal upon receipt. If preferred, a transmittal may be created and added to the list of files as a separate document. Please check with your project team for specific submittal needs.

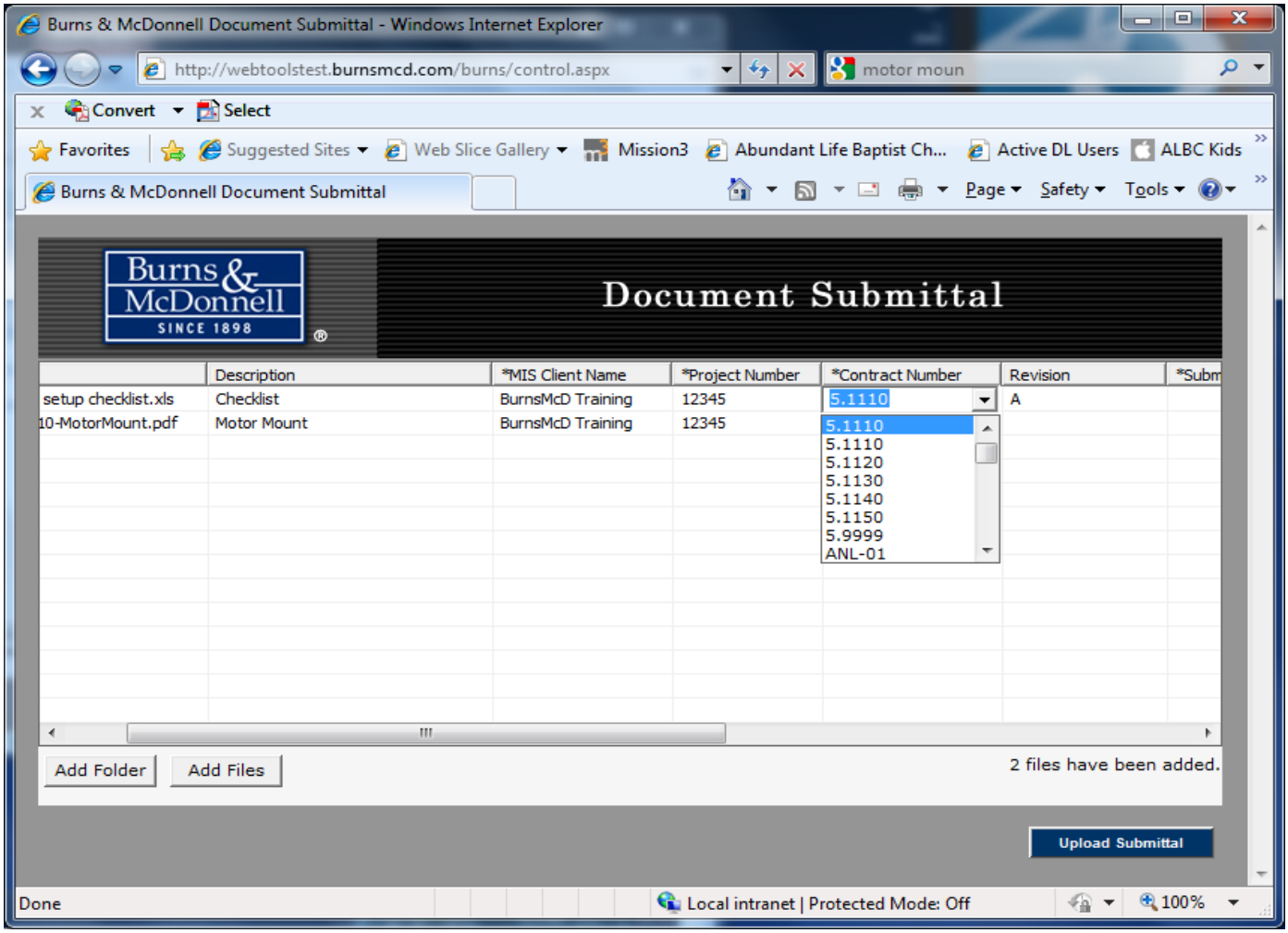
- The Filename, client name, and project number will be pre-populated in the Create Submittal window. <u>Before</u> dragging the files into the window make sure they follow the file naming requirements.
- **Filename** should be the same as the Drawing Name or Document Number.

  <u>Do not</u> include the following in the filenames:

