PROJECT PROPOSAL

LCRA Transmission Strategic Services CUSTOMER SERVICES CONTRACT

Form CSC revised 06/22/2020

CUSTOMER:

City of Sanger 502 Elm St

Sanger, Texas 76266 Attn: Attn: Mike Prater

PROJECT: 5 Year Engineering System Study with ESVI and Pole Count **DATE SUBMITTED**

November 30, 2022

SCOPE OF SERVICES:

- 1. Provide an Electric Distribution Study per the attached Scope (Engineering Services Agreement).
- 2. Provide a Visual Inspection per the attached Scope (Statement of Work, Electrical System Visual Inspection (ESVI)).
- 3. Perform a "telephone/cable pole attachment" count, (included in the Total Cost) @ \$1.00 per pole (\$1,542) #poles is estimated at 1,542 poles. The Contract amount will be adjusted if the pole count is less than or more than 5%.

Details attached. Scope Additional Information.

PROJECT SCHEDULE: LCRA CONTACT **Bill Jerram** Work to be done between the time frame February 1, Start: bill.jerram@LCRA.org

2023 to January 1, 2028. Schedule to be determined.

Work to be done between the time frame February 1, **Complete:**

2023 to January 1, 2028. Schedule to be determined.

512-940-6713 Lower Colorado River Authority

> 3700 Lake Austin Blvd. Austin, TX 78767-0220

Attn: Transmission Customer Relations

CONTRACT TYPE **PRICE: \$19,163.40 Annually**

Contract Type: **Independent Contract**

Project Total:

\$95,817.00

Reference Contract: 5 Year Engineering System Study **Compensation Form: Annual Invoice**

(Please note that if this is an independent contract, terms and conditions should be attached.)

Customer and the Lower Colorado River Authority agree that the work described above shall be performed in accordance with the terms and conditions in this contract.

Parties: City of Sanger **Lower Colorado River Authority** Bv: Printed Name ___ Printed Name Kristian Koellner Title: Title: VP, Transmission Asset Optimization

OFFICE USE ONLY

Job Description: 5 Year Engineering System Study with ESVI and Pole Count

Project ID: Work Order:

Contract Owner: Bill Jerram **Contract Coordinator: Catherine Hempfling**

Scope Additional Information

- 1. 5-year System Study: \$75,000. Provide an Electric Distribution Study per the attached Scope (Engineering Services Agreement). The purpose of this study is to identify large electric system improvements required over the five-year study period. The total contract amount of \$75,000 will be invoiced, \$15,000 annually over the 5 years.
- 2. Visual Inspection: \$19,275. Provide a Visual Inspection per the attached Scope (Statement of Work, Electrical System Visual Inspection (ESVI)). The total contract amount is \$19,275 but \$3,855 will be invoiced annually over the 5 years. The contract is based on an estimate of the city's pole count, of 1,542 poles. If the actual pole count varies by +/- 5% then the price will be adjusted at a rate of \$12.50 per pole, plus or minus. This service must be done at the same time as the field work for the 5-year system study (item 1 above) is being performed.
- 3. Perform a telephone/cable pole count: \$1,542. The contract is based on an estimate of the city's pole count, 1,542 poles, or \$308.40 each year over the 5 years. If the actual pole count varies by +/- 5% then the price will be adjusted at a rate of \$1.00 per pole, plus or minus. This service must be done at the same time as the field work for the 5-year system study (item 1 above) is being performed. \$308.40 will be added to each annual invoice over the 5 years.
- 4. Total Cost of the three services: \$95,817; \$19,163.40 annually.

