

and shall be responsible for demurrage, if any.

9. **Time and Manner of Construction.** Article II, Section 1, of Form 790 (*Time and Manner of Construction*), is hereby amended to delete subparts a. and b. and replace same with the following:

- a. *The Bidder agrees to commence construction of the Project on a date (hereinafter called the "Commencement Date") which shall be determined by the Engineer after notice to the Bidder in writing of acceptance of the Proposal by the Owner and notice in writing from the Bidder that the Bidder has sufficient materials to warrant commencement and continuation of construction, but in no event will the Commencement Date be later than fifteen (15) calendar days after acceptance of the Proposal by the Owner and the Owner providing the Bidder with the first Work Order. The Bidder further agrees to prosecute diligently and to complete construction of each Section of the Project that is the subject of a particular Work Order in a good and workmanlike manner and in strict accordance with the Plans, Specifications and Construction Drawings (including those plans, specifications and construction drawings accompanying a Work Order) within the time frames described in Owner's Special Requirements attached to the Addendum as Exhibit A: Provided, however, that the Bidder will not be required to dig holes, set poles, install anchors, install underground conduit, perform any plowing for the installation of underground cable, or dig trenches if there are more than six (6) inches of frost on the ground nor to perform any construction on such days when in the judgment of the Engineer snow, rain, or wind, or the results of snow, rain, or frost make it impracticable to perform any operation of construction; provided further that the Bidder will not be required to perform any plowing for the installation of underground cable on public roads or highways if there are more than two (2) inches of frost in the ground. To the extent of the time lost due to the conditions described herein and approved in writing by the Engineer, the time of completion set out above will be extended if the Bidder makes a written request therefore to the Owner as provided in subsection b of this Section 1.*
- b. *The time for completion of construction of a Section shall be extended for the period of any reasonable delay which is due exclusively to causes beyond the control and without the fault of the Bidder, including Acts of God, fires, floods, inability to obtain materials and acts or omissions of the Owner with respect to matters for which the Owner is solely responsible: Provided, however that no such extension of time for completion shall be granted the Bidder unless within ten (10) days after the happening of any event relied upon by the Bidder for such an extension of time the Bidder shall have made a request therefore in writing to the Owner, and provided further that no delay in such time of completion or in the progress of the work which results from any of the above causes except acts or omissions of the Owner, shall result in any liability on the part of the Owner.*

10. **Construction Not In Proposal.** Article II, Section 5, of Form 790, (*Construction Not in Proposal*), is hereby deleted in its entirety and replaced with the following:

Section 5. Construction Not in Proposal. *The Bidder agrees that when it is necessary to construct units not shown in the Proposal, the Bidder shall construct such units for a price agreed upon by the Bidder and the Owner by written agreement*

(which, for purposes of this Section 5, may include agreement reached via electronic correspondence, e.g., e-mail).

- 11. Payments to Subcontractors.** Article III, Section 3, of Form 790, (Payments to Material Suppliers and Subcontractors), is hereby deleted in its entirety and replaced with the following:

Section 3. Payments to Subcontractors. *The Bidder shall pay each subcontractor for and on account of construction or services performed by such subcontractor prior to making application for payment to the Owner with respect to such construction or services.*

- 12. Drug-Free Workplace; OSHA, APPA, ANSI and NESC; Burial Grounds and Wetlands.** Article IV, Section 1, of Form 790 (*Protection to Persons and Property*), is hereby amended to add the following subparts:

- m. The Bidder shall employ a drug-free workplace policy.*
- n. The Bidder shall comply with Occupational Safety and Health Administration (OSHA) standards and regulations in 29 CFR Parts 1910 and 1926, as well as the standards and regulations of the American Public Power Association (APPA), the American National Standards Institute (ANSI) and the National Electric Safety Code (NESC).*
- o. If, in the course of work performed under this Contract, the Bidder encounters human remains or recognizes the existence of burial markers, archaeological sites or wetlands not indicated in this Contract or in a Work Order, the Bidder shall immediately suspend any operations that would affect them and shall notify the Owner. The Bidder shall continue to suspend such operations until otherwise instructed by the Owner but will continue with all other operations that do not affect those remains or features.*

- 13. Additional Insurance Coverages.** Article IV, Section 2, of Form 790, (*Insurance*), is hereby amended to add additional types and minimum amounts of insurance to be maintained by the Bidder/Contractor throughout (and in some instances beyond) the period of this Contract by adding the following subparts:

- d. Commercial General Liability Insurance under an occurrence-based policy form covering all ongoing and completed operations under this Contract and insuring Bidder's indemnity obligations set forth in this Contract, with a combined single limit of not less than \$5,000,000 per occurrence and \$10,000,000 in the aggregate for occurrences during the policy period, endorsed to have the aggregate apply only to matters related to this Contract, and including the following coverage (in the policy or by way of endorsement(s)):*
 - A. Premises/Operations;*
 - B. Personal Injury Liability, with employee and contractual exclusions removed;*

- C. *Independent Contractor Liability;*
- D. *Broad Form Property Damage Liability, including Completed Operations, Products/Completed Operations,*
- E. *Explosion, Collapse and Underground Damage (X,C,U) Liability;*
- F. *Blanket Contractual Liability, specifically in support of, but not limited to, the indemnity sections of this Contract;*
- G. *Completed Operations Coverage. The Bidder shall continue to take out and maintain Completed Operations Coverage for a period of not less than two (2) years following the date of the final completion of the Project, endorsed to provide that aggregate limits apply on a "per project" basis; and*
- H. *Railroad Protective Liability coverage (RPL), if any construction or work being performed is within 50 feet (50') of a railroad.*
- e. *Pollution Liability Insurance, covering losses caused by pollution conditions that arise from the operations of Bidder, minimum limits of coverage of not less than \$1,000,000 per occurrence and \$1,000,000 in the aggregate.*
- f. *Umbrella Insurance (Excess Liability) with minimum limits of \$5,000,000 per occurrence, written on an umbrella basis in excess over, and no less broad, than the coverage described in Article IV, Section 2 a. – e., with no gap in coverage, and following the form of the underlying policies.*
- g. *The Bidder(s) shall purchase and maintain property insurance covering the machinery, equipment, mobile equipment, and tools used or owned by the Bidder(s) in the performance of construction services under the Contract. The Owner shall, under no circumstances, be responsible or liable for the loss, damage to, or disappearance of any machinery, equipment, mobile equipment and tools used or owned by the Bidder(s) in the performance of services under the Contract.*

All insurance required under this Contract shall have minimum limits of not less than the greater of (i) the amounts specified in this Contract, and (ii) the minimum coverage allowed per 7 Code of Federal Regulations Part 1788, et seq., as same may be amended from time to time.

All insurance required under this Contract or procured by the Bidder to satisfy the requirements of this Contract shall be primary and non-contributory with respect to any other insurance or self-insurance maintained by or for the benefit of the Owner or any other Indemnitee (as defined in the Addendum) and shall not require contribution from or exhaustion of any other policy under which the Owner may be covered.

14. **Compliance with Laws.** Article VI, Section 10, (*Compliance with Laws*), of Form 790, is hereby amended to add the following provisions at the end of said section:

If the Bidder performs work under this Contract knowing, or in the exercise of reasonable caution and care should have known, it to be contrary to applicable federal, state, or local laws, rules, or regulations, the Bidder shall assume appropriate responsibility for any correction of such work and shall bear the costs, losses, and expenses attributable to correction.

15. **Independent Contractor.** Article VI, Section 10, (*Independent Contractor*), of Form 790, is hereby amended to add following provision to the end of said section:

Notwithstanding any provision to the contrary, in performance of any work by the Bidder, the Bidder shall be conclusively deemed an independent contractor, with the authority and right to direct and control all the details of the work being performed. However, all work contemplated by this Contract shall meet the approval of the Owner and shall be subject to the Owner's general right of inspection. The Owner shall have no right or authority to supervise or give instructions to the employees, agents or representatives of the Bidder, and such employees, agents or representatives at all times shall be under the direct and sole supervision or control of the Bidder. Any suggestions or directions which may be given by the Owner or its employees shall be given only to the Superintendent or other person in charge of the Bidder's crew. It is the understanding and intention of the parties hereto that no relationship of master and servant or principal and agent shall exist between the Owner and the employees, agents representatives, or subcontractors of the Bidder.

16. **Special Requirements:** The Bidder/Contractor agrees to comply with the Owner's Special Requirements attached hereto as Exhibit A and incorporated herein by reference for all purposes.

17. **Construction Unit Labor Pricing:**

- a. Construction Unit labor pricing (to be completed by the Bidder in conjunction with the Bidder/Contractor's submittal of this Proposal to the Owner) is detailed on Exhibit B attached hereto and incorporated herein by reference for all purposes.
- b. In the event Plans and Specifications promulgated by RUS are amended after the date this Proposal is accepted by Owner, any amendment to the Construction Unit labor pricing detailed on Exhibit B hereto shall be by written agreement between Bidder/Contractor and Owner.

18. **Miscellaneous:**

- a. Notwithstanding any other provision to the contrary, in the event the Owner shall accept Bidder/Contractor's Proposal, the Owner shall be obligated to release only one (1) Section of the Project to the Bidder/Contractor; the parameters of such Section shall be established and limited by the Owner, in its sole discretion, and the Owner shall have no obligation to utilize the Bidder/Contractor with respect to any other portion of the Project.
- b. Notwithstanding any provision to the contrary, the Owner may terminate any Work Order and/or this Contract at any time upon written notice to the Bidder/Contractor, with or without cause, effective upon Bidder/Contractor's receipt of such termination notice, and no amount shall be owed except for work performed prior to such termination.

- c. If the Bidder/Contractor shall make default in any of its obligations under this Contract and it becomes necessary for the Owner to obtain the services of an attorney(s) to enforce such, the Bidder/Contractor agrees to pay any and all of the Owner's attorneys' fees, costs (including court costs) and expenses associated with the enforcement of such obligations, including, but not limited to, any and all attorneys' fees and expenses incurred by the Owner in conjunction with any bankruptcy of the Bidder/Contractor, including, without limitation, any appearances, court filings, and other expenses.
- d. This Contract shall be governed, construed, and interpreted as to validity, enforcement, and in all other respects in accordance with the laws of the State of Texas and the laws of the United States of America, if applicable. The county in which the Owner has its principal office is Johnson County, Texas and such county shall be the proper place of venue to enforce payment or performance under this Contract. The Bidder/Contractor irrevocably agrees that any legal proceeding arising in connection with this Contract shall be brought in the state court of appropriate jurisdiction in Johnson County, Texas or in the United States District Court for the District in which Johnson County is located.
- e. The failure of either the Bidder/Contractor or the Owner to enforce or insist upon compliance with any of the terms or conditions of this Contract shall not constitute a general waiver or relinquishment of any such terms or conditions, but the same shall remain in full force and effect.
- f. The rights and remedies provided by this Contract are cumulative and use of any one right or remedy by either party shall not preclude or waive its right to use any other or all other remedies. Said rights and remedies are given in addition to any other rights the parties may have by law, statute, ordinance or otherwise.

United Electric Cooperative Services, Inc.,
a Texas electric cooperative corporation

Owner

Bidder/Contractor

By: _____
President

By: _____
President

Date

Date

Exhibits:

Exhibit A – Owner's Special Requirements
 Exhibit B – Construction Unit Labor Pricing

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EXHIBIT "A"
TO ADDENDUM TO ELECTRIC SYSTEM CONSTRUCTION CONTRACT
NON-SITE SPECIFIC CONSTRUCTION BETWEEN UNITED ELECTRIC COOPERATIVE
SERVICES, INC. AND _____

OWNER'S SPECIAL REQUIREMENTS

Locates

The Bidder/Contractor will be responsible for initiating and completing all Digtess locates. Any damage to clearly marked or exposed public or private facilities that may occur during excavation performed on behalf of the Owner are the responsibility of the Bidder/ Contractor. The Owner's members ("Member(s)" or "Membership"), developers, and/or builders will be responsible for locating and marking all private utilities. The Bidder/Contractor will coordinate with the Membership before any excavation begins to identify and locate any existing utilities. Damage to Member owned facilities shall be reported to the Contract Coordinator (designated by Owner) immediately and the Contract Coordinator shall review prior to repairs being made. Any repairs requiring permits will be made by a licensed professional in the appropriate trade, and the repairs will be made within a timely manner depending on the severity of the situation.

As-Built

The Bidder/Contractor will be responsible for showing "As-builts" on the Owner's staking sheet(s) provided to them for each Section. Once a Section has been completed and As-builts have been recorded on the staking sheets, the staking sheets must be returned to the area foreman daily via an electronic file (scanned and e-mailed in Adobe PDF format). As-builts must be recorded in a "reference by reference" format.

Supervision, Administration and Inspection

The Bidder/Contractor shall provide sufficient administrative personnel so as to notify (by email, phone or fax) the Owner of completion of a Section within one (1) business day of the actual physical completion of a Section.

The Bidder/Contractor shall provide sufficient administrative personnel as is required to notify affected Members of any delays in, or modifications made to, the Bidder/Contractor's construction schedule. The Bidder/Contractor shall notify the Owner's designated representative of any such delays in, or modifications made to, the Bidder/Contractor's construction schedule and shall inform the Owner of any correspondence or conversation (including the details thereof) that takes place between a representative of the Bidder/Contractor and the Owner's Membership.

GIS Software

The Bidder/Contractor must have the ability to interact with the Owners GIS software. Software(s) include, but are not limited to, Partner System, Inc. GIS & Staking.

Materials and Warehousing

Materials Group:

Robert Sherman, Senior Manager of Procurement/Facilities – Burleson
Jason Goosen, Asst. Purchasing Agent – Cleburne
Matt George, Storekeeper – Cleburne
Ronnie Hall, Storekeeper – Stephenville
Shawn Eiler, Storekeeper – Burleson
Kevin Baker, Storekeeper – Granbury

- The Bidder/Contractor will not be allowed to enter or exit storage areas without first checking with the Materials Group. When they are not available, Line Department personnel may assist the Bidder/Contractor.
- All material needs must first be brought to the attention of Warehouse Personnel – advance notification is preferred (call 817-556-4000 and ask for the appropriate personnel noted above).

