CITY OF COFFEYVILLE
BOARD OF COMMISSIONERS AGENDA ITEM

MEETING DATE	January 12, 2016	
RESOLUTION OR ORDINANCE NUMBER	R-16-06	
AGENDA TITLE	**Electrical Engineering, Substation Maintenance, Testing & Support Services**	
REQUESTING DEPARTMENT	Electric	
PRESENTER	Gene Ratzlaff	
FISCAL INFORMATION	Cost as recommended:	$150,000.00 (Not To Exceed)
	Budget Line Item:	800-5-020-424
	Balance Available	$150,000.00
	New Appropriation Required:	[ ] Yes [X] No
PURPOSE	Secure services to provide electrical engineering, maintenance, testing, and support services for the Electric Utility	
BACKGROUND	The Electric Utility owns and operates 6 electric substations, and 4 electric generating Units, to provide reliable economic electric service to our residents, businesses and visitors. To provide the most reliable system possible, and to meet federally mandated NERC requirements, the electric utility must perform certain testing on high voltage electric apparatus, on a scheduled basis.	
SPECIAL NOTES	N/A	

ANALYSIS	Staff issued a public Request for Proposals in 2014, receiving quotes from three (3) firms to provide these services. Based on qualifications and cost, Criswell Engineering was selected. Criswell Engineering did not increase their rates above the 2014 - 2015 rates for FY 2016. Staff will again seek in 2017, through a public Request for Proposals, a competitive cost for these services.
PUBLIC INFORMATION PROCESS	N/A
BOARD OR COMMISSION RECOMMENDATION	
STAFF RECOMMENDATION	Staff recommends that the Mayor be authorized to enter into a service agreement for electrical engineering, substation maintenance, testing and support services with Criswell Engineering, LLC for the amount not to exceed $150,000 for FY2016.
REFERENCE DOCUMENTS ATTACHED	2016 Engineering Service Agreement – Criswell Engineering

RESOLUTION NO. R-16-06

A RESOLUTION TO ENTER INTO A SERVICE AGREEMENT WITH CRISWELL ENGINEERING, LLC FOR ELECTRICAL ENGINEERING, SUBSTATION MAINTENANCE, TESTING AND SUPPORT SERVICES FOR THE CITY OF COFFEYVILLE ELECTRIC UTILITY FOR FY 2016.

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 a service agreement with Criswell Engineering, LLC in the amount not to exceed $150,000.00 for electrical engineering, substation maintenance, testing and support services for the City of Coffeyville Electric Utility for FY 2016.

ADOPTED THIS 12th DAY OF JANUARY, 2016.

_____
Christopher V. Williams, Mayor

ATTEST:

_____
Cindy Price, City Clerk

APPROVED AS TO FORM AND LEGALITY:

_____
Paul Kritz, City Attorney

SERVICE AGREEMENT FOR ENGINEERING SERVICES

THIS AGREEMENT, made at Coffeyville, Kansas, _____, 2015, between the City of Coffeyville, (Owner), and Criswell Engineering, a Missouri Limited Liability Company, (Engineer);

WHEREAS: The Engineer is a competent engineering company with experience in consulting, power system study and device coordination analyses, commissioning, relaying, and substation maintenance; and

WHEREAS: The Owner owns, operates and manages an electrical power system and desires the Engineer to perform engineering services; and

WITNESSETH: THAT the Engineer shall provide such engineering and supporting services as requested by the Owner.

IN CONSIDERATION of the mutual agreements herein contained, the Owner agrees to employ the Engineer to provide engineering services specific to the Owner's electrical power system hereinafter mentioned and agrees to pay the Engineer for the services rendered according to the attached hourly labor, material and expense rate schedule at the time service is performed. Supporting services would include Power System Study and Device Coordination Analyses which would be negotiated separately.

SECTION I – SERVICES PROPOSED

A. Consulting: The Engineer will provide consulting services as requested by the Owner to remediate problems compromising the integrity of his power system.
B. Commissioning: The Engineer will perform commissioning work as requested by the Owner to prepare any and all electrical power apparatus for energization and reliable serviceability.
C. Relaying: The Engineer will provide protective relay application, installation, calibration, and configuration as requested by the Owner to ensure optimum reliability of the power system.
D. Substation Maintenance: The Engineer will schedule and perform substation maintenance as requested by the Owner to strategically extend the life cycles and thereby minimize unscheduled outages of his power system equipment.
E. Supporting Services: The Engineer will provide supporting services as requested by the Owner to optimize his power system protection, operation and reliability.

SECTION II – WORKSCOPE

The services proposed in Section I will be performed on Substation equipment as required in the following locations, A Sub, B North Sub, B South Sub, North Industrial Park Sub, South Industrial Park Sub, Power Plant Sub, Black Start Sub and the Power Plant Generating Station.
Substation equipment includes all apparatus necessary to safely transmit and distribute electrical energy to industrial, commercial and residential customers in a reliable and economical manner. High voltage oil and gas power circuit breakers, transformers, switchgear, cables, capacitors and LTC voltage control equipment must perform as designed and within manufacturers' limits.
Systematically, diagnostic tests will be performed on each apparatus and device, the results will be immediately evaluated and any necessary repairs or corrections would be made at that time. Relays and the integrated protective relay system will be calibrated and functionally tested to ensure correct and dependable operation of all primary circuitry and all secondary control and lockout devices.
Any apparatus, device, protective relay, or control circuit with questionable results will not be returned to service until such disparity has been resolved to the satisfaction of the engineer.