I. Technical Requirements

LCRA shall provide the following engineering services to Customer:

- a. Verify and/or gather field information needed to construct a computer model of the primary electric system including:
 - i. Location of substation(s) that supply the Customer's distribution system.
 - ii. Location of distribution poles.
 - iii. Location of primary overhead and underground distribution conductors including the following:
 - 1. Conductor construction design type
 - 2. Conductor type per phase, including neutral
 - 3. Conductor phasing
 - 4. Conductor span measured from each section (pole to pole)
 - iv. Location of air break switches (including type and current rating), disconnect switches (including type and current rating), line breakers / reclosers / sectionalizers (including type, current rating and controller information), and line regulators (including current and kVA rating).
 - v. Location of capacitor banks to include size (kVAR rating), phasing, status (open / closed), and capacitor bank controller type if installed.
 - vi. Location of fuse cut-outs (including rating); status of fuse cut-out (open or closed); and size and type of fuse if identifiable from the ground or data is available from customer.
 - vii. Location of distribution transformers, transformer phasing and transformer kVA rating.
- b. Produce or update the computer models for the Customer's distribution system.
- c. Evaluate the adequacy of existing system to meet anticipated demand levels over a five-year horizon, by applying the distribution system planning criteria to:
 - i. Identify overloaded line sections
 - ii. Identify excessive system losses
 - iii. Identify excessive voltage drops
- d. Conduct a study of distribution system improvement needs to meet anticipated demand levels over a five-year horizon, by applying the distribution system planning criteria to:
 - i. Optimize the performance of the system by balancing the load among power transformers, feeders and phases (where phase current data is available)
 - ii. Evaluate need for reconductoring existing circuits
 - iii. Evaluate need for constructing new distribution circuits
 - iv. Evaluate substation capacity requirements
 - v. Examine location and status of all air break or disconnect switches
 - vi. Evaluate system capacitor banks needs for reduction of system losses and correcting system power factor, including leading power factor conditions.

- vii. Provide up to ten (10) additional fault rating values per year from the distribution system as per Customer request.
- e. Conduct Contingency Analysis in terms of a planned or unplanned outage of a distribution feeder, breaker, or power transformer (where applicable), and by applying the distribution system planning criteria, determine and recommend system improvement projects necessary to improve system reliability.
- f. Conduct Arc Flash Analysis:
 - i. The results of this analysis will assist the Customer in determining its arc flash requirements at selected locations
 - ii. Perform arc flash analysis at the locations selected by the Customer.
 - iii. No more than ten (10) locations may be selected.
 - iv. The arc flash analysis results shall include:
 - 1. Clearance distances
 - 2. Fault current
 - 3. Energy
 - 4. Hazard level and the corresponding voltages to which the qualified person will be exposed.
 - v. Arc flash labeling is the responsibility of the Customer, as specified in NESC 2012-410 A3 but labeling may be provided by LCRA at an added cost.
- g. Perform the following distribution system protection analysis:
 - i. Verify that the maximum interrupting rating for all distribution feeder breakers and downstream reclosers are adequately rated to withstand the maximum available fault current using the latest ERCOT short circuit case.
 - ii. Verify that the continuous rating of all feeder breakers are adequately rated so that the feeder breakers' continuous rating will not be exceeded for any non-fault conditions including contingency analysis.
 - iii. For all distribution feeder breaker relays and downstream reclosers perform the following analysis:
 - Verify that the phase and ground overcurrent pickup settings will not be exceeded for any non-fault conditions including contingency analysis and are also set sensitively enough to detect faults at the end of the feeder.
 - Verify coordination with upstream (transformer protection) and downstream devices (reclosers, largest / nearest fuse(s), etc.).
 - Determine if the existing settings have performed in a manner that the Customer expects (fuse saving vs. a fuse sacrificing scheme, any misoperations, etc.).
 - iv. Evaluate the need for any new downstream reclosers, and if a recloser is warranted provide basic coordination settings and verify coordination with upstream and downstream devices.
 - v. Document substation outages over the last 5 year period.

- h. Based upon the findings of items b through f above, develop a list of Recommend Capital Improvement Projects and budgetary project cost estimates.
- i. Update Maps and Electric System Model as information is provided by field crews and the Customer during the study.