- All material receipts (picked up or returned), pole release forms, and transformer return tickets shall be furnished by Owner.
- Storekeepers will verify all materials entering and exiting storage areas.
- The Work Order Number is required for all pickup and returning of materials.
- All reusable returned material must be broken down and separated into like-groupings.
- All non-reusable material, after being separated from reusable material shall be discarded in the proper bins (either scrap or trash) as specified by appropriate Storekeeper.
- All broken and lost material must be accounted for.
- Although it is easier to keep leftover or retired material until the end of the day, this practice is counter-productive to the Inventory Control Process. It is therefore necessary whenever possible to complete one Work Order before beginning another.
- When picking up or returning materials, the Bidder/Contractor's crews are only allowed on the Owner's premises during the Owner's normal working hours.
- Invoices shall be delivered to the Owner completed, including copies of all material tickets, transformer tickets, and pole release forms. All invoices shall be tabulated by staking sheet and have a master tabulation of all sheets completed. Partially completed staking sheets will be paid only when completed units are highlighted and approved by the Contract Coordinator (e.g., when Contractor pulled off job for ROW problems or weather).

Time and Manner of Work

The Contractor agrees to complete construction on all Sections that involve only secondary or service work (as specified in the subject Work Order) within seven (7) business days from Contractor's receipt of a Work Order, subject to extensions for periods of reasonable delay due exclusively to causes beyond the control and without the fault of the Contractor pursuant to the terms of the Contract.

Upon receipt of a Work Order, other than those involving only secondary or service work (as specified in the subject Work Order), the Contractor agrees to review the Work Order and schedule the Section(s) to be constructed within two (2) business days of receipt of such Work Order; and shall schedule the start date no less than ten (10) business days from the date Contractor receives the Work Order. In the event that the Contractor identifies that due to overall work-load the Contractor will be unable to start construction on said Section within ten (10) business days, Contractor shall notify the Owner's Contract Coordinator immediately.

All non-emergency maintenance work will be coordinated with the Area Foreman and construction shall be completed within fifteen (15) business days of the receipt of the Work Order. Non-emergency maintenance work includes work consisting of equipment or conductor replacement, relocation, or maintenance that is not specified by the Owner to be an emergency situation. Contractor agrees to schedule the construction of any Section that is deemed an emergency by the Owner in strict accordance with a reasonable schedule that will be set out by the Owner. Sections that are within a residential development shall be scheduled in accordance with a schedule that is acceptable and agreed upon by the developer, the Owner and the Contractor.

A Work Order is deemed received by the Contractor if it is sent by the Owner to the Contractor's business office via email, fax or hand delivery on or before 12:00pm on a given day. Work Orders sent to the Contractor by the Owner after 12:00pm of a given day will be deemed received on the following business day, and all time frames listed above are inclusive of the day they are received.

Items to be verified by Contractor at completion of a Section:

- Is a full 8' ground rod driven - (1) ground rod per device/arrestor 12 inches below ground level, and 2 feet from the pole in undisturbed soil? Is the connection made per the specs (if the crimpet is not visible, then it is assumed that there is not a ground rod present).
- Are guy wires pulled correctly, and is the line pulled to proper sag?

- Are material, poles, wire, etc. picked up and area cleaned to pre-construction levels?
- Were spoils removed and job cleaned up?
- Is stranded bare copper in the top and bottom of all fused laterals, and the top of all cutouts for transformers, and by-passes.
- Has 5-kV bird wire been installed properly and as needed on all devices?
- Has the properly sized (voltage) arrestor been installed on all devices, and have ground rods been driven on poles with devices (transformers, reclosers, etc.) or arrestors?
- Have pole grounds been left off of service or meter poles (only grounds on these poles should be for meter bases)?
- Do all devices have a 5 point loop grounding system?
- In the event that a Member is requesting you to leave the retired poles, has the Member completely filled out and signed the Pole Release Forms; and have said poles been placed in a location where they will not present a danger or become a hazard (in no event shall poles be left in the County or State right-of-way)? Have all other poles been returned to the Owner in a timely manner?
- Have all guy wires been properly bonded to the system neutral?
- Have all "As Built" changes been referenced on the appropriate reference on the staking sheets?
- Have all hot line clamps been removed from permanent construction?
- Are all splices at least 10 feet from the pole?
- Do all new poles have pole tags (issued by the Owner)?
- Have all cutout and crossarm brackets been hung "low" unless otherwise noted?
- Have all arrestors that were hanging on a the crossarm for an existing transformer or transformer bank been relocated to the transformer tank(s) where possible?
- Have all service neutrals been taken to the X-2 bushing of the transformer?

Additionally, during construction of a Section, Bidder/Contractor is responsible for insuring that:

- All poles are tamped and backfilled properly. If not, the pole shall be pulled and reset at the Bidder/Contractor's cost; and the Bidder/Contractor shall not attempt to straighten the pole under any circumstance.
- All armor rods shall be removed from a structure while working on said structure.
- Poles and material shall be placed in areas where they are not susceptible to being damaged or presenting a hazard to the public.
- When replacing equipment or structures, all replacement structures and equipment shall be constructed per applicable current construction specifications.
- The utmost care shall be taken by the Bidder/Contractor to ensure that no damage occurs to surrounding property. The Bidder/Contractor is responsible for any damage or ruts that occur during construction.

Debris/Spoils/Trash

The Bidder/Contractor will be responsible for the disposal and disposal cost of all trash generated in the construction and retirement process. Trash in this context is defined as items such as empty boxes, pallets, used poles, used crossarms, and any other items which are deemed as unusable in the construction of electric or fiber optic lines and have no residual value.

EXHIBIT "B"
TO ADDENDUM TO ELECTRIC SYSTEM CONSTRUCTION CONTRACT
NON-SITE SPECIFIC CONSTRUCTION BETWEEN UNITED ELECTRIC COOPERATIVE
SERVICES, INC. AND _____

CONSTRUCTION UNIT LABOR PRICING

Proposal on Unit Basis

The Construction Unit labor pricing herein set forth is applicable to work performed on un-energized line. Such Construction Unit labor prices shall be increased by _____ (____%) percent for all units constructed/installed on energized lines in accordance with the instructions of the Owner.

CONSTRUCTION UNITS - NEW CONSTRUCTION

Pole units consists of the installation of one pole. The first two digits indicate the length of the pole; the third digit shows the classification per A.S.A. (Example: 25-6 means a 25 feet pole long, class 6.) tamped or backfilled with select backfill, pole foam, or material from the hole depending on the location and application. A pole top assembly unit consists of the installation of the hardware, temporary and or permanent jumpers, ties, cross-arms and their appurtenances, insulators, etc., required to support the primary conductors.

A conductor assembly unit consists of the installation of 1,000 feet of conductor or cable for primaries, secondaries or services. Tree trimming necessary for installation of services and secondaries on poles not carrying primary line is included with the conductor assembly unit and shall be performed in accordance with the directions of the Owner. The services shall be connected to the secondary or transformer and 2 feet of conductor or cable shall be left for connecting to the consumer's service entrance. In computing the compensation to the Contractor for conductor assembly units only the horizontal distance between conductor supports or pole stales shall be used. The conductor or cable sizes and types listed are the manufacturer's designation.

A guy unit consists of the installation of the hardware and wire, and guy insulator where necessary. An overhead guy assembly unit does not include the associated pole and down guy, each of which is listed separately. Guy guards are designed separately.

An anchor assembly unit consists of the installation of an anchor with rod complete, ready for attaching the guy wire.

A transformer assembly unit consists of the installation of the transformer, its protective equipment, a 5 point ground, and its hardware leads with their connectors and supporting insulators and pins. This unit does not include the installation of the pole top, secondary, service, or grounding assemblies.

A secondary assembly unit consists of the installation of the hardware, insulators, ties, etc., to support the secondary conductor or cable. It does not include the installation of the secondary conductor or cable, or if any hardware, insulators, etc., required to support service conductors or cable.

A service unit consists of the installation of the hardware, insulator, ties, etc. To support the service conductors or cable. It does not include the installation of the service conductor or cable, or if any hardware, insulators, etc. required to support secondary conductors or cable.

A miscellaneous assembly unit consists of the installation of an additional unit needed in the Project for new line construction but not otherwise listed in the Proposal. This section includes the installation of grounding assemblies, fuse cutouts, reclosers, sectionalizers, capacitors, regulators, metering and other assembly units.

Assembly units should also include all labor for the transferring, re-sagging and re-tying of conductors from one position on the pole to a different position on the pole where such transfers are required. Where replacement of conductor is required, the existing conductor will be removed under Section I and the new conductor installed under Section N.

All bids for any units that require jumpers, temporary or permanent shall be included in the price for the unit.

Pole Top Assy - 1 Phase	
Unit No.	Unit Labor Price
VA1-01	
VA1-011	
VA1-011L	
VA1	
VA1-02	
VA1-03	
VA1-1	
VA2	
VA2-01	
VA2-021	
VA3	
VA4	
VA5	
VA5-1	
VA5-2	
VA5-2A	
VA5-3	
VA6	
VA6-2	
VA7	
VA7A	
VA7B	
VA8	
VA8-2	
VA9	
VA9-1	

Pole Top Assy - V Phase	
Unit No.	Unit Labor Price
VB1	
VB1-1	
VB2	
VB2-1	
VB3	
VB4-1	
VB5-1	
VB5-12	
VB7	
VB7A	
VB7B	
VB8	
VB8-1	
VB8-2	
VB9	
VB9-1	
VB9-2	
VB9-3	

Pole Top Assy - 3 Phase	
Unit No.	Unit Labor Price
VC1	
VC1-1	
VC1-2	
VC1-3	
VC1-13NP	
VC1-13LNP	
VC1-15NP	
VC1-16NP	
VC2	
VC2-2	
VC3	
VC4	
VC5-1	
VC5-1L	
VC7	
VC7-1	
VC7B	
VC8	
VC8-1	
VC8-1A	
VC8-2	
VC8-2A	
VC8-3	
VC9	
VC9-1	
VC9-2	
VC9-3	

Pole Top Assy - DBL Circuit	
Unit No.	Unit Labor Price
VDC-C1C	
VD1-81	
VD1-81L	
VD1-83	
VD1-83L	
VD2-91	
VD2-91L	
VD6-91	

Guy Assembly Units	
Unit No.	Unit Labor Price
E1-01	
E1-01L	
E3-10	
E10	
E15	
E20	
E22	
E25	

Anchor Assembly Units	
Unit No.	Unit Labor Price
F1-12	
F1-14	
F2-12	
F311	
F5-3	

Conductor	
Unit No.	Unit Labor Price
#4 ASCR	
#2 ACSR	
#1/0 ACSR	
#4/0 ACSR	
#2 TX	
#1/0 TX	
#2QX	
#6 DX	
#41X	
#2/0 TX	
#4/0 TX	
#1/0 QX	
#477 ACSR	
#795 ACSR	

Transformer Units	
Unit No.	Unit Labor Price
DVG1-4	
DVG1-5	
DVG1-6	
DVG2-1	
DVG3-1	
DVG3-2	
DVG3-3	

Secondary Assembly Units	
Unit No.	Unit Labor Price
J1-1	
J1-2	
J2-1	
J2-2	
J3-1	

Service Assembly Units	
Unit No.	Unit Labor Price
K1-2	
K2-1	
K2-2	
K3-1	
K3-2	

Pole Units	
Unit No.	Unit Labor Price
P35-5	
P40-3	
P40-4	
P40-5	
P45-4	
P45-5	
P50-2	
P50-3	
P55-2	
P55-3	
P60-2	

ADDENDUM

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Miscellaneous Assembly Units	
Unit No.	Unit Labor Price
111-1	
112-1	
H3-1	
M5-14	
N1-1	
N1-11	
N2-21	
N2-1	
N3-1	
N5-1	
N5-2	
N6-1	
P1-01	
VP1-01	
VP1-11	
VP1-2	
VP1-3	
VR1-2	
VR2-2	
VR2-3	
VR3-2	
VR3-3	
VR3-5	
VR3-6	
VR4-1	
VR4-2	
VR4-4	

Miscellaneous Assembly Units	
Unit No.	Unit Labor Price
VR4-6	
VR5-1A	
VR5-1B	
VR5-1C	
VS1-01	
VS1-03	
VS1-1	
VS1-2	
VS1-3	
VS1-4	
VS2-01	
VS2-02	
VS2-03	
VS2-04	
VS2-05	
VS2-21	
VS2-31	
VS2-32	
VS2-33	
VS3-20	
VY1-1	
VY1-3	
VY2-1	
VY2-11	
VY2-2	
VY2-3	
VY2-4	

Miscellaneous Assembly Units	
Unit No.	Unit Labor Price
VY2-5	
VY3-3	
W3-1	
W3-2	

Fiber Cable (OH)	
Unit No.	Per Foot Labor Price
F-CO12	
F-CO24	
F-CO48	
F-CO96	
F-CO144	
F-CO288	

Fiber Cable (UG)	
Unit No.	Per Foot Labor Price
F-BFO12I	
F-BFO24I	
F-BFO48I	
F-BFO96I	
F-BFO144I	
F-BFO288I	

Tree Trimming Units

M1-30G-10

The unit is 1,000 feet in length and 10 feet in width (to be measured on one side of the pole line) of actual clearing of right-of-way. This includes clearing of underbrush, tree removal, and such tree trimming as is required so that the right-of-way, except for tree stumps which shall not exceed Two (2) inches in height, shall be clear from the ground up on one side of the line of poles carrying primary conductors. This unit does not include clearing or trimming associated with secondaries or services which is included with conductor units. The length of actual clearing shall be measured in a straight line parallel to the horizontal line between stakes and cross maximum dimension of foliage projected to the ground line.