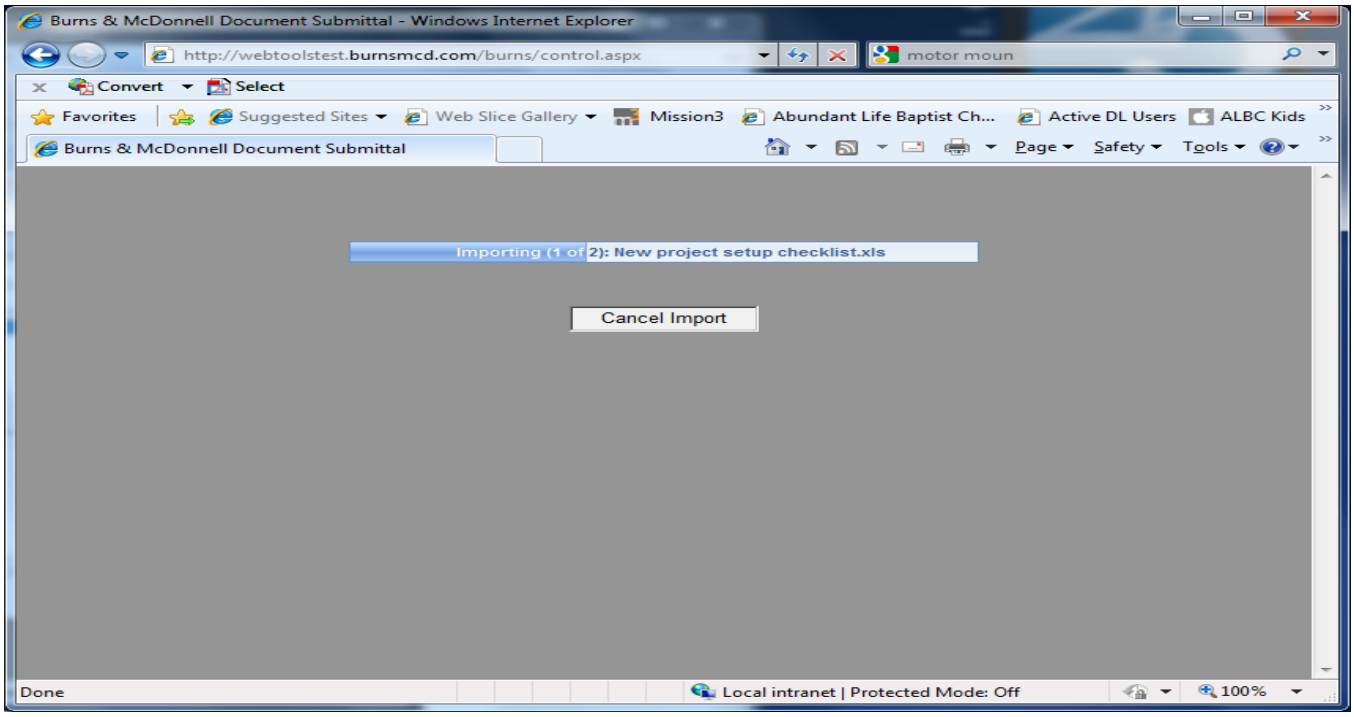
  a. Revision
  b. Dates
  c. Transmittal Information
  Note: If the document is being resubmitted then the filename must match EXACTLY with the previous submittal name.

Valid filename examples: A07-9877-8-1.pdf, M-114-1-par.pdf, A-347-wps.pdf, 18555-18 ASME calcs.pdf, Terminal Point List.pdf

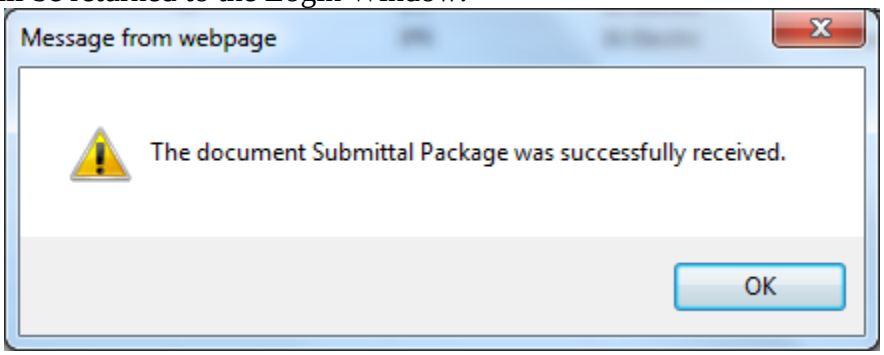
- **Description** is required and should relate to the **document title** from the title block of the drawing.
  Valid description include: General Arrangements, Weld Procedures, Code Calcs, Terminal Point List, Wiring Diagram – Analyzer.
- **Revision** should be the actual revision from the document title block. If the document does not have a revision enter a dash/hyphen (-).
- Items with an * in the column name are required. Items that do not include the * may still be required by your project. Please fill in as much detail as possible unless directed otherwise by your BMCD Document Control contact.
  Note: Columns in the window may be resized as needed. If a drop down list is supplied then only those values may be selected. To narrow a list of items or if a value is known, it may be typed or the copy/paste option may be used into the drop down.



3. Click on the Upload Submittal and the files will begin to load.



4. When complete you will be prompted that the Package was successfully received. Click OK and you will be returned to the Login Window.