Information to be provided by the Customer includes but is not limited to the following:

- a. Any Customer-specific distribution system planning criteria
- b. Ten-year load forecast
- c. Load profile results per feeder via relays or load loggers, if available
- d. Mapping data that has changed since data collection
- e. Rate class kWh sales data, if available
- f. Capacitor bank(s) status during peak electrical loading and load profile, if available
- g. Capacitor bank controller settings
- h. Arc flash analysis supporting data
 - a. Distribution transformer nameplate and fuse size/type
- i. Protective device nameplate information for distribution feeder breaker and downstream reclosers
- j. Existing relay and controller details:
 - a. Distribution feeder breaker relay settings, manufacturer, and part number
 - b. Downstream recloser controller settings and controller type
 - c. Event files (if available)
- k. For the largest fuse downstream of each distribution feeder breaker and the largest fuse downstream of each downstream recloser:
 - a. Location of fuse (intersecting streets)
 - b. Fuse type
 - c. Fuse size
- I. If available, provide any history of outages caused by feeder breaker trips, recloser trips, or lateral tap fuses operating.

II. <u>Deliverable</u>

This agreement provides for one primary Deliverable by LCRA, which shall be provided to Customer as a bound printed copy and an electronic copy (.pdf file) sent via email.

- a. An Electric Distribution System Study ("Plan"). The Plan shall include tables, charts, maps, and explanatory text. At a minimum, the following items shall be included with the Plan:
 - i. Existing Circuit Diagram color coded by circuit
 - ii. Existing Conductor Diagram color coded by primary conductor
 - iii. Five Year Work Plan Diagram all improvement projects color-coded by recommended year
 - iv. Existing and Proposed Fusing Diagram
 - v. Fault Duty Maps: three-phase and phase to ground with associated table

- vi. Relay / fuse / recloser coordination curves and summary of proposed changes where applicable
- b. In addition to the Plan described in item a. above, LCRA shall conduct an annual review of the load power factor and, where required, provide interim recommendations for meeting the ERCOT load power factor requirement. This power factor review shall be conducted by LCRA once per year during the annual load forecast data collection period.
- c. This agreement does not include engineering advice on technical problems that may arise during operation, construction, or addition of new electric loads. For this engineering support or support on inspection, maintenance, and construction methods and/or procedures, LCRA and Customer may enter into a separate agreement.
- d. This agreement does not include project implementation costs.
- e. This agreement does not include NERC or ERCOT compliance related matters, such as retention of objective evidence.

LCRA specifically acknowledges and agrees that the Customer requires the Deliverable information described herein to meet five (5) year demand levels and that the provision of the Deliverable to the Customer is time-sensitive. Accordingly, LCRA agrees that the Deliverable shall be provided to the Customer no later than sixty (60) months after execution of this Agreement.

III. Confidential Work Product

Software, data, computer models, maps, graphical products and other products used to produce the Deliverable under this Agreement have been developed by LCRA at considerable expense, and shall be considered competitive, proprietary information belonging to LCRA. Customer has the right to request certain data from LCRA and LCRA has the obligation to provide certain data (or equivalent); however, at LCRA's discretion, certain data, if related to LCRA's products or materials which were used to produce the Deliverables, will be kept as proprietary information belonging to LCRA and not distributed to any Customer. The Deliverable, and all related information described herein, to be provided to the Customer pursuant to the terms of this Agreement, shall be the property of the Customer and the Customer, in its sole discretion, may use, copy or distribute the Deliverable.



Statement of Work for Surveying and Mapping Services

ELECTRICAL SYSTEM VISUAL INSPECTION (ESVI) SERVICES
Revised: September 2021

GENERAL DESCRIPTION

Lower Colorado River Authority will provide visual inspection and mapping services of the customer distribution system. Visual inspection field data acquisition, data compilation, and mapping will be performed by LCRA employees.

SCOPE OF WORK

- Visually inspect the distribution system: make record of the size, type, general location (non-GPS), and general condition of each inspected element, both overhead and underground
 - Inspected elements include, but are not limited to: poles, crossarms, lines/conductor, transformers, pad mount transformers, regulators, capacitors, switches, air break switches, fuse cutouts, street lights, reclosers, etc.
- Identify and record deficiencies: make record of element, deficiency, and location
 - Deficiencies include, but are not limited to: poles: bottom and top rot, woodpecker holes, top splitting, shell rot, leaning/bowing; crossarms intact; missing hardware; leaking fluid; rusting; underground cabinets are secure and free of vegetation and debris; elements operating "normally"
 - Poles will be "sounded" (hit with hammer) 6 inches above ground level for indications of bottom rot
 - Identify and record elements needing immediate attention
- Identify and record vegetation management areas: make record of location and attention need
 - o Immediate attention includes: limbs resting on lines, ivy climbing poles and around elements, etc.
 - o Regular attention includes: limbs nearing lines, wind blowing limbs into lines, etc.
- Compile and transfer visual inspection field data and records into mapping software
- Create deliverables
- Meet with customer to deliver and discuss results of inspection
- Electrical System Visual Inspection (ESVI) services provided are not intended to be a statement of serviceability of any particular element in the distribution system
- LCRA will provide: staff, tools, and materials necessary to perform the outlined scope of work and create the deliverables