All trees and underbrush across the width of the right-of-way, as designated by the Owner shall be considered to be grouped together as a single length in measuring the total of clearing. Spaces along the right-of-way in which no trees are to be removed or trimmed or underbrush cleared shall be omitted from the total measurement. All thus arrived at, added together and divided by 1,000, shall give the number of 1,000- foot M1.30G-10 units clearing. This unit includes the removal or topping, at the option of the Contractor, of danger trees outside of the right-of-clearing when so designated by the Owner. (Danger trees are defined as dead or leaning trees which, in falling, will affect the operation of the line.) The Contractor shall not remove or trim shade, fruit, or ornamental trees unless so directed by the Owner.

M1-30G-20

This unit is identical with M1.30G-10 except that width is 20 feet (to be measured 10 feet on each side of the pole line).

M1-30G-30

This unit is identical with M1.30G-10 except that width is 30 feet (to be measured 15 feet on each side of the pole line).

M1-30G-40

This unit is identical with M1.30G-10 except that width is 40 feet (to be measured 20 feet on each side of the pole line).

Tree Trimming Units	
Unit No.	Unit Labor Price
M1-30G-10	
M1-30G-20	
M1-30G-30	
M1-30G-40	

CONSTRUCTION UNITS – LINE CHANGES (Continued)

Section I – REMOVAL ASSEMBLY UNITS

Removal assembly units cover the furnishing for the removal of existing units of construction from existing lines, disassembling into material items, and all labor and transportation for the returning of all materials to the warehouse of the Owner in an orderly or transporting elsewhere to the site of the Project for reuse in the prosecution of this Contract as directed by the Owner.

The new unit prices in the line changes section shall include all labor required to reinstall in accordance with specifications any conductors temporary detached. The Contractor will reinstall at his own expense any other removed units by him for his own convenience.

The removal units are specified by the prefix I and followed by the assembly unit designation of existing assembly unit to be removed. For example, an I-A1 assembly unit. The following special notes apply to specific removal units:

A. Poles. All poles of the same height, regardless of pole class, are designated by the same unit. Thus an I-P30-foot pole signifies the removal of a 30-foot pole of any class. The Contractor is not required under this unit to remove from the pole any ground wire or pole numbering attached to the pole. This unit includes the refilling and tamping of holes in a workmanlike manner unless they are to be reused.

B. Pole-top Assemblies. The unit of removal of pole-top assemblies includes the removal of the assembly itself. The new unit pricing in the Line Changes section will include any necessary handling, re-sagging, tying and retying of conductors in those cases where an existing pole-top assembly will be removed and replaced by a new pole-top assembly and where any existing conductor is to be reused.

The new unit pricing in the line change section will also include any holding or handling of mainline or tap conductors at tap lines, angles, and dead-ends where such is involved, and the reinstalling of such conductor in accordance with the Specifications; for example, an N-A5-4 will include the disconnection of the tap conductors, stubbing off the tap line nearest practical point and the reconnection and re-sagging of these tap conductors if necessary to the new tap assembly when installed. The cost of tying, untying, and retying of conductors shall be included in the Contractors bid for unit pricing. Jumpers temporary or permanent will be included in the unit pricing.

C. Conductor. The conductor removal unit covers the removal of 1,000 feet of conductor or cable and reeling or coiling it in a workmanlike manner in such a way it can be reused by the Contractor or the Owner. The Owner will furnish to the Contractor reels if it is to be returned to the Owner's warehouse on reels. The removal unit for each size of conductor or cable is shown by the prefix I followed by D and the conductor or cable type; thus an I-D 6ACWC signifies the removal unit for 1,000 feet of 6A copper-weld-copper conductor.

D. Guys. All guys regardless of length, type of attachment, or size of guy strand are specified by the same unit; thus an I-E signifies the removal of any guy.

E. Anchors. Only anchor rods are to be removed by the Contractor in anchor removal units. The anchors will be left in the ground; thus an I-F signifies the removal of any anchor rod. If the rod cannot be re-screwed, the end of the rod shall either be cut off or bent down so that the rod will be at least 18 inches below ground.

F. Transformer. The unit for removal of transformer assembly units is divided into two sections, (1) Conventional Transformer Assembly, and (2) Self-protected Transformer Assembly. Only one unit specified for each type, and all sizes of transformers from 1 to 15 kVA within each group will be covered by the same unit. "Self-protected" refers to transformers when all protective equipment is mounted on or within the transformer. "Conventional" refers to transformers where protective equipment is mounted separately from the transformer. The unit is designated by the prefix

I followed by the description of the unit to be removed; thus I-G Conventional signifies the removal of a conventional transformer assembly for any size transformer from 1 to 15 kVA.

G. Secondary Units. The unit for removal of secondary assemblies includes, in addition to the removal of the assembly itself, all necessary handling such as untying, re-sagging, and retying of secondary conductor or cables where existing secondary conductor or cable is to be reused.

In addition, the unit for removal of the secondary assembly includes the handling or holding of any conductor at tap lines where such is involved, and the reinstalling of such conductor in accordance with the Specifications.

H. Service Unit. The unit for removal of service assemblies includes, in addition to the removal of the assembly itself, all necessary handling such as untying, re-sagging, and untying of service conductor or cable where existing service conductor or cable is to be reused.

The following descriptions applying to those removal units not sufficiently explicit:

Unit	Description

CONSTRUCTION UNITS – LINE CHANGES (Continued)
Section I – REMOVAL ASSEMBLY UNITS

Pole Top Assy - 1 Phase	
Unit No.	Unit Labor Price
VA 1-01	
VA 1-011	
VA 1-011L	
VA 1	
VA 1-02	
VA 1-03	
VA 1-1	
VA 2	
VA 2-01	
VA 2-021	
VA 3	
VA 4	
VA 5	
VA 5-1	
VA 5-2	
VA 5-2A	
VA 5-3	
VA 6	
VA 6-2	
VA 7	
VA 7A	
VA 7B	
VA 8	
VA 8-2	
VA 9	
VA 9-1	

Pole Top Assy - V Phase	
Unit No.	Unit Labor Price
VB1	
VB1-1	
VB2	
VB2-1	
VB3	
VB4-1	
VB5-1	
VB5-12	
VB7	
VB7A	
VB7B	
VB8	
VB8-1	
VB8-2	
VB9	
VB9-1	
VB9-2	
VB9-3	

Pole Top Assy - 3 Phase	
Unit No.	Unit Labor Price
VC1	
VC1-1	
VC1-2	
VC1-3	
VC1-13NP	
VC1-13JNP	
VC1-15NP	
VC1-16NP	
VC2	
VC2-2	
VC3	
VC4	
VC5-1	
VC5-1L	
VC7	
VC7-1	
VC7B	
VC8	
VC8-1	
VC8-1A	
VC8-2	
VC8-2A	
VC8-3	
VC9	
VC9-1	
VC9-2	
VC9-3	

Pole Top Assy - Dbl Circuit	
Unit No.	Unit Labor Price
VDC-C1C	
VD1-81	
VD1-81L	
VD1-83	
VD1-83L	
VD2-91	
VD2-91L	
VD6-91	

Guy Assembly Units	
Unit No.	Unit Labor Price
E1-01	
E1-01L	
E3-10	
E10	
E15	
E20	
E22	
E25	

Anchor Assembly Units	
Unit No.	Unit Labor Price
F1-12	
F1-14	
F2-12	
F311	
F5-3	

Conductor	
Unit No.	Unit Labor Price
#6GS	
#4 ACSR	
#2 ACSR	
#1/0 ACSR	
#4/0 ACSR	
#2 TX	
#1/0 TX	
#2QX	
#6 DX	
#4TX	
#2/0 TX	
#4/0 TX	
#1/0 QX	
#477 ACSR	
#795 ACSR	

Transformer Units	
Unit No.	Unit Labor Price
DVG1-4	
DVG1-5	
DVG1-6	
DVG2-1	
DVG3-1	
DVG3-2	
DVG3-3	

Secondary Assembly Units	
Unit No.	Unit Labor Price
J1-1	
J1-2	
J2-1	
J2-2	
J3-1	

Service Assembly Units	
Unit No.	Unit Labor Price
K1-2	
K2-1	
K2-2	
K3-1	
K3-2	

Pole Units	
Unit No.	Unit Labor Price
P35-5	
P40-3	
P40-4	
P40-5	
P45-4	
P45-5	
P50-2	
P50-3	
P55-2	
P55-3	
P60-2	

Miscellaneous Assembly Units	
Unit No.	Unit Labor Price
111-1	
H2-1	
H3-1	
N1-1	
N1-11	
N2-21	
N2-1	
N3-1	
N5-1	
N5-2	
N6-1	
P1-01	
VP1-01	
VP1-11	
VP1-2	
VP1-3	
VR1-2	
VR2-2	
VR2-3	
VR3-2	
VR3-3	
VR3-5	
VR3-6	
VR4-1	
VR4-2	
VR4-4	
VR4-5	

Miscellaneous Assembly Units	
Unit No.	Unit Labor Price
VR4-6	
VR5-1A	
VR5-1B	
VR5-1C	
VS1-01	
VS1-03	
VS1-1	
VS1-2	
VS1-3	
VS1-4	
VS2-01	
VS2-02	
VS2-03	
VS2-04	
VS2-05	
VS2-21	
VS2-31	
VS2-32	
VS2-33	
VS3-16	
VS3-20	
VY1-1	
VY1-3	
VY2-1	
VY2-11	
VY2-2	
VY2-3	

Miscellaneous Assembly Units	
Unit No.	Unit Labor Price
VY2-4	
VY2-5	
VY3-2	
VY3-3	
VY3-4	
W3-1	
W3-2	

Miscellaneous Unit Pricing

Removal assembly units cover the furnishing for the removal of existing units of construction from existing lines, disassembling into material items, and all labor and transportation for the returning of all materials to the warehouse of the Owner in an orderly or transporting elsewhere to the site of the Project for reuse in the prosecution of this Contract as directed by the Owner.

The new unit prices in the line changes section shall include all labor required to reinstall in accordance with specifications any conductors temporary detached. The Contractor will reinstall at his own expense any other removed units by him for his own convenience.

Transfer unit prices shall include all labor required to transfer the units from an existing structure to a new structure in accordance with specifications.

MISC. UNITS	NEW	REMOVAL	TRANSFER
Armor Rods Used where specified for in spec. units.			
Animal/Bird Guards Guards bushings against possible animal/snake contact.			
Hand dig dirt (ft.) Pole, anchor, or hand digging while transferring equipment, United's or members.			
Hand dig rock (ft.) Pole, anchor, or hand digging while transferring equipment, United's or members.			
Removal of Satellite Dish, Basketball Goal, Bird House, etc. Removal of any foreign material not associated with United's electrical system.			
Plumb pole Straighten existing pole.			
Plywood in per hr. Hourly charge for ply-wooding equipment into location			
Pole Foam Using pole set (where needed)			
Haul off excess dirt (if needed) When using pole set, the excess dirt will need to be disposed of.			
Tighten hardware Tighten all hardware on existing pole.			
Pole top insulator only Insulator that is broken, damaged, or two piece on pole.			
Primary Jumper Jumper used where not included in units.			
Primary splice Crimp type or automatic type.			
Primary tie Where not included in unit			
Pull stub pole Existing stub (various lengths)			

MISC. UNITS	NEW	REMOVAL	TRANSFER
Repair conduit Where conduit is broken, damaged, or needed added onto.			
Repair ground wire Repair ground wire from ground to neutral connection, this includes staples driven and adding if needed per spec.			
Re-pull Guy wire Tighten existing guy wire.			
Re-sag Primary/Neutral Re-sag existing wire on structure.			
Re-sag Secondary Re-sag existing wire on structure			
Rock per ft. Adder when digging in solid rock .			
Saw off pole Top pole due to other equipment on pole.			
Secondary splice Splicing secondary cable (per leg)			
Select backfill per ft. When specified to use select fill (per ft.) Material will be cost plus.			
Split bolt When not called for in units			
CATV in line Retiring, or transferring existing catv on pole.			
CATV dead end Retiring, or transferring catv dead-end on pole.			
Phone pedestal transferring phone pedestal (where applicable)			
Telephone cable in line (large.) Retiring or transferring existing phone cable.			
Telephone cable in line (small.) Retiring or transferring existing phone cable.			
Telephone dead end (large.) Retiring or transferring existing phone cable.			
Telephone dead end (small) Retiring or transferring existing phone cable.			
Members plug/switch Members elect. Equipment on pole.			
Member's Underground Service Retire or transfer member underground service on pole.			
Open wire sec. Under-build secondary on pole.			
Member disconnect Retire or transfer members disconnect equipment on pole.			
Member loop Hanging new, retiring, or transferring existing loop.			

MISC. UNITS	NEW	REMOVAL	TRANSFER
Member riser Retire or transfer member's underground riser on pole.			
UA-1 1-phase underground dip pole. (dead end single phase structure), includes, arresters, pot heads, animal guards, wire supports, cut outs, all wiring, warning signs			
UA-3 1-phase underground dip pole. (dead end three phase structure), includes, arresters, pot heads, animal guards, wire supports, cut outs, cross arms, all wiring, warning signs			
UB1 Vee-phase underground dip pole. (dead end vee phase structure), includes, arresters, pot heads, animal guards, wire supports, cut outs, cross arms, all wiring, warning signs			
UC1 Three phase underground dip pole, (dead end 3-phase structure), includes, arresters, pot heads, animal guards, wire supports, cut outs, cross arms, all wiring, warning signs			
UC1-1 Three phase underground dip pole, (dead end 3-phase structure), includes, arresters, pot heads, animal guards, wire supports, cut outs, cross arms, mounting brackets all wiring, warning signs			
UM5-2 secondary underground riser 2" includes straps, weather-head, signage.			
UM5-3 secondary underground riser 3" includes straps, weather-head, signage.			
UM5-4 secondary underground riser 4" includes straps, weather-head, signage.			
Transformer spades Adding wire connectors (spade type) to existing services			
Pole key Only used where called for.			
Change fuse Includes temp. jumpers for changing out "hot"			
Floater (1) Floater includes dead ends. And jumpers (if applicable)			
Pole holes extra depth per ft. extra depth when called for per ft.			
Airplane balls (1) Visible airplane ball, all connectors.			