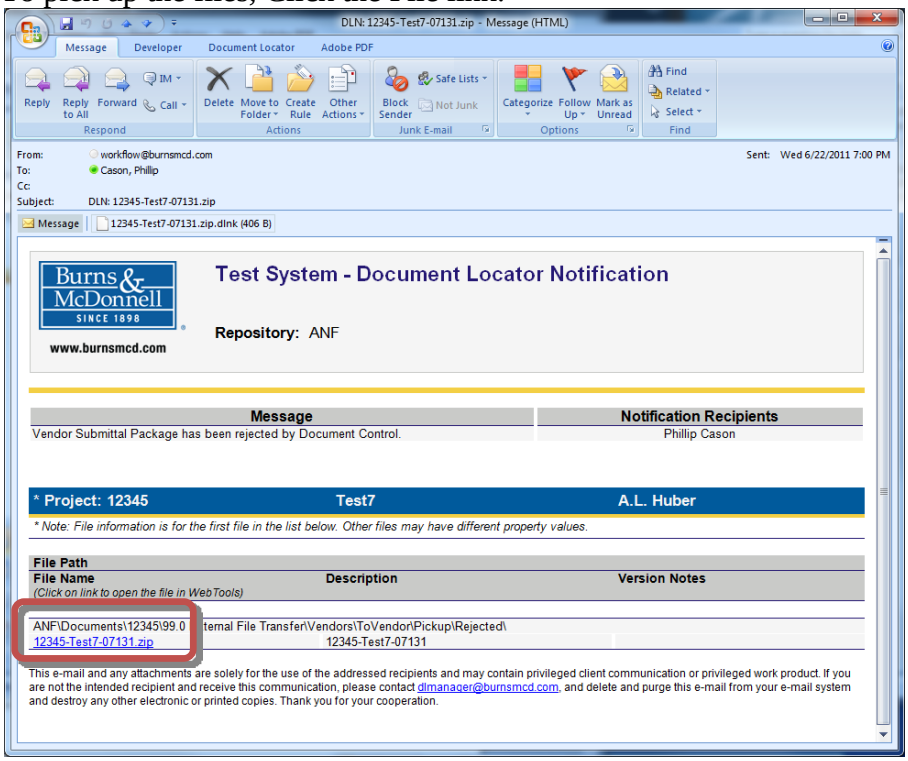
Notification of Receipt:

Within a few minutes you will receive an email notice that will include a link to a transmittal receipt. If there is a correction made to the submittal you may receive an additional notice that will include a link to the updated transmittal receipt.

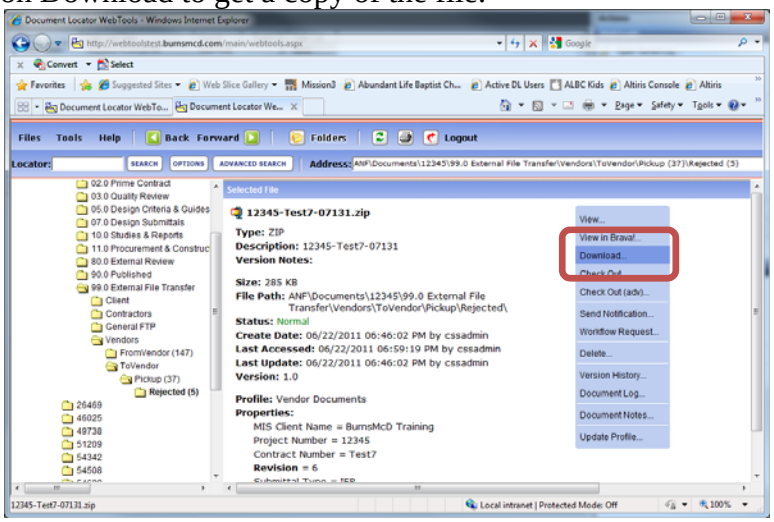
Picking up a Reviewed Submittal

If your Submittal is being return after a review or is rejected, you will receive an email from the system with a link to a zip file consisting of the files.

1. To pick up the files, Click the File link.



2. After logging into WebTools you will be directed to the document for pickup. Click on Download to get a copy of the file.



3. Select a location on your hard drive to save the file and click ok.

SECTION 016001 - EQUIPMENT AND MATERIALS

PART 1 - GENERAL

1.01 SUMMARY:

A. This SECTION includes general requirements for transportation and handling, delivery, storage, and protection of Supplier-furnished Equipment and Materials.

B. Related SECTIONS:

1. Submittals: SECTION 013301.

1.02 DEFINITIONS:

A. Terms used in this SECTION are not intended to negate the meaning of other terms used in the Contract , including such terms as "systems," "structures," "finishes," "accessories," "furnishings," "special construction," and similar terms. Such terms are self-explanatory and have recognized meanings in the construction industry.

1.03 QUALITY ASSURANCE:

A. Equipment and Material incorporated into the Work:

1. Conform to the Specifications and applicable codes, standards, and requirements of regulatory agencies.
2. Provide Products that comply with the requirements of the Contract, undamaged and, unless otherwise indicated, new and unused at the time of installation. Provide Products that are complete with all accessories, trim, finish, safety guards, and other devices and details needed for a complete installation and for the intended use and effect.
   a. Standard Products: Where they are available and comply with the Specifications, provide standard Products of types that have been produced and used successfully in similar situations on other projects.
   b. Continued Availability: Where, because of the nature of its application, Owner is likely to need replacement parts or additional amounts of a product at a later date, either for maintenance and repair or replacement, provide standard Products for which the manufacturer has published assurances that the products and its parts are likely to be available to Owner at a later date.
3. Comply with size, make, type, and quality specified, or as specifically approved in writing by Owner.
4. Manufactured and Fabricated Products:
   a. Design, fabricate, and assemble in accordance with the applicable standard trade, engineering, and shop practices.
   b. Manufacture like parts of duplicate units to standard sizes and gages, to be interchangeable.
   c. Two or more items of the same kind shall be identical, by the same manufacturer.
   d. Equipment and Material shall be suitable for service conditions intended.
   e. Equipment capacities, sizes, and dimensions shown or specified shall be adhered to unless variations are specifically approved in writing by Owner.
5. Do not use Material or Equipment for any purpose other than that for which it is designed or is specified.

B. Nameplates: Except for required labels and operating data, do not attach or imprint manufacturer's or producer's nameplates or trademarks on exposed surfaces of products that will be exposed to view in occupied spaces or on the exterior.