DELIVERABLES

- Map book to include:
 - o Coversheet with map index, legend, and scale
 - o Distribution system mapped at the primary and secondary circuit level
 - o Each element mapped graphically in relation to streets, water features, parks, railways, and other elements included in the ESRI provided basemap
 - Callout boxes denoting deficiency
 - o Symbols indicating areas of vegetation management
 - o Format: hard copy paper & .pdf
- ArcGIS data, of line work and points, is available upon request

- 1. <u>Agreement.</u> This Customer Services Contract, including these terms and conditions, the Project Proposal, and any other documents attached hereto (collectively, the "Contract"), contains the entire agreement and understanding between LCRA and Customer with respect to the subject matter of this Contract and supersedes any and all prior or contemporaneous oral and written agreements and understandings regarding the defined scope of services. Additional terms and conditions on Customer's forms (including those accompanying any purchase order, invoice or payment) are a material alteration of this Contract and are rejected and null and void unless expressly agreed to by LCRA in writing. In the case of any conflicts between the terms of this Contract and the terms of any applicable Customer form, the terms of this Contract will control.
- Services. LCRA will perform services for the Customer as detailed in the Scope of Services section of the Project Proposal ("Services"). Customer will review and respond as appropriate to all reports, studies, recommendations, requests and other submissions of LCRA so as not to delay the performance of the Services.
- Notices. Correspondence, notices and invoices will be in writing and mailed or delivered to the other party as identified in the Customer and LCRA Contact sections of the Project Proposal, or at such other address as a party may from time to time designate in writing. All notices, correspondence or invoices will be effective upon receipt.
- 4. <u>Changes Orders.</u> Changes in the scope of the Services may only be made by written agreement of the Customer and LCRA. Verbal changes will not be given or accepted, except in cases of emergencies which pose a risk of personal injury or property damage, and such changes will be followed up with a written confirmation as soon as practicable.
- 5. Term; Termination. This Contract will commence on the date of the last signature by the parties ("Effective Date") and will govern LCRA's performance of the Services. Either party may terminate this Contract for its convenience at any time by providing written notice to the other party. In the event of such termination, Customer will pay LCRA for all Services performed up to the date of termination, plus (in the case of termination by Customer) any cancellation charges or other termination expenses as may be reasonably identified by LCRA.
- 6. <u>Costs; Invoicing.</u> As compensation for the Services, Customer will pay LCRA in accordance with one of the following, as identified in the Price section of the Project Proposal:
 - (a) All (i) direct costs incurred by LCRA in performing the Services, including, (1) costs for materials and supplies, (2) labor costs, including salary and benefits, paid to LCRA employees, (3) travel, meal and lodging expenses reimbursed or paid on behalf of LCRA employees within established LCRA expense guidelines, and (4) any third party costs, plus (ii) indirect costs that LCRA normally applies to Services of this nature, including general and administrative costs and other internal expenses and contributions; or
 - (b) A fixed price. Any changes to the scope of the Services may require an increase in the fixed price. Such change to the scope and the correlating fixed price will be agreed to in writing by the parties.

LCRA may invoice Customer for progress payments for the Services completed to date during the term of this Contract. All payments by Customer under this Contract will be due and payable within 30 days after receipt of invoice. If payment is not timely made, interest will accrue on the unpaid balance at the lesser of the maximum lawful rate, or one percent per month, from the due date until paid.