Hourly and Storm Damage Rates

LABOR	REGULAR RATE	OVERTIME RATE	STORM RATE (PORTAL TO PORTAL)	COMMENTS
Superintendent				
Safety Coordinator				
General Foreman				
Crew Foreman				
Lineman				
Equip. operator				
Ground-man				
Per Diem				This includes per man per day, lodging and meals
EQUIPMENT				
Track digger/Bucket				
Haul Truck/Trailer				
Digger Derrick				
Pressure Digger				
Bucket truck				
Bull Dozer				
Rope Rig				
Tensioner				
Tractor				
Pick-up				
Pole Trailer				
Material Trailer				
Skid Steer with Pole Setter and Digger				
Skid Steer Haul Trailer				
All Terrain Track Digger				
Tractor/Front End Loader				
Backyard Machine				

Special Equipment Costs

The following pricing is for the installation and removal of special equipment. This information will be utilized for United's special equipment costing purposes, and **will not be included in the bid evaluation.**

Pricing for the installation or retirement of the equipment only (including transportation to or from the location).		
Special Equipment	Installation Cost	Retirement Cost
1.5 kVA Conventional Transformer		
10-15-25 kVA Conventional Transformer		
37.5 kVA Conventional Transformer		
50 kVA Conventional Transformer		
75-100 kVA Conventional Transformer		
167-500 kVA Conventional Transformer		
225-500 kVA Step Transformer		
833 kVA Step Transformer		
2500-3750 kVA Step Transformer		
5000 kVA Step Transformer		
Electronic Single Phase Recloser		
Single Phase Versatech Recloser		
NOVA Three Phase Recloser		
NOVA Triple Single Recloser		
Group Operated Airbreak Switch - Three Phase		
S&C SCADA-Mate Switch - Three Phase		
Three Phase Gang/Hookstick Operated Switch		
Voltage Regulator - Single Phase		
Single Phase Capacitor		
Single Phase Primary Meter Set		
Three Phase Primary Meter Set		

UNITED COOPERATIVE SERVICES

Information to be Furnished with Bid

Furnished information regarding available underground crews and equipment. Please complete the following:

1. Superintendent for Project: _____
2. Foreman available for Project: _____

3. Furnish list of available equipment for project:

4. Furnish names and years experience of personnel qualified to terminate and splice primary cable:

5. References – At least 5 references for comparable work experience with installation of electrical distribution primary and secondary. Include the Company Name, Contact Person, Phone Number and E-mail Address for each Reference:

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U.S. Department of Agriculture
Rural Utilities Service
CERTIFICATE OF CONTRACTOR

_____ certifies that he/she is the

_____ of _____,
TITLE NAME OF CONTRACTOR

the Contractor, in a Construction Contract No. _____,

dated _____, 20____, entered into between the Contractor and

United Electric Cooperative Services, Inc. _____, RUS designation Texas 164 UNITED _____,
NAME OF RUS BORROWER

the Owner, and that he or she is authorized to and does make this certification on behalf of said Contractor in order to induce the Owner to make payment to the Contractor, in accordance with the provisions of said Construction Contract.

Undersigned further says that all persons who have furnished labor in connection with said construction have been paid in full, that the names of manufacturers, material suppliers, and subcontractors that furnished material or services or both in connection with such construction and the kind or kinds of material or services or both so furnished are:

NAME	KIND OF MATERIAL AND SERVICE
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

and that the releases of liens executed by all such manufacturer material suppliers and subcontractors have been furnished the Owner.

_____ By _____
Date President

This Certificate must be signed with the full name of the Contractor. If the Contractor is a partnership, this Certificate must be signed in the partnership name by a partner. If the Contractor is a corporation, this Certificate must be signed in the corporate name by a duly authorized officer.

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U.S. Department of Agriculture
Rural Utilities Service

CERTIFICATE OF CONTRACTOR AND INDEMNITY AGREEMENT (Line Extensions)

_____ certifies that he or she is the

President

of

TITLE

NAME OF CONTRACTOR

the Contractor, in a Construction Contract No. _____,

dated _____, 20____, entered into between the Contractor and,

United Electric Cooperative Services, Inc.

RUS designation Texas 164 UNITED

NAME OF RUS BORROWER

the Owner, and that he or she is authorized to and does make this Certificate and Indemnity Agreement on behalf of said Contractor in order to induce the Owner to make payment to the Contractor, in accordance with the provisions of the said contract.

The undersigned further says that all persons who have furnished labor in connection with the Section of the project

represented by the inventory dated _____, 20____, in the

amount Of \$ _____, have been paid in full; that all manufacturers, material suppliers, and subcontractors which furnished any materials or services, or both, for the said Section of the project have been paid in full; that no lien has been filed against the project and no person has any right to claim any lien against the project.

The undersigned further says that if the Owner pays the Contractor the contract price for the said Section of the project the Contractor will indemnify and hold harmless and does hereby undertake and agree to indemnify and hold harmless the Owner from any claim or lien arising out of the negligence or other fault of the Contractor in respect of the performance of the contract which may have been or may be filed against the Owner.

Date

By

President

This Certificate must be signed with the full name of the Contractor. If the Contractor is a partnership, this Certificate must be signed in the partnership name by a partner. If the Contractor is a corporation, this Certificate must be signed in the corporate name by a duly authorized officer.

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CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS - PRIMARY COVERED TRANSACTIONS

INSTRUCTIONS FOR CERTIFICATION

1. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.
2. The inability of a person to provide the certification required below will not necessarily result in denial of participation in the covered transaction. The prospective participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such person from participation in this transaction.
3. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.
4. The prospective primary participant shall provide immediate written notice to the department or agency to which this proposal is submitted if at any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
5. The terms *covered transaction*, *debarred*, *suspended*, *ineligible*, *lower tier covered transaction*, *participant*, *person*, *primary covered transaction*, *principal*, *proposal*, and *voluntarily excluded*, as used in this clause, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is being submitted for assistance in obtaining a copy of those regulations.
6. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transactions with a person who is proposed for debarment under 48 CFR part 9, subpart 9.4, debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
7. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
8. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not proposed for debarment under 48 CFR part 9, subpart 9.4, debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the List of Parties Excluded from Federal Procurement and Nonprocurement Programs.
9. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge

and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

10. Except for transactions authorized under paragraph 6 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is proposed for debarment under 48 CFR part 9, subpart 9.4, suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

CERTIFICATION

- (1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
- (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded by any Federal department or agency;
 - (b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
 - (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- (2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

Organization Name

PR/Award or Project Name

Name and Title

Signature

Date

U.S. Department of Agriculture
Rural Utilities Service

WAIVER AND RELEASE OF LIEN

WHEREAS the undersigned,

NAME OF MANUFACTURER, MATERIAL SUPPLIER OR SUBCONTRACTOR

has furnished to _____ the following:

NAME OF CONTRACTOR

for

KIND OF MATERIAL AND SERVICES FURNISHED

use in the construction of a project belonging to United Electric Cooperative Services, Inc.
NAME OF BORROWER

and designated the Rural Utilities Service as Texas 164 UNITED
RUS DESIGNATION

NOW, THEREFORE, the undersigned,

NAME OF MANUFACTURER, MATERIAL SUPPLIER, OR SUBCONTRACTOR

for and in consideration of \$ _____ and other good and valuable consideration, the receipt whereof is hereby acknowledged, do(es) hereby waive and release any and all liens, or right to or claim of lien, on the above described project and premises, under any law, common or statutory, on account of labor or materials, or both, heretofore or hereafter furnished by the undersigned to or for the account of

said _____ for said project .

NAME OF CONTRACTOR

Given under my (our) hand(s) and seal(s) this _____ day of _____, 20 _____.

Name of Manufacturer, Material Supplier, or Subcontractor

By _____
President

This Waiver and Release of Lien must be signed with the full name of the Manufacturer, Material Supplier, or Subcontractor. If the Manufacturer, Material Supplier, or Subcontractor is a partnership, this Waiver and Release of Lien must be signed in the partnership name by a partner. If the Manufacturer, Material Supplier, or Subcontractor is a corporation, this Waiver and Release of Lien must be signed in the corporate name by a duly authorized officer and the corporate seal affixed and attested by the Secretary of the Corporation.

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LOBBYING CERTIFICATION

Certification for Contracts, Grants, Loans, and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Organization Name

Name of Authorized Official

Signature

Date

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**Request for Taxpayer
Identification Number and Certification**

**Give form to the
requester. Do not
send to the IRS.**

Print or type
See Specific Instructions on page 2.

Name (as shown on your income tax return)

Business name, if different from above

Check appropriate box: ☐ Individual/Sole proprietor ☐ Corporation ☐ Partnership
☐ Limited liability company. Enter the tax classification (D=disregarded entity, C=corporation, P=partnership) ▶ -----
☐ Other (see instructions) ▶

☐ Exempt
payee

Address (number, street, and apt. or suite no.)

Requester's name and address (optional)

City, state, and ZIP code

List account number(s) here (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on Line 1 to avoid backup withholding. For individuals, this is your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Note. If the account is in more than one name, see the chart on page 4 for guidelines on whose number to enter.

Social security number

or

Employer identification number

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and
3. I am a U.S. citizen or other U.S. person (defined below).

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the Certification, but you must provide your correct TIN. See the instructions on page 4.

**Sign
Here**

Signature of
U.S. person ▶

Date ▶

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Purpose of Form

A person who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
2. Certify that you are not subject to backup withholding, or
3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income.

Note. If a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien,
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States,
- An estate (other than a foreign estate), or
- A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax on any foreign partners' share of income from such business. Further, in certain cases where a Form W-9 has not been received, a partnership is required to presume that a partner is a foreign person, and pay the withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid withholding on your share of partnership income.

The person who gives Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States is in the following cases:

- The U.S. owner of a disregarded entity and not the entity,

- The U.S. grantor or other owner of a grantor trust and not the trust, and
- The U.S. trust (other than a grantor trust) and not the beneficiaries of the trust.

Foreign person. If you are a foreign person, do not use Form W-9. Instead, use the appropriate Form W-8 (see Publication 515, Withholding of Tax on Nonresident Aliens and Foreign Entities).

Nonresident alien who becomes a resident alien. Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a "saving clause." Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items:

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.
2. The treaty article addressing the income.
3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.
4. The type and amount of income that qualifies for the exemption from tax.
5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

Example. Article 20 of the U.S.-China income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if his or her stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first protocol) and is relying on this exception to claim an exemption from tax on his or her scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a nonresident alien or a foreign entity not subject to backup withholding, give the requester the appropriate completed Form W-8.

What is backup withholding? Persons making certain payments to you must under certain conditions withhold and pay to the IRS 28% of such payments. This is called "backup withholding." Payments that may be subject to backup withholding include interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

Payments you receive will be subject to backup withholding if:

1. You do not furnish your TIN to the requester,
2. You do not certify your TIN when required (see the Part II instructions on page 3 for details),
3. The IRS tells the requester that you furnished an incorrect TIN,

4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or

5. You do not certify to the requester that you are not subject to backup withholding under 4 above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See the instructions below and the separate Instructions for the Requester of Form W-9.

Also see *Special rules for partnerships* on page 1.

Penalties

Failure to furnish TIN. If you fail to furnish your correct TIN to a requester, you are subject to a penalty of \$50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

Civil penalty for false information with respect to withholding. If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a \$500 penalty.

Criminal penalty for falsifying information. Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

Misuse of TINs. If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

Specific Instructions

Name

If you are an individual, you must generally enter the name shown on your income tax return. However, if you have changed your last name, for instance, due to marriage without informing the Social Security Administration of the name change, enter your first name, the last name shown on your social security card, and your new last name.

If the account is in joint names, list first, and then circle, the name of the person or entity whose number you entered in Part I of the form.

Sole proprietor. Enter your individual name as shown on your income tax return on the "Name" line. You may enter your business, trade, or "doing business as (DBA)" name on the "Business name" line.

Limited liability company (LLC). Check the "Limited liability company" box only and enter the appropriate code for the tax classification ("D" for disregarded entity, "C" for corporation, "P" for partnership) in the space provided.

For a single-member LLC (including a foreign LLC with a domestic owner) that is disregarded as an entity separate from its owner under Regulations section 301.7701-3, enter the owner's name on the "Name" line. Enter the LLC's name on the "Business name" line.

For an LLC classified as a partnership or a corporation, enter the LLC's name on the "Name" line and any business, trade, or DBA name on the "Business name" line.

Other entities. Enter your business name as shown on required federal tax documents on the "Name" line. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on the "Business name" line.

Note. You are requested to check the appropriate box for your status (individual/sole proprietor, corporation, etc.).

Exempt Payee

If you are exempt from backup withholding, enter your name as described above and check the appropriate box for your status, then check the "Exempt payee" box in the line following the business name, sign and date the form.

Generally, individuals (including sole proprietors) are not exempt from backup withholding. Corporations are exempt from backup withholding for certain payments, such as interest and dividends.

Note. If you are exempt from backup withholding, you should still complete this form to avoid possible erroneous backup withholding.

The following payees are exempt from backup withholding:

1. An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2),
2. The United States or any of its agencies or instrumentalities,
3. A state, the District of Columbia, a possession of the United States, or any of their political subdivisions or instrumentalities,
4. A foreign government or any of its political subdivisions, agencies, or instrumentalities, or
5. An international organization or any of its agencies or instrumentalities.

Other payees that may be exempt from backup withholding include:

6. A corporation,
7. A foreign central bank of issue,
8. A dealer in securities or commodities required to register in the United States, the District of Columbia, or a possession of the United States,
9. A futures commission merchant registered with the Commodity Futures Trading Commission,
10. A real estate investment trust,
11. An entity registered at all times during the tax year under the Investment Company Act of 1940,
12. A common trust fund operated by a bank under section 584(a),
13. A financial institution,
14. A middleman known in the investment community as a nominee or custodian, or
15. A trust exempt from tax under section 664 or described in section 4947.

The chart below shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 15.