1. Labels: Locate required product labels and stamps on concealed surfaces or, where required for observation after installation, on accessible surfaces that are not conspicuous.

2. Equipment Nameplates: Provide a permanent nameplate on each item of service-connected or power-operated Equipment. Locate on an easily accessible surface that is inconspicuous in occupied spaces. The nameplate shall contain the following information and other essential operating data:
   a. Name of product and manufacturer including address and telephone number.
   b. Model and serial number.
   c. Capacity.
   d. Speed.
   e. Ratings.

C. Electronic Equipment Compliance:
1. Supplier warrants that all equipment, devices, items, systems, software, hardware, or firmware provided shall properly, appropriately, and consistently function and accurately process date and time data (including without limitation: calculating, comparing, and sequencing). This warranty supersedes anything in the Contract which might be construed inconsistently. This warranty is applicable whether the equipment, device, item, system, software, hardware, or firmware is specified with or without reference to a manufacturer's name, make, or model number.

1.04 TRANSPORTATION AND HANDLING:

A. Shipment Preparation:
1. Supplier shall prepare Equipment and Materials for shipment in a manner to facilitate unloading and handling, and to protect against damage or unnecessary exposure in transit and storage. Provisions for protection shall include the following:
   a. Crates or other suitable packaging materials.
   b. Covers and other means to prevent corrosion, moisture damage, mechanical injury, and accumulation of dirt in motors, electrical equipment, and machinery.
   c. Suitable rust-preventive compound on exposed machined surfaces and unpainted iron and steel.
   d. Grease packing or oil lubrication in all bearings and similar items.

B. Marking: Tag or mark each item of Equipment and Material as identified in the delivery schedule or on Submittals and include complete packing lists and bills of material with each shipment. Each piece of every item need not be marked separately provided that all pieces of each item are packed or bundled together, and the packages or bundles are properly tagged or marked.

C. Bills of Material: Supplier shall mail bills of material to Engineer prior to delivery of each shipment and shall include bills of material with each shipment.

D. Delivery:
1. Furnish Engineer all requirements for unloading and handling of Equipment and Materials upon delivery sufficiently in advance to allow installing contractor sufficient preparation time. Include type and capacity of unloading equipment required as applicable.
2. Deliver Equipment and Materials in an undamaged condition, in original containers or packaging, with identifying labels intact and legible.
3. Mark partial deliveries of component parts to identify the Equipment or Material, to permit easy accumulation of parts, and to facilitate assembly.

E. Receipt and Unloading:
1. Deliver all Equipment and Materials complete with packing lists and bills of material. Installing contractor will furnish receipts to shipper upon delivery.

2. Installing contractor will receive, check, unload, inventory, accept, and store all Equipment and Materials delivered to the Point of Delivery in accordance with proper notice. Installing contractor will report any damage to prior to or during unloading and notify Owner's site representative of any shortage at time of delivery. Owner's site representative will verify such reports and so notify Supplier.

1.05 STORAGE AND PROTECTION:

A. Storage Requirements:

1. Furnish Engineer all requirements for storage and protection of all Equipment and Materials with notice of shipment, to allow installing contractor sufficient preparation time.
2. Installing contractor will furnish all facilities needed for storage of Equipment at the Project Site.
3. Installing contractor will assume responsibility for and protect all Equipment in accordance with Supplier's recommendations.

PART 2 - PRODUCTS - Specified in applicable Sections.

PART 3 - EXECUTION - Not Applicable.

END OF SECTION 016001

SECTION 017801 - CONTRACT CLOSEOUT

PART 1 - GENERAL

1.01 SUMMARY:

A. Related Work Specified Elsewhere:
   1. Prerequisites for final acceptance and payment: Attachment A Commercial Terms & Conditions.
   2. Submittals: SECTION 013301.
   3. Warranties: Attachment A Commercial Terms & Conditions.

1.02 REQUIREMENTS FOR FINAL PAYMENT:

A. Unless otherwise required elsewhere by this Contract, the following shall be furnished to Owner prior to application for final payment.
   1. Maintenance and operating instructions.
   2. Guarantees.
   3. Certifications of inspection.
   4. "Record Document" Submittals.
   5. Other documents as required by the Contract.
   6. Spare parts.

1.03 PROJECT RECORD DOCUMENTS:

A. General: Maintain at the Supplier's facilities one record copy of:
   1. Drawings.
   2. Specifications.
   3. Addenda.
   4. Change Orders and other modifications to the Contract.
   5. Approved Shop Drawings, Product Data, and Samples.

B. Recording:
   1. Label each document "PROJECT RECORD" in neat, large, printed letters.
   2. Record information concurrently with fabrication or Field Services progress.
   3. Record Drawings: Legibly mark to record actual construction:
      a. Where Submittals are used for mark-up, record a cross-reference at corresponding location on Drawings.
      b. Field changes of dimension and detail.
      c. Changes made by Change Order or other modifications to the Contract. Note related Change Order numbers where applicable.
      d. Details not on original drawings included in the Contract.
   4. Record Specifications and Addenda: Legibly mark each Section to record:
      a. Manufacturer, trade name, catalog number, and supplier of each product and item of Equipment actually furnished, particularly optional and substitute items.
      b. Changes to the Contract made by addendum, Change Order, or other modifications.
      c. Related Submittals.
   5. Record Product Data: Maintain one copy of each product data Submittal, and mark-up significant variations in actual Work in comparison with submitted information.
      a. Include both variations in product as delivered to Point of Delivery, and variations from manufacturer's instructions and recommendations for installation.
      b. Give particular attention to concealed products and portions of the Work which cannot otherwise be readily observed. Note related Change Orders and mark-up of record drawings and specifications.