SECTION III – COMPENSATION

A. Rates: The Owner agrees to pay the Engineer in accordance with the attached hourly labor, material and expense rates at the time service is performed.
The hourly labor, material and expense rate schedule attached to the Agreement is effective January 1, 2016, through December 31, 2016, inclusive.

B. Compensation: The estimated 2016 investment for engineering services shall not exceed **$150,000**. Plus any applicable sales tax.

C. Invoice Submittal: The Engineer shall submit invoices monthly for months in which work was performed within the current year of the Agreement and a final invoice upon completion of Services.

D. Payment: Each invoice will be payable upon receipt. The Engineer may charge a late fee of 1.5 percent per month on all unpaid amounts beginning thirty days after the invoice date.

E. Disputes: The Owner shall immediately make known to the Engineer any discrepancy found on the invoice. The Engineer shall immediately resolve any discrepancy the Owner finds on the invoice so payment can be made promptly in accordance with Agreement Payment procedures.

SECTION III – INSURANCE

A. Coverage: The Engineer shall maintain current insurance coverage during execution of the Agreement as follows:

a) *Workers' Compensation Insurance* with a limit of $500,000.00 for each occurrence.
b) *Employer's Liability Insurance* with a limit of $500,000.00 for each occurrence.
c) *Commercial General Liability Insurance* with a limit of $1,000,000.00 for each occurrence and $2,000,000.00 aggregate.
d) *Automobile Liability Insurance* with combined single limits of $1,000,000.00 for each occurrence.

B. Certificates of Insurance: The Engineer shall furnish the Owner a certificate of insurance with this Agreement for items *a*, *b*, and *c* above, and an evidence of insurance for item *d* above.

IN WITNESS WHEREOF, Owner and Engineer have executed this Agreement.

CITY OF COFFEYVILLE **COFFEYVILLE, KANSAS**	**CRISWELL ENGINEERING** **ROGERSVILLE, MISSOURI**
By	By Ray Criswell
Signature	Signature
Title	MEMBER Title
Date	11-24-2015 Date

Criswell Engineering

Engineering Consulting Services

TIME-AND-MATERIAL PRICE SHEET

Labor and Expense Rates

The rates provided below will apply through December 2016 for all Engineering Services provided by ***Criswell Engineering*** to the City of Coffeyville.

	HOURLY RATES		
	S.T.	**O.T.**	**HOLIDAY**
Engineer's Labor	$110	$165	$220
	S.T.	**O.T.**	**HOLIDAY**
Technician's Labor	$86	$129	$172

Note: Overtime (O.T.) rates would only apply to prearranged hours worked outside of normal working hours Monday through Friday, and all hours worked on Saturday. The "Holiday" rate would apply to Sundays, and all days observed as Holidays by City of Coffeyville.

Travel Time and Mileage

Travel time would be invoiced at the rates outlined above. Mileage would be invoiced at $0.69 per mile.

Expenses

Meals, lodging and incidental expenses will not exceed the current GSA Per Diem rates for customer's zip code. The current 2016 rates are as follows: Lodging $89 (excluding taxes), Meals and Incidental Expenses $51 per day with the first and last day of the work week at 75% or $38.25.

Materials and job related expenses will be invoiced at 10% profit margin.

CRISWELL ENGINEERING
5997 EAST LINDA STREET
ROGERSVILLE, MO 65742

CELL: (417) 860-0964
FAX: (417) 890-0726

Criswell Engineering

Engineering Consulting Services

In addition to the Engineering Services provided for substation high-voltage power equipment, **Power System Study, Device Coordination & Arc Flash Hazard Analyses** are provided. The industry standard software program used for this service is SKM's PTW-32 (Power Tools for Windows). Rates for these services would be negotiated separately.

Test Equipment

Description	Day
HV 50KVAC Hipotential Test Set	$75
Vanguard ATRT Auto Turns Ratio Tester (3-Phase)	$100
Hipotronics DC Hipotential	$100
Filmax Oil Filtration System	$100
Earth/Ground Resistance Test Set	$50
Manta MTS-5000 Relay Test System	$210
Megger BITE2P Battery Test Set	$200
Megger DLRO Test Set	$100
Megger MIT1025 Test Set	$65
Megger MIT520/2 Test Set	$50
Hipotronics Oil Dielectric Strength Test Set	$50
Doble TDR900 Circuit Breaker Time & Travel Analyzer	$175
Circuit Breaker Control Power Source	$50
Overload Relay Test Set	$50
Primary Current Injection Test Set	$50
TTR Turns Ratio Tester (1-Phase)	$50
Power Quality Analyzer	$75
Fluke Harmonics Analyzer	$75
LTC Vacuum Monitoring	$50
Dilo Dewpoint	$75
Gas Cart	$175

SPECIALTY TEST EQUIPMENT AVAILABLE TO RENT

If specialty test equipment is provided, the cost of its procurement for the rental period (including shipping) will be charged at 7.5% margin.

Description

Ultrasonic corona detection Instrument
Doble power factor test set
Motor overload relay test set
Transformer winding resistance ohmmeter
MCT-1600 Current Transformer test set
Amptector or equivalent secondary injection test set
High-current injection test set
Thermal Scanner (Infrascan)

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