IF the payment is for . . .	THEN the payment is exempt for . . .
Interest and dividend payments	All exempt payees except for 9
Broker transactions	Exempt payees 1 through 13. Also, a person registered under the Investment Advisers Act of 1940 who regularly acts as a broker
Barter exchange transactions and patronage dividends	Exempt payees 1 through 5
Payments over \$600 required to be reported and direct sales over \$5,000 ¹	Generally, exempt payees 1 through 7 ²

¹See Form 1099-MISC, Miscellaneous Income, and its instructions.

²However, the following payments made to a corporation (including gross proceeds paid to an attorney under section 6045(f), even if the attorney is a corporation) and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, and payments for services paid by a federal executive agency.

Part I. Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. If you are a resident alien and you do not have and are not eligible to get an SSN, your TIN is your IRS individual taxpayer identification number (ITIN). Enter it in the social security number box. If you do not have an ITIN, see *How to get a TIN* below.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN. However, the IRS prefers that you use your SSN.

If you are a single-member LLC that is disregarded as an entity separate from its owner (see *Limited liability company (LLC)* on page 2), enter the owner's SSN (or EIN, if the owner has one). Do not enter the disregarded entity's EIN. If the LLC is classified as a corporation or partnership, enter the entity's EIN.

Note. See the chart on page 4 for further clarification of name and TIN combinations.

How to get a TIN. If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local Social Security Administration office or get this form online at www.ssa.gov. You may also get this form by calling 1-800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at www.irs.gov/businesses and clicking on Employer Identification Number (EIN) under Starting a Business. You can get Forms W-7 and SS-4 from the IRS by visiting www.irs.gov or by calling 1-800-TAX-FORM (1-800-829-3676).

If you are asked to complete Form W-9 but do not have a TIN, write "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, generally you will have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

Note. Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon.

Caution: A disregarded domestic entity that has a foreign owner must use the appropriate Form W-8.

Part II. Certification

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if items 1, 4, and 5 below indicate otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). Exempt payees, see *Exempt Payee* on page 2.

Signature requirements. Complete the certification as indicated in 1 through 5 below.

1. Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983. You must give your correct TIN, but you do not have to sign the certification.

2. Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983. You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.

3. Real estate transactions. You must sign the certification. You may cross out item 2 of the certification.

4. Other payments. You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).

5. Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions. You must give your correct TIN, but you do not have to sign the certification.

What Name and Number To Give the Requester

For this type of account:	Give name and SSN of:
1. Individual	The individual
2. Two or more individuals (joint account)	The actual owner of the account or, if combined funds, the first individual on the account ¹
3. Custodian account of a minor (Uniform Gift to Minors Act)	The minor ²
4. a. The usual revocable savings trust (grantor is also trustee)	The grantor-trustee ³
b. So-called trust account that is not a legal or valid trust under state law	The actual owner ¹
5. Sole proprietorship or disregarded entity owned by an individual	The owner ³
For this type of account:	Give name and EIN of:
6. Disregarded entity not owned by an individual	The owner
7. A valid trust, estate, or pension trust	Legal entity ⁴
8. Corporate or LLC electing corporate status on Form 8832	The corporation
9. Association, club, religious, charitable, educational, or other tax-exempt organization	The organization
10. Partnership or multi-member LLC	The partnership
11. A broker or registered nominee	The broker or nominee
12. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity

¹ List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.

² Circle the minor's name and furnish the minor's SSN.

³ You must show your individual name and you may also enter your business or "DBA" name on the second name line. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.

⁴ List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.) Also see *Special rules for partnerships* on page 1.

Note. If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

Secure Your Tax Records from Identity Theft

Identity theft occurs when someone uses your personal information such as your name, social security number (SSN), or other identifying information, without your permission, to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund.

To reduce your risk:

- Protect your SSN.
- Ensure your employer is protecting your SSN, and
- Be careful when choosing a tax preparer.

Call the IRS at 1-800-829-1040 if you think your identity has been used inappropriately for tax purposes.

Victims of identity theft who are experiencing economic harm or a system problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 1-877-777-4778 or TTY/TDD 1-800-829-4059.

Protect yourself from suspicious emails or phishing schemes. Phishing is the creation and use of email and websites designed to mimic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.

The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to phishing@irs.gov. You may also report misuse of the IRS name, logo, or other IRS personal property to the Treasury Inspector General for Tax Administration at 1-800-366-4484. You can forward suspicious emails to the Federal Trade Commission at: spam@uce.gov or contact them at www.consumer.gov/idtheft or 1-877-IDTHEFT(438-4338).

Visit the IRS website at www.irs.gov to learn more about identity theft and how to reduce your risk.

Privacy Act Notice

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons who must file information returns with the IRS to report interest, dividends, and certain other income paid to you, mortgage interest you paid, the acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA, or Archer MSA or HSA. The IRS uses the numbers for identification purposes and to help verify the accuracy of your tax return. The IRS may also provide this information to the Department of Justice for civil and criminal litigation, and to cities, states, the District of Columbia, and U.S. possessions to carry out their tax laws. We may also disclose this information to other countries under a tax treaty, to federal and state agencies to enforce federal nontax criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism.

You must provide your TIN whether or not you are required to file a tax return. Payers must generally withhold 28% of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to a payer. Certain penalties may also apply.

U.S. Department of Agriculture
Rural Utilities Service

CERTIFICATE OF COMPLETION - CONTRACT CONSTRUCTION

I, the undersigned Architect or Engineer of the following Rural Utilities Service project, do hereby certify that:

1. The construction provided for pursuant to Construction Contract No. _____,

dated _____, 20_____, including all approved amendments, between

_____ United Electric Cooperative Services, Inc. _____, RUS designation _____ Texas 164 UNITED ("Owner")

and _____ ("Contractor")

has been completed as of _____, 20_____, and is in compliance with the provisions of the Construction Contract, including all plans, specifications, maps, and drawings and all modifications thereof.

2. Payment in full has been made to all persons who have furnished labor for the Project.

3. The Contractor has obtained valid releases of lien from all manufacturers, material suppliers, and subcontractors furnishing services or materials which were employed by the Contractor in the performance of the Construction Contract, and that such releases have been delivered by the Contractor to the Owner.

4. If applicable, the Final Inventory attached hereto and made a part hereof is a complete and accurate summary of all units of construction in the project and of all work performed in accordance with the Construction Contract.

5. If applicable, the staking sheets and tabulation of staking sheets upon which the Final Inventory is based show the accurate location, number, and kind of all units of construction of the project and show all work performed in accordance with the Construction Contract.

6. All defects in workmanship and materials reported during the period of construction of the project have been corrected.

7. The total cost of the project as completed is _____
dollars and _____ cents (\$ _____).

Dated this _____ day of _____, 20_____.

Name of Architect or Engineer

By _____

Date

Title

CERTIFICATE OF COMPLETION CONTRACT CONSTRUCTION

(continued)

We, the undersigned Owner and Contractor, do hereby certify that:

1. *The Project has been completed in accordance with the provisions of the Construction Contract, dated*

*_____ , 20____ , provided, however, that acceptance of the project by the
Owner shall not be deemed to relieve the Contractor of its obligations contained in the Construction Contract
with respect to defective workmanship or, materials discovered within one year after the date of completion.*

2. *If applicable, the Final Inventory attached hereto and made a part hereof is a complete and accurate summary
of all units of construction in the Project and of work performed in accordance with the Construction Contract.*

United Electric Cooperative Services, Inc.
a Texas cooperative corporation

Owner

Date

By _____
President

Name of Contractor

Date

By _____

Title

U.S. Department of Agriculture
Rural Utilities Service

CONTRACTOR'S BOND

1. Know all persons that we, _____, as

Principal, and _____, as Surety,

are held and firmly bound unto United Electric Cooperative Services, Inc.
(hereinafter called the "Owner") and unto the United States of America (hereinafter called the "Government")
and unto all persons, firms and corporations who or which may furnish materials for or perform labor on a

Rural Utilities Service project known as _____

and to their successors and assigns, in the penal sum of _____

dollars (\$ _____), as hereinafter set forth and for the payment of which sum well
and truly to be made we bind ourselves, our executors, administrators, successors and assigns jointly and
severally by these presents. Said project is described in a certain construction contract (hereinafter called the

"Construction Contract") between the Owner and the Principal, dated _____, 20____,
pursuant and subject to a certain loan contract (hereinafter called the "Loan Contract") between the Owner
and the Government, acting through the Administrator of the Rural Utilities Service (hereinafter called the
"Administrator").

2. The condition of this obligation is such that if the Principal shall well and truly perform and fulfill all the
undertakings, covenants, terms, conditions and agreements of the Construction Contract and any amendments
thereto, whether such amendments are or additions, decreases, or changes in materials, their quantity, kind or
price, labor costs, mileage, routing or any other purpose whatsoever, and whether such amendments are made
with or without notice to the Surety, and shall fully indemnify and save harmless the Owner and the
Government from all costs and damages which they, or either of them, shall suffer or incur by reason of any
failure so to do, and shall fully reimburse and repay the Owner and the Government for all outlay and expense
which they, or either of them shall incur in making good any such failure of performance on the part of the
Principal, and shall promptly make payment to all persons working on or supplying labor or materials for use
in the construction of the project contemplated in the Construction Contract and any amendments thereto, in
respect of such labor or materials furnished and used therein, to the full extent thereof, and in respect of such
labor or materials furnished but not so used, to the extent of the quantities estimated in the Construction
Contract and any amendments thereto to be required for the construction of the project, and shall well and
truly reimburse the Owner and the Government, as their respective interests may appear, for any excess in cost
of construction of said project over the cost of such construction as provided in the Construction Contract and
any amendments thereto, occasioned by any default of the Principal under the Construction Contract and any
amendments thereto, then this obligation shall be null and void, but otherwise shall remain in full force and
effect.

3. It is expressly agreed that this bond shall be deemed amended automatically and immediately, without formal
and separate amendments hereto, upon any amendment to the Construction Contract, so as to bind the
Principal and the Surety to the full and faithful performance of the Construction Contract as so amended,
provided only that the total amount of all increases in the cost of construction shall not exceed 20 percent of the
amount of the maximum price set forth in the Construction Contract. The term "Amendment," wherever used in
this bond, and whether referring to this bond, the Construction Contract or the Loan Contract shall include any
alteration, addition, extension, modification, amendment, rescission, waiver, release or annulment, of any
character whatsoever.

4. It is expressly agreed that any amendment which may be made by agreement or otherwise between the
Principal and the Owner in the terms, provisions, covenants and conditions of the Construction Contract, or in
the terms, provisions, covenants and conditions of the Loan Contract (including, without limitation, the
granting by the Administrator to the Owner of any extension of time for the performance of the obligations of

the Owner under the Loan Contract or the granting by the Administrator or the Owner to the Principal of any extension of time for the performance of the obligations of the Principal under the Construction Contract, or the failure or refusal of the Administrator or the Owner to take any action, proceeding or step to enforce any remedy or exercise any right under either the Construction Contract or the Loan Contract, or the taking of any action, proceeding or step by the Administrator or the Owner, acting in good faith upon the belief that the same is permitted by the provisions of the Construction Contract or the Loan Contract) shall not in any way release the Principal and the Surety, or either of them or their respective executors, administrators, successors or assigns, from liability hereunder. The Surety hereby acknowledges receipt of notice of any amendment, indulgence or forbearance, made, granted or permitted.

5. This bond is made for the benefit of all persons, firms and corporations who or which may furnish any materials or perform any labor for or on account of the construction to be performed under the Construction Contract and any amendments thereto, and they, and each of them, are hereby made obligees hereunder with the same force and effect as if their names were written herein as such, and they and each of them may sue hereon.

In witness whereof, the undersigned have caused this instrument to be executed and their respective corporate seals to be affixed and attested by their duly authorized representatives this

_____ day of _____, 20_____.

Principal (SEAL)

ATTEST:

By _____

Secretary

Surety (SEAL)

ATTEST:

By _____

Secretary

Address of Surety's Home Office

By _____
Resident Agent of Surety

Signatures The Contractor's Bond must be signed with the full name of the Contractor. If the Contractor is a partnership the Contractor's Bond must be signed in the partnership name by a partner. If the Contractor is a corporation the Contractor's Bond must be signed in the corporate name by a duly authorized officer and the corporate seal affixed and attested by the Secretary of the corporation. A typewritten copy of all such names and signatures shall be appended.

Power of Attorney: The Contractor's Bond must be accompanied by a power of attorney authorizing execution on behalf of the Surety and, in jurisdictions so requiring should be countersigned by a duly authorized resident agent of the Surety.

U.S. Department of Agriculture
Rural Utilities Service

BID BOND

1. KNOW ALL PERSONS that we, _____
_____ as Principal, and

_____,
as Surety, are held and firmly bound unto United Electric Cooperative Services, Inc.
_____ (hereafter called the "Owner")
in the penal sum of ten percent (10%) of the amount of the bid referred to in paragraph 2 below, but not to
exceed _____ dollars (\$ _____), as
hereinafter set forth and for the payment of which sum well and truly to be made we bind ourselves, our
executors, administrators, successors and assigns, jointly and severally, by these presents;

2. WHEREAS, the Principal has submitted a bid to the Owner for the construction of the Rural Utilities Service
project known as _____.

3. NOW, THEREFORE, the condition of this obligation is such that if the Owner shall accept the bid of the
Principal, and

- a. the Principal shall execute such contract documents, if any, as may be required by the terms of the bid and
give such Contractor's Bond or Bonds for the performance of the contract and for the prompt payment of
labor and material furnished for the project as may be specified in the bid, or
- b. in the event of the failure of the Principal to execute such contract documents, if any, and give such
Contractor's Bond or Bonds, if the Principal shall pay to the Owner the difference, not to exceed the penal
sum hereof, between the amount specified in the bid and such larger amount for which the Owner may in
good faith contract with another party to construct the project, then this obligation shall be void, otherwise to
remain in full force and effect.