6. Miscellaneous Record Submittals: Refer to other SECTIONS of these Specifications for requirements of miscellaneous record keeping and Submittals in connection with actual performance of the Work.
7. Instruction Books and Operating Manuals: Specified in SECTION 013301.
8. Electronic Documentation:
   a. Provide electronic versions of record documents showing "as-constructed" conditions, master field drawing list showing final revisions, instruction books, and operating manuals on CD-ROM or flash drive in searcheable Adobe PDF and AutoCAD 2012 or later.

C. Delivery:
1. Deliver Record Documents to Owner.
2. Accompany submittal with transmittal letter in duplicate, containing:
   a. Date.
   b. Contract title and number.
   c. Supplier's name, address, and telephone number.
   d. Number and title of each Record Document.
   e. Signature of Supplier's authorized representative.

1.04 WARRANTIES AND BONDS:

A. Specified in Attachment A Commercial Terms & Conditions.

PART 2 - PRODUCTS - Not Applicable.

PART 3 - EXECUTION - Not Applicable.

END OF SECTION 017801

DIVISION 26 - ELECTRICAL

SECTION 260002 - ELECTRICAL EQUIPMENT - GENERAL TECHNICAL REQUIREMENTS

PART 1 - GENERAL

1.01 SUMMARY:

A. The electrical Equipment supplied under this Contract will be used in conjunction with Owner's new natural gas fired reciprocating engine plant.

B. Furnish new Equipment with all auxiliary items except those specified as furnished by Owner, required for complete Equipment systems as specified. This shall include all materials required for complete field assembly, installation, and operation.

C. Furnish to coordinate completely in physical arrangement, and physical and electrical connections to Equipment and structures furnished by Owner.

1.02 REFERENCES:

A. Applicable Codes and Standards:

1. American Society for Testing and Materials (ASTM):

a. A6 - General Requirements for Rolled Steel Plates, Shapes, Sheet Piling, and Bar for Structural uses.

b. A36 - Carbon Structural Steel.

c. A123 - Zinc (Hot-Galvanized) Coatings on Products Fabricated from Rolled, Pressed, and Forged-Steel Shapes, Plates, Bars, and Strip.

d. A153 - Zinc Coating (Hot-Dip) on Iron and Steel Hardware.

e. A283 - Low and Intermediate Tensile-Strength Carbon-Steel Plates, Shapes and Bars.

f. A325 - High-Strength Bolts for Structural Steel Joints.

g. B187 - Copper Bus Bar, Rod and Shapes.

h. B236 - Aluminum Bars for Electrical Purposes (Bus Bars).

i. B317 - Extruded Aluminum-Alloy Bars, Rods, Pipe, and Structural Shapes for Electrical Purposes.

1.03 DELIVERY :

A. Ship Equipment as completely assembled as possible, within construction limitations at Owner's Site. Factory-install all component Equipment specified. Ship Equipment assemblies with all components completely installed, other than normal draw-out type components such as removable breaker elements.

B. Tag and package all maintenance equipment, spare parts, and special tools separately. Identify on bill of lading as "Owner's Spare Parts."

1.04 EQUIPMENT QUALIFICATION:

A. All Equipment and Material designs furnished shall be identical to equipment and material designs having an acceptable history of domestic service for a period of not less than three years at comparable temperature, voltage, and design stress levels.

B. Equipment and Material designs with less than three years of actual service will be considered from established manufacturers, but shall be furnished only if accepted by Engineer and Owner prior to award of Contract.

C. All major Equipment furnished shall be manufactured at Supplier's own plants, unless otherwise approved by Engineer. Minor auxiliary items not manufactured by Supplier shall be supplied by manufacturers approved by Engineer.

1.05 JOB CONDITIONS:

A. See conditions as stated in SECTION 011100.

PART 2 - PRODUCTS

2.01 GENERAL REQUIREMENTS:

A. Furnish Equipment of dead front construction.

B. Furnish Materials suitable for their application, and for the mechanical and electrical stresses to which they will be subjected.

C. Furnish all current-carrying parts of high-conductivity copper unless specified otherwise.

D. Silverplate or tinplate all primary current connections and joints. Plating shall be done after all drilling and cutting operations are completed.

E. Provide space, cutouts, drilling, and blank plates for future equipment and for equipment installed by others where specifically indicated.

F. Engraved laminated plastic nameplates shall be as follows:

1. Fabricated from laminated matte finish white plastic with black core. Size of nameplates:

a. 1-1/2 inches high and 6 inches long for "Master" nameplates, with 3/8-inch letters.

b. 1 inch high and 2 to 3 inches nominal length for individual device nameplates with 3/16-inch letters.

2. Engrave designations as required later by the Engineer.

3. Attach nameplates by permanent adhesive or screws. Double-sided tape is not acceptable.

G. Wiring:

1. Furnish all wiring integral to all Equipment, including wiring across shipping splits and, where specifically indicated, wiring for future equipment and for equipment installed by Others. Factory install all wiring integral to each shipping group, one end of all wiring across shipping splits, and one end of all wiring for future equipment and for equipment installed by others.

2. Make all internal wiring connections at Equipment terminals or terminal blocks; splices in wiring will not be acceptable.