7. Warranty; Disclaimer.

- (a) During the term of this Contract, and for a period of 30 days after completion of the Services, LCRA will correct or reperform any Services not conforming to the requirements of this Contract. Upon completion of the Services, LCRA will assign to Customer all contractor, manufacturer and supplier warranties related to the Services, to the extent LCRA has the right to do so. After such assignment, LCRA will have no continuing obligations to Customer with respect to the good or service to which the warranty applies, and Customer will look solely to the applicable contractor, manufacturer or supplier for relief regarding any claims or remedies, whether based on a warranty or otherwise.
- (b) Any law, code or standard referenced in this Contract will refer to the version of such law, code or standard in effect as of the Effective Date.
- (c) The warranties contained in this Section 7 are exclusive and in lieu of all other warranties, express or implied, including any implied warranty of merchantability, fitness for a particular purpose, or good and workmanlike performance, and LCRA's obligation under Section 7(a) is Customer's sole and exclusive remedy for any breach or liability of LCRA arising under this Contract.
- 8. Environmental Conditions. Prior to LCRA starting any Services on-site, Customer will provide documentation that identifies the presence and condition of any hazardous materials or environmental conditions existing in or about Customer's equipment or the site that LCRA may encounter while performing the Services, and will keep LCRA informed of changes in any such conditions. If LCRA encounters hazardous materials in Customer's equipment or on-site, LCRA is not obligated to perform any Services affected by the hazardous conditions. Customer will indemnify and hold LCRA, its affiliates and their respective directors and employees, harmless for any and all claims, damages, losses, and expenses arising out of or relating to any hazardous materials which are or were (i) present in or about Customer's equipment or the site prior to the commencement of LCRA's work, (ii) improperly handled or disposed of by Customer or Customer's employees, agents, contractors or subcontractors, or (iii) brought, generated, produced or released on-site by parties other than LCRA.
- Schedule. Unless otherwise expressly stated in the Contract documents, time is *not* of the essence and LCRA will not be liable to Customer for any damages arising out of LCRA's delay in providing the Services, including any failure to meet schedules contained in this Contract.
- 10. Force Majeure. Neither party will be responsible or liable for any delay or failure in its performance under this Contract to the extent such delay or failure is caused by conditions or events of Force Majeure. The term "Force Majeure" means causes or

CUSTOMER SERVICES CONTRACT

events beyond the reasonable control of, and without the fault or negligence of the party claiming Force Majeure, including (to the extent satisfying the foregoing requirements) (i) acts of God or sudden actions of the elements such as floods, earthquakes, hurricanes, tornadoes, ice storms, or wildfires; (ii) terrorism; war; riots; blockades; insurrection; strike at a regional level; labor disruption at a regional level (even if such difficulties could be resolved by conceding to the demands of a labor group); (iii) any action by a governmental or regulatory entity, including ERCOT or the PUCT; and (iv) pandemic, including the current Coronavirus Disease 2019 outbreak.