IN WITNESS WHEREOF, the undersigned have caused this instrument to be executed and their respective
corporate seals to be affixed and attested by their duly authorized representatives this

_____ day of _____, 20_____.

Principal (Seal)

ATTEST: By _____

Secretary Title

Surety (Seal)

ATTEST: By _____

Secretary Title

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Federal Emergency Response Telephone and Contact Information

Criminal/Terrorist Incident To locate local office	Federal Bureau of Investigation http://www.fbi.gov/contact/fo/territory.htm
DHS/LAIP (NIPC)	http://www.dhs.gov or http://www.nipc.gov 1-202-323-3204 Email: nicc@dhs.gov Phone: 202-282-9201 Fax: 703-607-4998
U.S. National Response Team	http://www.nrt.org
Chemical Incident	National Response Center 1-888-424-8802
Biological Incident	Medical Research Institute of Infectious Diseases 1-800-872-7443
Radiation Incident	Armed Forces Radiobiology Research Institute AFRR/IRAT 301-295-0530 1-800-SKY-PAGE PIN 801-0338 REAC/TS 8:00 AM-4:30 PM (CST) 1-865-576-3131 AFTER 4:30 PM (CST) 1-865-576-1005
Health Incident	Health and Human Services http://www.hhs.gov Center for Disease Control http://www.cdc.gov http://www.bt.cdc.gov Public Inquiries 404-639-3534 or 1-800 311-3435 Center for Disease Control and Prevention 1-404-639-3311
ESISAC	Email: esisac@nerc.com Internet: http://www.esisac.com Phone: 609-452-8060 (NERC office hours) Fax: 609-452-9550

NOTE: Any additional numbers that the utility deems needed (local hazmat, fire and police departments, etc.) should be added to this list.

11/18/2015

UNITED STATES DEPARTMENT OF AGRICULTURE
Rural Utilities Service

BULLETIN 1724D-106

SUBJECT: Considerations For Replacing Storm-Damaged Conductors

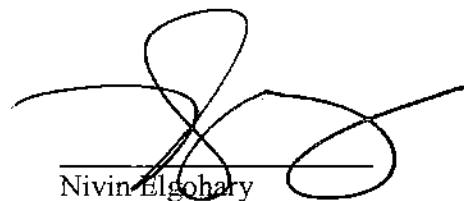
TO: RUS Electric Borrowers

EFFECTIVE DATE: Date of Approval

OFFICE OF PRIMARY INTEREST: Distribution Branch, Electric Staff Division

AVAILABILITY: This is a revision of an existing guide bulletin and is available on the Rural Utilities Service website at <http://www.usda.gov/rus/electric/bulletins.htm>.

PURPOSE: Immediately after a major storm like a hurricane, electric utility personnel are very busy and focused on restoring electric service. Often during this period of service restoration and commotion, electric utility engineers or others have to make an immediate decision on whether to simply re-install downed or damaged conductors or to replace them with new conductors. This bulletin provides guidelines that will assist Rural Utilities Service (RUS) borrowers to expediently make this decision.



Nivin Elgohary

Acting Assistant Administrator
Electric Program

8/3/10

Date

TABLE OF CONTENTS

1	PURPOSE
2	RESTORATION OF ELECTRIC SERVICE
3	RUS ACCOUNTING REQUIRMENTS
4	BENEFITS OF REPLACING STORM-DAMAGED CONDUCTORS
5	REASONS TO REPLACE DAMAGED CONDUCTORS WITH LARGER CONDUCTORS

INDEX:

Conductors, Distribution
Conductors, Transmission

ABBREVIATIONS

ACSR	Aluminum Conductor Steel Reinforced
CWP	Construction Work Plan
LRP	Long Range Plan
FEMA	Federal Emergency Management Agency
RUS	Rural Utilities service

DEFINITIONS

For the purposes of this bulletin, the following definitions are used:

Storm (or major storm) - The most recent major natural catastrophic event such as a hurricane, tornado, flood, forest fire or an ice storm.

Line Section - All of the spans between guyed, dead-end, poles or structures. (In this bulletin it is assumed that new conductors will be installed and sagged in the entire line section because that is the standard method of installing new conductors.)

Conductor-Span - One span of one primary phase or a neutral conductor.

(e.g., 5 spans with 3 phases and a neutral equal 20 Conductor-Spans.) $[5 \times (3 + 1) = 20]$

Downed conductor – A conductor that is lying on or near the ground as the result of a storm. (A downed conductor has usually either been torn away from its pole-top attachments, or it is still attached to the top of a pole that has been broken off.)

Damaged conductor – A conductor that:

Is entirely broken or contains broken strands;

Has been permanently stretched, annealed, or deformed such that cannot be re-installed within predictable sag values or reasonable tension limits;

Is severely pitted, burned, or similarly harmed in other ways;

Has areas of rusted steel or corroded (white powder) aluminum strands; or

Contains one or more splices (with automatic splices or compression type connectors) other than those installed when the conductor was initially installed.

Re-install conductors – A repair if necessary and restore all of the downed or damaged conductors in a line section to their original position before the storm.

Replace conductors - Remove the downed or damaged conductors (even if they have been previously re-installed) and install new conductors of the same size or larger.

FORMS

Questionnaire Form: “Reasons to Replace Stormed-Damaged Conductors”

1 PURPOSE

- a This bulletin presents guidelines for borrowers to use during emergency system restorations when borrowers need to decide without delay whether to re-install or to replace storm-damaged conductors. This bulletin is not to be used for making undamaged conductor replacement decisions normally made in a construction work plan (CWP) or a long-range plan (LRP) that employ additional studies and a much more rigorous analysis.
- b The brief questionnaire at the end of this bulletin can be used to determine, document and validate replacing storm-damaged conductors with new conductors. If one or more of the 6 criteria in the questionnaire are met, then the conductor replacement is justified. A knowledgeable utility engineer in the field can complete the questionnaire when conductor replacement decisions need to be made promptly, without the benefit of an engineering study, during restoration activities after a major storm event.
- c If borrowers are seeking grant funds from FEMA, RUS recommends that borrowers reference and comply with the FEMA Disaster Assistance Fact Sheet DAP9580.6.

2 RESTORATION OF ELECTRIC SERVICE

- a Immediately after a storm, electric utilities expediently strive to make the distribution supply system safe for the general public, and restore electric service to all consumers in an orderly, prioritized manner (starting from the substation). For example, the restoration of service to hospitals and re-energizing main feeders are deemed high priority. Whenever possible, line workers make good, permanent repairs to the storm-damaged distribution system. However during emergency conditions, line workers routinely make temporary repairs (including non-standard construction) until the time and resources are available to return and make permanent repairs to restore the distribution supply system to its condition before the storm.
- b For the purposes of this bulletin, it is assumed that all distribution line materials other than conductors (such as poles, crossarms, insulators and transformers) that have been damaged during a storm have been or will be permanently replaced on a "like-with-like" basis. The purpose of such repairs and material replacements is to restore the distribution infrastructure to pre-storm.

3 RUS ACCOUNTING REQUIREMENTS

Borrowers' activities related to materials retirements, new material replacements, and construction and other activities pertaining to storm damage restoration involve accounting procedures that are beyond the scope of this bulletin. However, because of the detailed nature of these accounting provisions, RUS recommends that borrowers refer to RUS Bulletin 1767B-1, "Uniform System of Accounts - Electric Program." Borrowers should specifically review Accounting Method and Procedure #136, "Storm Damage," in

RUS Bulletin 1767B-1. Copies of RUS Bulletin 1767B-1 are available on the RUS website at: <http://www.usda.gov/rus/rcgs/bulls/1767b-1.pdf>

4 BENEFITS OF REPLACING STORM-DAMAGED CONDUCTORS

Replacing downed or damaged conductors immediately or soon after a storm will eliminate the duplicate labor and cost of a documented and planned near future replacement of the conductors based on a previous study of voltage, loading, or physical condition needs. Also replacing downed and damaged conductors immediately or soon after a storm will eliminate the duplicate labor and cost of re-installing the downed and damaged conductors yet another time (or ultimately replacing them) should the old conductors fail again when subjected to another storm before they are replaced.

5 REASONS TO REPLACE DAMAGED CONDUCTORS WITH LARGER CONDUCTORS

If the decision has been made to replace downed or damaged conductors, larger conductors should be installed if:

- a Larger conductors are called for and documented in a current CWP or LRP;
- b The existing conductors are made of steel, Amerductor, Copperweld or hard-drawn copper;
- c The conductors are smaller than #2 ACSR; or
- d There are known (and preferably documented) undesirable primary voltage drops or primary conductor overload problems that can be attributed to the conductors in the line section in question.

QUESTIONNAIRE FORM: “Reasons to Replace Stormed-Damaged Conductors

Company: _____ Address: _____

Engineer: _____ Date: _____

Date and type of storm [name] _____

Circuit, lead / line & section location: _____ No. of Spans: _____

Existing Conductor [phases, size & type: approx. age]: _____

Number of Conductor-Spans¹ in the line section; Total Number = _____ Damaged = _____

Description of damage: _____

Number of poles in line section: Total Number = _____ Number Damaged = _____

Proposed Conductor [phases, size & type]: _____

Comments: _____

Reasons for Replacing Conductors in the above Line Section	YES	NO
#1. 25% or more of the conductor spans are damaged. Damage is defined as broken conductors, broken strands, the existence of new (disaster-related) splices, and/or if the conductor is severely pitted, burned, kinked, or damaged.		
#2. 30% or more of the line spans are visibly out of sag or do not meet clearances (for example, the conductor does not meet clearance requirements for conductor-to-conductor or conductor-to-ground).		
#3. 40% or more of the poles were replaced or need to be replaced or plumbed (straightened) due to the disaster.		
#4. 40% or more of the supporting structures have a disaster-related damaged component (for example, x-arms, braces, pins, ties, insulators, guys/anchors, or poles).		
#5. The sum of the percentages of the above criteria is 65% or more.		
#6. Other additional compelling information provided by a licensed professional engineer.		

¹ A Conductor-Span means one span of one primary phase or neutral conductor.

Example: 5 spans with 3 phases and neutral equals 20 Conductor-Spans. [5 x (3 + 1) = 20]



FEMA Rollout of Temporary Housing Units

TEC attended a meeting at the PUC this week about FEMA's rollout of temporary housing units or "MHUs" for Hurricane Harvey victims in Texas. Also in attendance by phone were several co-ops serving areas affected by the hurricane. FEMA asked the PUC to coordinate the meeting with utilities, co-ops, MOUs, and cities to discuss FEMA's interest in having "uniform standards" for connecting electricity to MHUs as well as streamlined construction permitting. The FEMA representative, Nathan Knapp, Deputy Operations Section Chief (Recovery), said FEMA is interested in this approach because the agency experienced numerous delays in electric connections and city permitting after a severe rain event in Louisiana.

FEMA identified the following co-ops serving in the Harvey-affected areas of the state: **Blucbonnet, Deep East, Fayette, GVEC, Jackson, Jasper Newton, Karnes, Mid-South Synergy, Nueces, Sam Houston, San Bernard, San Patricio, Victoria, and Wharton County.** *TEC thanks the many co-op managers and knowledgeable employees who took time to join the call and contribute to the discussion.*

Representatives from TNMP, AEP, CenterPoint, Entergy, TPPA, Texas Municipal League, and the General Land Office (GLO) also participated in the call. As you know, each utility varies in the way it handles connections, and while some electric installation standards did not pose issues, others drew a longer discussion. For example, most co-ops and utilities agreed that meter poles would be buried 5 feet deep and set outside the easement. There was a longer discussion about whether the co-ops and utilities on the call hang the meter loop on the transformer pole or the intermediate pole; prefer to set a temporary pole or a permanent pole; and set the meter box at 4 foot 5 inches or 6 feet.

FEMA currently has approved 8800 applicants for MHUs. FEMA will send list of applicants to the GLO which will deliver the MHUs. The Councils of Government (COGs) will oversee the MHU installation at the local level. As next steps:

1. FEMA will revise the proposed measurements shown on the schematic on page 7 of the PowerPoint based on the discussion at the meeting;
2. TEC will send FEMA corrections to the separate spreadsheet showing the counties in which the co-ops serve;
3. FEMA will set up a group email address and possibly a virtual situation room to facilitate communication with electric providers;
4. FEMA will provide a Density Map showing where most of the MHUs will be deployed to focus coordinating connection standards in those areas rather than throughout every affected service area;
5. Affected co-ops should decide who their internal point of contact will be for MHU connections;
6. At the IOUs request, MHU addresses for meters will include the letters "HH" for Hurricane Harvey for faster identification.

TEC will pass along this information to the affected co-ops as we receive it from FEMA and the PUC.

QUESTIONS OR COMMENTS:

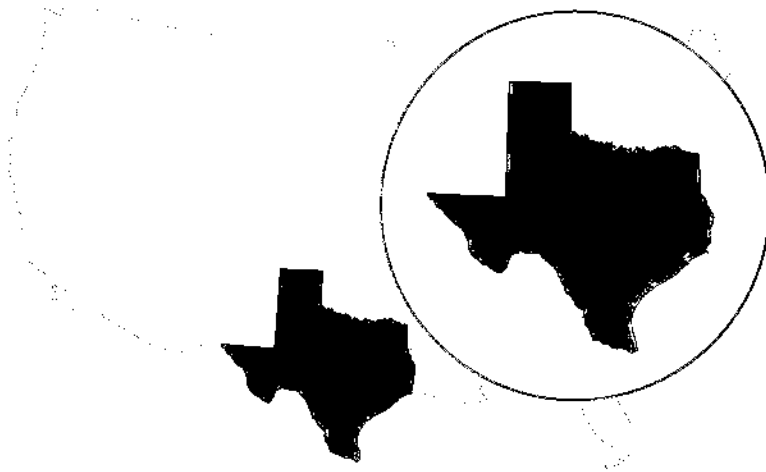
ERIC CRAVEN Sr. VP, Government Relations & Legal Affairs • (512) 486-6222 • ecraven@texas-cc.org
DEBORAH L. INGRAHAM Director, Regulatory & Legal Affairs • (512) 486-6220 • dingraham@texas-cc.org
EVAN AUTRY Director, Legislative Affairs • (512) 486-6227 • cautry@texas-cc.org
KAREN POLLEI Government Relations Coordinator • (512) 486-6221 • kpollei@texas-cc.org

**FEMA**[Apply for Assistance](#)

Texas

Region 6

FEMA has information to help you prepare for, respond to, and recover from disasters specific to your location. Use this page to find local disaster recovery centers, flood maps, fact sheets, FEMA contacts, jobs and other resources.