3. Terminate all points requiring external wiring connections, all points requiring field connection to wiring leads from other shipping sections, and all spare contacts on control switches, auxiliary switches, and lockout relays at numbered points on terminal blocks located in the Equipment control compartments.

4. Connect all wiring as indicated on approved Supplier's and Engineer's schematic and connection drawings.

5. Group terminal blocks for external connection to conveniently receive the Owner's cables. Locate terminal blocks for connections across shipping splits adjacent to the split. Terminal blocks for external connection on draw-out breakers shall be fully accessible with the removable breaker element in either the "connected" or "test" position.

6. Terminate all current transformer secondary leads individually on short-circuiting type terminal blocks located in the control compartment. Connect the current transformer in wye or delta, as required, on the external connection side of this terminal block. Where a current transformer secondary circuit is connected to devices internal and external to the equipment, furnish a second short-circuiting type terminal block for external wiring connections.

7. No more than two wires shall be terminated at any one terminal block stud or screw.

8. Use stranded, tinned copper switchboard wire, insulated for 600VAC, 90°C copper temperature, Type SIS, as follows:

Type of Circuit	Minimum Wire Size
Indicating light or annunciator	12 AWG
Transducer outputs	16 AWG (shielded)
Circuit breaker close or trip	12 AWG
Current transformer secondary circuits	10 AWG
Potential transformer secondary	12 AWG
Power supply branch circuit	12 AWG
Main ac power supply and main AC control buses	10 AWG
Main dc power supply and main DC control buses	8 AWG

9. Install internal wiring in horizontal and vertical wiring troughs or neatly dressed wire bundles for easy accessibility to interior wiring.
10. Label all wires at equipment studs and terminal blocks with slip-on wire sleeves stamped to indicate wire number and destination terminal number for opposite end of conductor as indicated on approved connection drawings.
11. Connect all internal grounds to the Equipment internal ground bus.
12. Terminate all internal wiring individually with pre-insulated ring-tongue-type compression terminals on stud or screw-type terminals. Termination of bare wire is not acceptable.
13. Terminate all potential transformer secondaries on a set of terminal blocks, located to provide convenient access.

H. Terminal Blocks:
1. All terminal blocks shall be heavy duty, rated not less than 30 amperes, 600 volts.
2. Terminal blocks for external circuits (except in 480-volt motor control centers) shall be General Electric EB-25.
3. Terminal blocks for current transformer circuits shall be short-circuiting type. Furnish General Electric Type EB-27. Furnish with covers and sufficient shorting screws for each terminal.
4. Identify each terminal on each block with a permanent designation.
5. Mount terminal blocks vertically in rows with provisions for supporting external control cables entering from the top or bottom.

I. Finish:
1. Apply finish to all steel surfaces of Equipment.
2. Clean and treat surfaces with phosphatizing process or equal and apply all necessary filler before application of finish.
3. Apply a corrosion-resistant prime coat of paint and at least two finish coats of standard, ANSI 70 light gray paint.
4. Hot-dip galvanize all steel supporting structures and hardware in accordance with ASTM A123 and A153.

2.02 ELECTRONIC EQUIPMENT COMPLIANCE:

A. Supplier warrants that all equipment, devices, items, systems, software, hardware, or firmware provided shall properly, appropriately, and consistently function and accurately process date and time data (including without limitation: calculating, comparing, and sequencing). This warranty supersedes anything in the Specifications or other Contract Documents which might be construed inconsistently. This warranty is applicable whether the equipment, device, item, system, software, hardware, or firmware is specified with or without reference to a manufacturer's name, make, or model number.

PART 3 - EXECUTION

A. Owner and Engineer shall be allowed to visit the plant at any point throughout the manufacturing of the Equipment to verify schedule progress without a Contract Price increase after award of the Contract.

END OF SECTION 260002

SECTION 261200 – SMALL POWER TRANSFORMERS

PART 1 - GENERAL

1.01 SUMMARY:

A. Work in this Section includes furnishing the following:
   1. The following dry-type cast-coil distribution transformers:
      a. 00-EAP-TFM-011 – 13.8kV/480V, 2,000/2,667 kVA
      b. 00-EAP-TFM-012 – 13.8kV/480V, 2,000/2,667 kVA
      c. 00-EAP-TFM-013 – 12.47kV/480V, 1,500/2,000 kVA
   2. Maintenance equipment and spare parts as specified.

B. Furnish Equipment suitable for operation on the following systems as follows:
   1. For 00-EAP-TFM-011 and 00-EAP-TFM-012
      a. Primary (HV): 13,800V, three-phase, delta-wound, which may either be ungrounded or resistance grounded depending on generator breaker status.
      b. Secondary (LV): 480V, three-phase, high-resistance grounded wye.
   2. For 00-EAP-TFM-013
      a. Primary (HV): 12,470V, three-phase, grounded wye system.
      b. Secondary (LV): 480V, three-phase, high-resistance grounded wye.