- 11. LIMITATION OF LIABILITY. THE TOTAL LIABILITY OF LCRA ARISING OUT OF THIS CONTRACT AND THE SERVICES WILL NOT EXCEED AN AMOUNT EOUAL TO THE FEES PAID TO LCRA UNDER THIS CONTRACT, AND LCRA WILL NOT BE LIABLE FOR PUNITIVE, INCIDENTAL, SPECIAL, CONSEQUENTIAL DAMAGES, INCLUDING LOST PROFITS. IN NO EVENT WILL ANY OFFICER, DIRECTOR, EMPLOYEE OR AFFILIATE (OR AFFILIATE'S OFFICER, DIRECTOR OR EMPLOYEE) OF LCRA BE LIABLE TO CUSTOMER UNDER THIS CONTRACT, AND CUSTOMER'S SOLE RECOURSE UNDER THIS CONTRACT WILL BE AGAINST LCRA AND NOT AGAINST SUCH OTHER PERSONS. THE LIMITATIONS ON LIABILITY AND REMEDIES IN THIS PARAGRAPH WILL APPLY REGARDLESS OF WHETHER THE LIABILITY OR CAUSE OF ACTION ARISES IN CONTRACT, WARRANTY, INDEMNITY, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY OR OTHERWISE. NOTHING IN THIS CONTRACT WILL BE CONSTRUED TO WAIVE LCRA'S GOVERNMENTAL IMMUNITY.
- 12. <u>Amendment</u>. This Contract may only be amended or modified through written agreement of the parties signed by an authorized representative of LCRA and by an authorized representative of the Customer.
- 13. <u>Assignment</u>. This Contract will be binding upon and inure to the benefit of the parties and their respective successors and assigns; provided, however, that neither party may assign this Contract, in whole or part, without the prior written consent of the other party.
- 14. Non-Waiver. No failure or delay on the part of a party to exercise any right or remedy will operate as a waiver of such right or remedy, nor will any single or partial exercise of any right or remedy preclude any further or other exercise of any such right or remedy.
- 15. <u>Partial Invalidity</u>. If any section or part of this Contract is declared invalid by any court of competent jurisdiction, the court's decree will not affect the remainder of this Contract, and the remainder of this Contract will remain in full force and effect with the deletion of the part declared invalid.
- 16. Choice of Law; Venue; Waiver of Jury Trial. This Contract will be governed by and construed in accordance with the laws of the State of Texas, without regard to conflict of law principles. Each party irrevocably consents and agrees that any legal action or proceeding arising out of this Contract will be brought exclusively in a court of competent jurisdiction in Travis County, Texas. LCRA AND CUSTOMER IRREVOCABLY WAIVE ALL RIGHT OF TRIAL BY JURY IN ANY ACTION, PROCEEDING OR COUNTERCLAIM ARISING OUT OF OR IN CONNECTION WITH THIS CONTRACT.

- 17. Ownership. Intellectual property and rights to intellectual property owned by any party on the Effective Date will remain the property of that party. All deliverables, including plans, drawings, designs, specifications, computer programs or applications photographs, studies, data, schedules, test readings, technical reports, and calculations developed or utilized by LCRA or its subcontractors which are developed and specified to be delivered under this Contract and which are paid for by Customer are the property of Customer, but subject to LCRA's intellectual property rights. Customer recognizes that no deliverables will be suitable for reuse at any Customer facility or in connection with any project other than that for which the deliverable was prepared. LCRA DISCLAIMS LIABILITY FOR ANY REUSE OF THE DELIVERABLES ON ANY OTHER FACILITY OR PROJECT THAT IS DONE WITHOUT THE EXPLICIT, WRITTEN APPROVAL OF LCRA.
- "Confidential Information" 18. Confidentiality. information marked or otherwise designated as "confidential" by a party. Confidential Information may only be used by the parties for purposes related to the performance of this Contract, and each party agrees not to disclose Confidential Information of the other party to any other person (other than its affiliates, and the party's and affiliate's respective employees and directors, or to contractors who agree to be bound by the provisions of this Section), provided that either party may disclose Confidential Information if and to the extent such disclosure is required by law (including the Texas Public Information Act). In the event a party is requested under law to disclose Confidential Information, such party will to the extent possible notify the other party within three business days of such request.
- 19. <u>Municipally Owned Utilities</u>. If Customer is a municipally owned utility, the following additional terms will apply:
 - (a) This Contract is entered into under the authority of Chapter 791 of the Texas Government Code;
 - (b) Customer pledges the revenues of its electric utility system to pay its obligations under this Contract. In addition, the amounts payable by Customer to LCRA under this Contract are operation and maintenance expenses as contemplated by Section 1502.056 of the Texas Government Code and, as a result, are a first lien against the revenues of Customer to secure the Customer's payment obligations to LCRA hereunder. Customer agrees that it will not request Services for which funds have not been appropriated and are not available.
 - (c) Payments made under this Contract (1) are based on cost recovery, (2) will fairly compensate LCRA for the Services, and (3) will be made from current revenues available to Customer.
- 20 <u>Survival</u>. Termination or expiration of this Contract will not relieve, reduce, or impair any rights or obligations of a party which expressly or by implication survive termination or expiration of this Contract. Without limiting the generality of the foregoing, the following sections will survive the termination or expiration of this Contract: Costs; Invoicing, Warranty; Disclaimer, Environmental Conditions, Schedule, Limitation of Liability, Choice of Law; Venue; Waiver of Jury Trial, Ownership, Confidentiality, and Municipally Owned Utilities.