Region 6



English Español

On This Page

Declared Disasters Active - Apply for Assistance

Emergency Response Resources

Disaster Recovery Centers

More About This Location

News, Media & Events

Events | Preparedness Tips | Press Releases & Fact Sheets | PDFs & Multimedia

Risk Reduction

Find Your Flood Map | Minimize Local Risk | Environmental Requirements

Contact & About

Contacts | Federal Funding Data | Employment Opportunities

Declared Disasters

Incident Type

- Any -

Search and Filter Disasters

Texas Severe Winter Storm (DR-4705-TX)

Incident Period: January 30, 2023 - February 2, 2023

Major Disaster Declaration declared on April 21, 2023

Texas Chalk Mountain Fire (FM-5444-TX)

Incident Period: July 18, 2022 - August 6, 2022

Fire Management Assistance Declaration declared on July 19, 2022

Texas Hard Castle Fire (FM-5443-TX)

Incident Period: July 7, 2022 - July 16, 2022

Fire Management Assistance Declaration declared on July 7, 2022

1 2 3 ... Next › Last »

Displaying 1 - 3 of 372

Emergency Response Resources

[Inciweb - Incident Information System](#)

[Texas Division of Emergency Management](#)

[Texas Office of the Governor](#)

[Texas State and Local Referrals](#)

Disaster Recovery Centers

There are no active Disaster Recovery Centers for this location at this time.

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[Report Disaster Fraud](#)

[Website Information](#)

[DHS.gov](#)

[USA.gov](#)

[Inspector General](#)

National Terrorism Advisory System

Quick Accounting Reference Guide for FEMA Reimbursable Disasters

(A) CATEGORIES: FEMA authorizes re-imbursement by preparing one or several Project Worksheets (PW) per category:

Category A: Emergency Work – debris removal

Category B: Emergency Protective Measures – protection of public health

Category F: Permanent Work on Distribution Lines – full conformity to applicable standards

(B) BACK-UP DOCUMENTS: Back-up documents by work site are required for ALL costs. Undocumented and un-locatable costs WILL NOT be reimbursed.

Back-up documents should be collected daily for Labor (internal and contract; and approved by supervisors), Equipment (e.g. vehicles), and Materials.

Payroll calculations for the duration of the disaster should be available for the FEMA audit. The cooperative must be able to verify that dollars paid match amounts claimed for cooperative employee's payroll.

(C) TIME SHEETS AND WORK SHEETS: The line crew should use the Emergency Time Sheets and the Time Sheets shall reference either the Emergency Site Work Sheets or Work Order Staking Sheets that have been prepared by United. Each completed sheet should be verified by a supervisor. Recording of construction and retirement units is critical.

(D) MONITORS: Work done by contractors are required to have a United “monitor” to assure that reimbursable work was performed.

(E) SUMMARY RECORDS: The accounting department will use daily back-up documents to complete Force Account Summaries for Labor, Equipment, and Materials per FEMA guidelines (see FEMA Applicant Handbook, Appendix D).

DAILY TIME SHEET FOR FEMA REIMBURSABLE CATEGORIES

Date: _____

Employee Number:

Vehicle Unit Number:

Employee Name (print):

Supervisor Name (print):

Employee Signature: _____

Supervisor Signature: _____

[illegible]

Totals _____

Note: It may be necessary for this timesheet to be turned into your employer in addition to United's Damage As

LOG SHEET FOR FEMA REIMBURSABLE CATEGORIES

Date:	Work Order #/Reference #:
Line Crew:	Supervisor Name (print):
	Supervisor Signature:
	Vehicle Unit Number:
Substation and Circuit	Grid Location

<input type="checkbox"/>	Category A: Emergency Work - e.g. debris removal
<input type="checkbox"/>	Category B: Emergency Protective Measures
<input type="checkbox"/>	Category F: Permanent Work on Distribution Lines

Log Sheet #

NOTES:

DRAWING:

Staking Pages Attached: _____

**FEMA****DISASTER ASSISTANCE**

FACT SHEET

9580.5

ELEMENTS OF A PROJECT WORKSHEET

Overview

This Fact Sheet outlines the types of and order in which necessary documentation should be compiled to support a Project Worksheet (PW). It will be used to promote consistency in PW preparation by Public Assistance staff nationwide. The provision of timely, thorough, and accurate documentation will facilitate PW uniformity and expedite data entry, Quality Assurance/Quality Control (QA/QC), the obligation of funds, and eventual project closeout. States may require additional documentation applicable to sub-grantees.

PW Documentation

To facilitate efficient review and processing of PWs by Joint Field Office (JFO) staff, PW writers should compile all PW documentation (refer to Figure 1 and subsequent explanations) in the same order. Every PW must contain the required support documentation to substantiate the scope of work being funded. The scope of work documents "*work completed*" and/or "*work to be completed*."

Records for eligible "*work completed*" costs incurred should be included in summary format, and may include: labor, materials from inventory, materials purchased, equipment owned, equipment rented, services purchased (e.g., engineering), labor benefits, labor policies, etc. The format should follow (and must include all of the information indicated on) FEMA Forms 90-123 through 90-128, even if the Applicant elects not to use the FEMA forms. Source documentation, such as copies of time sheets, payroll records, and invoices should not be attached to a PW; instead, the PW writer should sample and note in the general comments section the percentage of source documents verified and percentage of errors. However, source documentation must be available for final closeout, audits, or other required follow-up actions. An Applicant is responsible for maintaining support documentation per 44 CFR Part 13.

Records for "*work to be completed*" should include detailed information that supports the estimated costs.

DISASTER ASSISTANCE FACT SHEET DAP9580.5

ELEMENTS OF A PROJECT WORKSHEET

Documentation for the PW should be compiled in the following order:

1. **Project Worksheet Cover** – FEMA Form 90-91. The PW is the primary form used to document the project and includes the location, damage description and dimensions, scope of work, and cost estimate for each project.
 - a. **Location**
 - i. Identifies location of all damages using addresses and/or proximity to landmarks.
 - ii. Includes latitude and longitude of the project, if known.
 - b. **Damage Description**
 - i. Describes the damage, including the cause of the damage.
 - ii. Quantifies specific disaster-related damages or emergency services provided.
 - iii. Quantifies specific non-disaster-related damages, if applicable.
 - c. **Scope of Work**
 - i. Describes the work necessary to remove and dispose of disaster-related debris, conduct emergency response measures, or repair or replace a disaster-damaged facility to pre-disaster condition.
 - ii. Documents the percentage of “work completed” and/or “work to be completed.”
 - iii. Describes the basis for the cost estimate.
 - iv. Quantifies eligible costs.
 - v. Describes any Special Considerations that affect the scope of work.
 - vi. Documents ineligible work and associated costs.
 - d. **Cost Estimate**
 - i. Summarizes actual costs incurred or expected for the project.
 - ii. Identifies unit prices.
 - iii. Documents total project cost.
2. **Damage Description and Scope of Work Continuation Sheet** – FEMA Form 90-91A. Used, if necessary, to expand the PW blocks for damage quantities and description, scope of work, and cost extensions.
3. **Project Worksheet – Cost Estimating Continuation Sheet** – FEMA Form 90-91B. Includes Cost Estimating Format (CEF) worksheets for large permanent work projects. If the CEF is not applicable, the basis for the cost estimate should be clearly denoted in the scope of work.

DISASTER ASSISTANCE FACT SHEET DAP9580.5

ELEMENTS OF A PROJECT WORKSHEET

4. **Special Considerations Questions** – FEMA Form 90-120.
5. **Hazard Mitigation Proposal (HMP)** – FEMA Form 90-61. Hazard mitigation applies to Categories C through G. In addition to the HMP itself, the proposal should include any documentation supporting the recommendation.
6. **Force Account Labor Summary Record** – FEMA Form 90-123.
7. **Applicant's Benefits Calculation Worksheet** – FEMA Form 90-128.
8. **Force Account Equipment Summary Record** – FEMA Form 90-127.
9. **Rented Equipment Summary Record** – FEMA Form 90-125.
10. **Materials Summary Record** – FEMA Form 90-124.
11. **Contract Work Summary Record** – FEMA Form 90-126.
12. **Contract Documentation** – Minimum documentation for contracted work should include: contract cover sheet or sheets, those portions of the contract defining principal parties, units of work bid, unit costs, and any other contract stipulations affecting scope of work or costs. Any addendums or extra work orders should be included, as well as procurement documentation indicating scope of work of the contract, number of bidders, and unit cost or lump sum bid by each bidder. If a bidder is disqualified, include an explanation. Frequently, a large portion of the contract defines general conditions. This portion of the contract is not required as an attachment, but should be maintained by the Applicant as source documentation.
13. **Insurance Information** – Attach only the information specific to the PW. This may include the Detailed Adjuster's Report, Statement of Loss, binders, settlement offers, insurance estimates, technical/engineering reports prepared by insurance company or adjuster, etc. In cases where several projects are covered by the same insurance policy, the information should be cross-referenced in the PW and the policy maintained in the Applicant's central file.
14. **Project Worksheet Maps and Sketches Sheet** – FEMA Form 90-91C. Used, as needed, to illustrate disaster-related damages, completed work, and proposed repairs. Limit attachments to 8.5 x 11-inch pages. If pages larger than 8.5 x 11 inches are required, they should be identified in the PW (title, date, preparer, number of sheets, etc.). Include a copy of the Flood Insurance Rate Map (FIRM) location and other site location maps.
15. **Project Worksheet Photo Sheet** – FEMA Form 90-91D. Used, as necessary, to illustrate and describe general project site conditions, disaster related damages, site irregularities, conditions relating to

DISASTER ASSISTANCE FACT SHEET DAP9580.5

ELEMENTS OF A PROJECT WORKSHEET

damaged elements, facility identification (e.g., front gate or building signs), and completed work, or to demonstrate the presence of an immediate threat.

16. **Other Documentation** – Other information as required (e-mails, communications, etc.).
17. **Do Not Copy/Scan Sheet** – Back up documentation behind this sheet is not scanned into the database.
18. **Materials Back up Documentation** – If applicable, may include:
 - a. Engineering/technical reports that were considered in eligibility determinations. Reference such reports in the PW's scope of work by title, subject, date, preparer, pages, etc.
 - b. Source documentation sampled by the PW writer, such as copies of time sheets, payroll records, and invoices.
 - c. Applicable codes and standards, if a code upgrade is triggered. A copy of the code/standard, a copy of the legal action (resolution, ordinance, etc.) formally adopting the code/standard, and/or amendments or annexes to the code/standard should be submitted and referenced in the PW scope of work.
 - d. Lease or rental agreements for facilities rented *by* an eligible Applicant or rented *to* an eligible Applicant. If insurance is required as part of the agreement, refer to the insured item.
 - e. Facility maintenance records are required for: roads (if condition or usage is questionable), engineered channels (other than flood control works), debris basins and reservoirs where debris removal is contemplated, beaches where repair to an engineered beach is contemplated, and other facilities requiring maintenance to ensure proper function or that capacity has been maintained.
 - f. Facility inspection/safety reports for bridges.
 - g. Mutual aid agreements (referenced in the body of the PW).

For more information on writing and compiling documentation for a PW, please refer to FEMA's *Public Assistance Program Project Worksheet Development Guide*.


Carlos J. Castillo

Assistant Administrator
Disaster Assistance Directorate

12/12/08
Date

Attachment

DISASTER ASSISTANCE FACT SHEET DAP9580.5

ELEMENTS OF A PROJECT WORKSHEET

Attachment

ELEMENTS OF A PROJECT WORKSHEET	Attached	
	Yes	No
1. Project Worksheet Cover – FEMA Form 90-91		
2. Damage Description and Scope of Work Continuation Sheet – FEMA Form 90-91A		
3. Project Worksheet – Cost Estimating Continuation Sheet – FEMA Form – 90-91B		
4. Special Considerations Questions – FEMA Form 90-120 (as applicable)		
5. Hazard Mitigation Proposal – FEMA Form 90-61 (as applicable)		
6. Force Account Labor Summary Record – FEMA Form 90-123		
7. Applicant's Benefits Calculation Worksheet – FEMA Form 90-128		
8. Force Account Equipment Summary Record – FEMA Form 90-127		
9. Rented Equipment Summary Record – FEMA Form 90-125		
10. Materials Summary Record – FEMA Form 90-124		
11. Contract Work Summary Record – FEMA Form 90-126		
12. Contract Documentation		
13. Insurance Information		
14. Project Worksheet Maps and Sketches Sheet – FEMA Form 90-91C		
15. Project Worksheet Photo Sheet – FEMA Form 90-91D		
16. Other Documentation		
17. Do Not Copy/Scan Sheet		
18. Materials Back up Documentation		



PUBLIC ASSISTANCE: CONTRACTING REQUIREMENTS CHECKLIST

FEMA's Public Assistance (PA) program provides supplemental assistance to states, tribes, and local governmental entities, as well as certain private non-profit organizations (hereinafter referred to as applicants) to assist them with recovering from emergencies and major disasters. FEMA's *Public Assistance Program and Policy Guide* (<http://www.fema.gov/public-assistance-policy-and-guidance>) provides comprehensive information regarding the types of assistance FEMA can provide and the requirements to receive assistance. The purpose of this Fact Sheet is to provide Public Assistance applicants with key information they need to consider when using contracted resources. Failure to follow federal contracting requirements when procuring and selecting contractors puts applicants at risk of not receiving full reimbursement for eligible disaster costs.

Understanding Which Federal Contracting Requirements Apply to Public Assistance Applicants

The federal procurement requirements are found at 2 C.F.R. §§ 200.317-200.326. In order for a Public Assistance applicant to determine which contracting rules apply, the applicant must first determine if it is a state or non-state entity. States must follow procurement requirements found at 2 C.F.R. § 200.317 and non-states must follow procurement requirements found at 2 C.F.R. §§ 200.318 through 200.326.