C. The Equipment specified in this Section shall also conform to the requirements of SECTION 260002.

1.02 REFERENCES:

A. Applicable Codes and Standards: Design, fabricate, assemble and test all equipment furnished to conform to the following codes and standards:
   1. American National Standards Institute (ANSI).
   2. American Society for Testing and Materials (ASTM):
      a. A6 - General Requirements for Rolled Steel Plates, Shapes, Sheet Piling, and Bar for Structural uses.
      b. A36 - Structural Steel.
      c. A123 - Zinc (Hot-Galvanized) Coatings on Products Fabricated from Rolled, Pressed, and Forged-Steel Shapes, Plates, Bars, and Strip.
      d. A153 - Zinc Coating (Hot-Dip) on Iron and Steel Hardware.
      e. A283 - Low and Intermediate Tensile-Strength Carbon-Steel Plates, Shapes and Bars.
      f. A325 - High-Strength Bolts for Structural Steel Joints.
      g. B187 - Copper Bus Bar, Rod and Shapes.
      h. B236 - Aluminum Bars for Electrical Purposes (Bus Bars).
      i. B317 - Extruded Aluminum-Alloy Bars, Rods, Pipe, and Structural Shapes for Electrical Purposes.
   3. Institute of Electrical and Electronics Engineers (IEEE):
      a. C57.12.01 - General Requirements for Dry-Type Distribution and Power Transformers, Including Those with Solid-Cast and/or Resin Encapulated Windings.
      b. C57.12.51 - Ventilated Dry-Type Power Transformers, 501 kVA and Larger, Three-Phase, with High-Voltage 601 V to 34 500 V; Low-Voltage 208Y/120 V to 4160 V - General Requirements.
      c. C57.12.70 - Standard Terminal Markings and Connections for Distribution and Power Transformers.
      d. C57.12.80 - Terminology for Power and Distribution Transformers.
      e. C57.12.91 - Test Code for Dry-Type Distribution and Power Transformers.

f. C57.13 - Requirements for Instrument Transformers.

4. National Electrical Manufacturer's Association (NEMA):
   a. CC1 - Electric Power Connection for Substations.
   b. ST-20 - Dry Type Transformers for General Applications.
   c. TR1 - Transformers, Regulators and Reactors.

1.03 SUBMITTALS:

A. Submit as specified in DIVISION 1.

B. Includes, but not limited to, the following:
   1. Transformer nameplate drawings.
   2. Arrangement and outline drawings.
   3. Bushing and connection drawings.
   4. Installation drawings.
   5. AC and DC schematic diagrams.
   6. Wiring diagrams including external connection terminals.
   7. Instrument transformer performance curves and data.
   8. Instruction books.

C. In addition to other submittal requirements, final drawings shall be furnished as AutoCAD 2012 or later files on compact discs.

1.04 QUALITY ASSURANCE:

1. Factory Tests: Submit certified statements that the Equipment furnished has passed the design and production tests in conformance with the standards listed. The following factory test shall be made on these transformers. All tests shall conform to IEEE C57.12.91 for dry-type power transformers. The manufacturer shall state by which method the test was made if method is not specifically stated below.
2. Insulation Resistance:
   a. Each winding to ground and to other windings.
   b. Core-to-ground, core form transformers only.
3. Winding ratio test on normal and all tap positions.
4. Winding polarity and phase relation.
5. No load loss at rated voltage.
6. Load loss at guarantee load point.
7. Exciting current at rated voltage and on the rated voltage connection.
8. Impedance.
9. Applied potential tests.
10. Induced potential tests.
11. Other manufacturers' standard factory tests on transformer.

1.05 DELIVERY:

A. Ship Equipment as completely assembled as possible, within construction limitations at Owner's Site. Factory-install all component Equipment specified. Ship Equipment assemblies with all components completely installed.

B. Tag and package all maintenance equipment, spare parts, and special tools separately. Identify on bill of lading as "Owner's Spare Parts."

1.06 JOB CONDITIONS:

A. See conditions as specified in SECTION 011100.

1. Furnish Equipment and Materials which will be capable of meeting the specified ratings and performance under the altitude and ambient temperature conditions specified. Nameplate data shall be for the conditions specified.

PART 2 - PRODUCTS

2.01 GENERAL:

A. Furnish Equipment of dead front construction.
B. Furnish Materials suitable for their application, and for the mechanical and electrical stresses to which they will be subjected.
C. All major Equipment furnished shall be manufactured at Supplier's own plants, unless otherwise approved by Engineer. Minor auxiliary items not manufactured by Supplier shall be supplied by manufacturers approved by Engineer.
D. Furnish all current-carrying parts of high-conductivity copper unless specified otherwise.
E. Silver plate or tinplate all primary current connections and joints. Plating shall be done after all drilling and cutting operations are completed.
F. Provide space, cutouts, drilling, and blank plates for future equipment and for equipment installed by others where specifically indicated.
G. Finish:
   1. Apply finish to all steel surfaces of Equipment.
   2. Clean and treat surfaces with phosphatizing process or equal and apply all necessary filler before application of finish.
   3. Apply a corrosion-resistant prime coat of paint and at least two finish coats of standard, ANSI 70 sky gray paint for outdoor Equipment.
   4. Hot-dip galvanize all steel supporting structures and hardware in accordance with ASTM A123 and A153.

2.02 TRANSFORMERS: Transformers shall be designed and constructed to conform to applicable standards and the following requirements:

A. Ratings under altitude and ambient temperature conditions specified:
   1. Capacity and Impedance:
      a. For 00-EAP-TFM-011 and 00-EAP-TFM-012:
         (1) 2,000/2,667 kVA AA/FA, impedance 5.75 percent.
      b. For 00-EAP-TFM-013
         (1) 1,500/2,000 kVA AA/FA, impedance 5.75 percent.
   2. Temperature Rise:
      a. Cast Coil Design: 80-degree C rise with insulation system designed for 185-degree C limiting temperature.
   3. High-Voltage Winding:
      a. For 00-EAP-TFM-011 and 00-EAP-TFM-012: 13,800 volts, 95 kV BIL, delta connected.
      b. For 00-EAP-TFM-013: 12,470 volts, 95 kV BIL, delta connected.
   4. Low-Voltage Winding:
      a. For all three (3) transformers specified: 480/277 volts, 10 kV BIL, wye connected with neutral connection to high-resistance ground furnished by Others.
   5. Angular Displacement: HV winding leads LV winding by 30 degrees.
   6. De-energized Taps: Full capacity taps on high-voltage winding:
      a. Two 2-1/2% taps above rated voltage.
      b. Two 2-1/2% taps below rated voltage.

7. Noise Level: Per NEMA Standards.
8. Three phase.
9. Frequency: 60 hertz.

B. Type and Design:
1. Outdoor, ventilated dry-type enclosed in NEMA 3R steel housing with removable side panels.
2. Windings shall be vacuum cast epoxy (Cast Coil) design to eliminate all moisture and voids.
3. High-voltage winding wired to terminals in a close-coupled, full-height compartment containing the following:
   a. Silver-plated or tin-plated pads with two NEMA sized and spaced threaded holes, and provisions for tying single-conductor, medium-voltage, insulated, shielded, copper power cable entering from below.
   b. Enclosure shall be of sufficient size to permit proper termination of high-voltage shielded power cables with stress relief devices.
   c. Provide a means of supporting incoming medium voltage cable to prevent excessive loads on the bushings.
   d. Provide a copper ground pad in the termination cabinet for termination of medium voltage cable shield drain wires.
4. Side-mounted, flanged connection on low-voltage side for connection of transformers to non-segregated phase bus duct furnished by Others.
5. Core laminations to be "non-aging" cold-rolled, grain-oriented, highly permeable, silicon alloy steel. Assembled core shall be treated with heat-resistant resin for high resistance to moisture and contaminants.
6. Vibration dampers between base and core-coil assembly.
7. Porcelain or cast epoxy supports and spacers for coils, leads, terminals, and other live parts.
8. Transformers shall be suitable for installation on a concrete pad. Apply undercoating to all surfaces in contact with foundation.
9. Fan control, temperature alarm contacts, and other circuits requiring external connection to be wired to properly labeled terminal blocks in the transformer control cabinet.
10. Include all necessary control devices and circuit protective devices and wire complete for automatic control of fans for forced ventilation. All auxiliary power, including fans and other controls, to be supplied from a 208VAC, 3-phase, 4-wire power circuit supplied by Owner. Supplier shall include a properly-sized three-phase molded case circuit breaker in control cabinet to protect all auxiliary control components.
11. Current Transformers:
    a. For transformer 00-EAP-TFM-013 only, provide one (1) 200/5A, C100 accuracy class current transformer (CT) on each phase on the high voltage bushings with polarity away from transformer windings wired out to a shorting terminal block in the transformer control cabinet for use by Others.
    b. Provide one (1) 50/5A, C10 accuracy class current transformer (CT) on the LV neutral connection of each transformer. The CT secondary shall be wired out to a shorting terminal block in the transformer control cabinet for use by Others.
12. Include accessories as follows:
    a. Dial-type thermometer or electronic temperature monitor with contacts for fan control and high-temperature alarm.
    b. Lifting lugs and jacking pads.
    c. Ground pad and connector for up to a 250kcmil copper cable.

d. All other standard accessories.

13. Conduit:
    a. Furnish all conduit and wiring required to interconnect equipment and devices on the transformer.
    b. Factory-install all conduit and wiring other than connections to equipment shipped separate from the transformer enclosure assembly.
14. All conduits shall be rigid galvanized steel. If Supplier wishes to use other conduit materials, they shall be subject to Owner's approval.
15. Transformer Control Cabinet:
    a. Weatherproof dead front construction, integral to transformer enclosure and meeting same NEMA 3R rating of transformer enclosure.
    b. One (1) control cabinet shall be furnished and shall include all Owner connections. Owner's conduit shall be run below ground to the control cabinet and enter from the bottom.
    c. Cabinet height shall not exceed six (6) feet from the base of the transformer.
    d. Removable bottom plate, hinged doors with guides to hold the doors open, provisions for padlocking, and compartments for holding manuals and drawings.
    e. Integral ground bus not less than 1 inch by 1/8-inch cross-section.
    f. Thermostatically controlled 120VAC space heater to prevent condensation.
    g. Grounded 120VAC duplex convenience receptacle with ground fault interrupting (GFI) protection.
    h. A 100W incandescent light with a door-operated switch.
    i. A 20A breaker, derived from the main auxiliary power circuit, shall protect the lighting and receptacle circuits independent of the fans and other controls.
    j. Factory-mount and interconnect all equipment and devices to be installed in the cabinet.
    k. Permanently label all equipment and devices mounted in the cabinet labeled to describe their function, and identify on Supplier's drawings.
    l. All wiring and terminal blocks shall be furnished in accordance with Section 260002.

2.03 MAINTENANCE EQUIPMENT AND SPARE PARTS:

A. Furnish the following:
    1. One spare HV Bushing of each type.
    2. One spare LV Bushing of each type.
    3. Other parts normally furnished by manufacturer and listed in the Bidder's Proposal.

PART 3 - EXECUTION

Not Applicable

END OF SECTION 261200