A **"STATE"** means any state or territory of the United States, and any agency or instrumentality of that state or territory.

A **"NON-STATE"** entity is any eligible Public Assistance applicant that does not meet the "state" definition. Non-state applicants include local governments, Indian tribal governments, institutions of higher education, hospitals, and other eligible private non-profit organizations.

State entity applicants should refer to **"Checklist A: State Entities"** on page 2 for additional information. Non-state entity applicants should refer to **"Checklist B: Non-State Entities"** on page 2 for additional information.

DISCLAIMER: This Fact Sheet is intended to provide general information on procurement compliance and is not inclusive of every rule that an applicant may need to comply with. Additional information regarding the federal procurement standards can be found at the following webpage: www.fema.gov/procurement-disaster-assistance-team.

ATTENTION: Potential Compliance Issues

State Entities:

- ☐ Not following their own procurement policies and procedures.
- ☐ Not including required contract provisions.

Non-state entities:

- ☐ Using Time & Materials (T&M) contracts without a ceiling price.
- ☐ Awarding sole-source contracts without ensuring the noncompetitive proposals method is appropriately followed.
- ☐ Using pre-awarded/pre-disaster contracts for supplies or services that are out of the contract scope.
- ☐ Awarding to contractors that drafted solicitation documents.
- ☐ Using geographic preferences in the evaluation of bids and proposals.
- ☐ Entering into Cost-Plus-Percentage of Cost (CPPC) contract types. These contract types are prohibited.
- ☐ Improper "piggybacking" of other entities' contracts.
- ☐ Awarding to suspended or debarred contractors.

FEDERAL PROCUREMENT REQUIREMENTS CHECKLISTS

Checklist A: State Entities

- ☐ Follow **the same policies and procedures** used when contracting with non-Federal funds (2 C.F.R. § 200.317);
- ☐ Comply with the **procurement of recovered materials** guidelines (2 C.F.R. § 200.322);
- ☐ Must include **required contract provisions** in all purchase orders/contracts awarded (2 C.F.R. § 200.326); and
- ☐ **Reasonable cost** considerations:
 - ☐ While **T&M contracts** without a ceiling price and **CPPC contracts** may be allowable under state standards, the use of these contracting vehicles carry a higher risk of noncompliance with the requirement that costs be reasonable (2 C.F.R. § 200.404) and as such may be subject to a higher level of scrutiny.

Checklist B: Non-State Entities

- ☐ Maintain written standards of conduct covering **conflicts of interest** and governing the performance of employees who engage in the selection, award, and administration of contracts (2 C.F.R. § 200.318(c));
- ☐ Conduct procurements in a manner providing for **full and open competition** (2 C.F.R. § 200.319);
- ☐ Take six necessary steps to assure that **small and minority businesses, women's business enterprises, and labor surplus area firms** are used when possible (2 C.F.R. § 200.321):
 - ☐ Place such organizations that are qualified on solicitation lists;
 - ☐ Ensure such organizations are solicited whenever they are potential sources;
 - ☐ Divide total requirements, when economically feasible, into smaller tasks or quantities;
 - ☐ Establish delivery schedules, where the requirement permits, which encourage their participation;
 - ☐ Use the services and assistance, as appropriate, of the Small Business Administration and the Minority Business Development Agency of the Department of Commerce; and
 - ☐ Require prime contractor to take the above affirmative steps if subcontracting.
- ☐ Perform a **cost or price analysis** in connection with every procurement action in excess of the Simplified Acquisition Threshold, including contract modifications (2 C.F.R. § 200.323);
- ☐ Use allowable **procurement methods**, including procurement by micro-purchases, small purchases, sealed bidding, competitive proposals, and non-competitive proposals and ensure corresponding standards are met (2 C.F.R. § 200.320);
- ☐ If using a **T&M contract**, ensure that no other contract type is suitable and the contract includes a ceiling price that the contractor exceeds at their own risk (2 C.F.R. § 200.318(j));
- ☐ Follow the **bonding requirements** for all facility and improvement projects (2 C.F.R. § 200.325);
- ☐ Must include **applicable contract provisions** in all contracts awarded (2 C.F.R. § 200.326);
- ☐ Comply with the **procurement of recovered materials** guidelines (2 C.F.R. § 200.322);
- ☐ Maintain **oversight** to ensure contractors perform according to the terms, conditions, and specifications of their contracts or purchase orders (2 C.F.R. § 200.318(b)); and
- ☐ Maintain **records** sufficient to detail the history of the procurement. These records will include, but are not limited to the rationale for the method of procurement, selection of contract type; contractor selection or rejection; and basis for the contract price (2 C.F.R. § 200.318(i)).

FEMA DISASTER ASSISTANCE FACT SHEET – DAP 9580.6

Overview

The purpose of this fact sheet is to establish criteria to determine eligibility for repair or replacement of disaster-damaged electric distribution and transmission systems under the authority of rural electric cooperatives (RECs), municipal electric utilities, public power districts, and other public entities following a major disaster or emergency declaration by the President. This fact sheet addresses appropriate contracting procedures, categories of work (that is, Category B or F), criteria for replacing conductors, hazard mitigation, Rural Utility Service (RUS) Bulletins, and collateral damage. The Federal Emergency Management Agency (FEMA) must inspect and validate all projects for which the owners are requesting replacement of conductors. The utility owners are responsible for the safety and reliability of their distribution and transmission systems.

Contracting

To be eligible for Federal funding, applicants must comply with federal procurement standards as outlined in the Title 44 Code of Federal Regulations (CFR), Part 13.36, Procurement. Essential elements of the procurement process include: competition; a clear and definitive scope of work, if possible; qualified bidders (documented by licenses, financial records, proof of insurance, and bonding, as applicable); a price analysis to demonstrate price reasonableness; compliance with all relevant local, State, and Federal requirements, laws and policies; and, clear documentation of the process/rationale followed in making procurement decisions. There is no requirement to negotiate profit separately when applicants follow competitive procurement procedures. Profit is considered to be a component of the unit price.

Unacceptable Contracts: Cost Plus Percentage of Cost

Acceptable Contracts:

1. Lump Sum
2. Unit Price
3. Cost Plus Fixed Fee
4. Sole Source for Materials – in limited situations. RECs, municipal utilities, and public power districts may use noncompetitive procurements to procure materials, provided they meet the requirements of 44 CFR §13.36(d)(4), Methods of procurement to be followed, Procurement by noncompetitive proposals.
5. Time and Material (T&M) - applicants may use T&M contracts only when it has been determined that no other contract is suitable and the contract includes a ceiling price that the contractor exceeds

at its own risk (44 CFR §13.36(b)(10), Procurement standards). Since RECs, municipal utilities, and public power districts generally provide the materials used in repairing their systems, these contracts are referred to as “time and equipment” (T&E) contracts. Due to the critical nature of restoring power to the electrical grid following a disaster and because exigent circumstances do not permit delays related to fully assessing the damages before repair work begins, RECs, municipal utilities, and public power districts commonly use T&E contracts for making disaster-related repairs.

The use of T&E contracts to repair disaster-related damages to electrical transmission and distribution systems may be eligible for Public Assistance (PA) funding provided the utility owner:

- (a) Documents the exigent circumstances that exist and explains why other types of contracts were not suitable;
- (b) Documents why a detailed scope of work could not be developed for the repairs;
- (c) Ensures that all T&E contracts contain a “ceiling price” that the contractor exceeds at its own risk, a “not to exceed” clause, or are otherwise limited by an applicant- issued task order;
- (d) Performs and documents a price analysis to demonstrate that the hourly rates are reasonable and justifiable under the disaster conditions;
- (e) Documents the terms of the contract (including mutual aid contracts); and
- (f) Monitors contractors and keeps good records of work performed.

Category of Work

FEMA characterizes work authorized under sections 403, Essential Assistance, and 407, Debris Removal, of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act) as emergency work (Categories B and A, respectively) and under section 406, Repair, Restoration, and Replacement of Damaged Facilities, as permanent work (Categories C-G). Category F refers to the permanent repair of utility systems. RECs, municipal utilities, and public power districts work to restore power to customers as soon as possible following disasters. Most repairs are permanent in nature. FEMA categorizes electric utility restoration work as follows:

1. FEMA will characterize all temporary work that RECs, municipal utilities, and public power districts perform to restore power to all facilities capable of receiving it, as Category B, emergency work. In these situations, the RECs, municipal utilities, and public power districts make permanent repairs later to bring the damaged components into compliance with appropriate codes and standards.
2. FEMA will characterize work that RECs, municipal utilities, and public power districts perform to restore the damaged facilities to pre-disaster condition in accordance with applicable codes and

standards as Category F, permanent work. RECs, municipal utilities, and public power districts can complete permanent repairs immediately after the disaster occurs or after temporary repairs are completed (see item 1 above).

Replacing Conductors

44 CFR §206.226, Restoration of damaged facilities, authorizes reimbursement for "... work to restore eligible facilities on the basis of the design of such facilities as they existed immediately prior to the disaster ..." in accordance with adopted codes and standards. FEMA recognizes local, state, and national codes (for example, the National Electrical Safety Code and RUS standards and specifications for materials, equipment, and construction, which are applicable regardless of funding source) as appropriate when determining eligible cost to repair or replace damaged electrical facilities.

Establishing Pre-Disaster Condition

Applicants should provide the following information to establish pre-disaster condition of their facilities:

1. Certification of the pre-disaster condition and capacity of the conductor from a licensed professional engineer who has direct experience with the damaged electrical transmission or distribution system. Records providing satisfactory evidence of the condition and capacity of the conductor as it existed prior to the disaster. The certification may be supplemented by a professional engineering evaluation.
2. If available, copies of construction work plans demonstrating the utility's past practices and current/future projects.
3. If required by RUS, a copy of any corrective action plans submitted to RUS in compliance with 7 CFR §1730.25, Corrective action (RUS borrowers only).

Criteria for Conductor Replacement

Determining the disaster-related damages to some components (for example, poles, guys, and cross-arms) of an electrical transmission or distribution system can usually be accomplished by visual inspection. However, determining the full extent of disaster-related damages to conductors, and the appropriate method to repair the damages, is more challenging, particularly with older systems. FEMA considers a conductor eligible for replacement when it is stretched beyond the point where it can be effectively repaired and re-sagged through predictable modeling to meet appropriate clearances, sag and tension, and to meet pre-disaster reliability. A conductor is beyond the point where it can be effectively repaired when one or more of the following criteria exist within a line section:

1. 25% or more of the conductor spans are damaged. Damage is defined as broken conductors, broken strands, the existence of new (disaster-related) splices, and/or if the conductor is severely pitted, burned, kinked, or damaged in other ways.
2. 30% or more of the line spans are visibly out of sag or do not meet clearances (for example, the conductor does not meet clearance requirements for conductor-to-conductor or conductor-to-ground).
3. 40% or more of the poles were replaced or need to be replaced or plumbed (straightened) due to the disaster.
4. 40% or more of the supporting structures have a disaster-related damaged component (for example, x-arms, braces, pin, ties, insulators, guys/anchors, or poles).
5. The sum of the percentages of the above criteria is 65% or more.
6. Other additional compelling information provided by a licensed professional engineer.

Replacement Conductor

FEMA will fund eligible work in accordance with 44 CFR §206.226, Restoration of damaged facilities. The use of #2 Aluminum Conductor Steel Reinforced (ACSR), however, is considered the lower cost equivalent to replace conductor with equal or lesser amperage capacity, such as copper weld conductor (CWC), hard and soft drawn copper wire, smaller ACSR, and Amerdutor. When such conductor is replaced with #2 ACSR, FEMA will fund adjustments of span lengths and pole heights to meet appropriate design requirements.

If FEMA determines that the conductor is eligible for replacement, FEMA will fund the use of #2 ACSR as the lower cost equivalent replacement of conductor with equal or lesser amp capacity (for example, copper weld conductor (CWC), hard and soft drawn copper wire, and smaller ACSR, and Amerdutor). If the existing spacing of poles exceeds the spacing required for the new conductor, FEMA will fund the installation of additional poles and components as required to meet appropriate design requirements.

If disaster damaged conductor does not qualify for replacement, the damaged line section is eligible for repair only.

Hazard Mitigation

FEMA provides hazard mitigation funding under Section 404, Hazard Mitigation, and Section 406, Repair, Restoration, and Replacement of Damaged Facilities, of the Stafford Act. The State manages the Section 404 Hazard Mitigation Grant Program and establishes the funding priorities for the program. FEMA will evaluate and fund Section 406 hazard mitigation projects to protect disaster-damaged components of facilities. FEMA supports funding cost-effective hazard mitigation measures for electrical transmission and distribution facilities. In order to be eligible, hazard mitigation measures under Section 406 of the Stafford Act:

1. Must be appropriate to the disaster damage and must prevent future damage similar to that caused by the declared event.
2. Must be applied only to the damaged element(s) of a facility. This criterion is particularly important when conducting repairs to a portion of a system.
3. Cannot increase risks or cause adverse effects to the facility or to other property.
4. Must consist of work that is above and beyond the eligible work required to return the damaged facility to its pre-disaster design. Upgrades required to meet current codes and standards, however, are not considered hazard mitigation measures for purposes of the PA Program and have different eligibility criteria.

FEMA staff must review and approve hazard mitigation measures prior to implementation to ensure eligibility, technical feasibility, environmental and historic preservation compliance, and cost effectiveness. FEMA may fund the use of “wind-motion resistant conductor” as effective hazard mitigation, when conductor segments qualify for replacement.

Code or standard upgrades that FEMA determines do not meet the five criteria listed in 44 CFR §206.226(d), Restoration of damaged facilities, Standards, but which will enhance a facility’s ability to resist similar damage in a future disaster, may be eligible for funding under Section 406 hazard mitigation (see FEMA Disaster Assistance Policy DAP9526.1, Hazard Mitigation Funding under Section 406 of the Stafford Act). For example, increasing the size or changing the type of conductor for hazard mitigation purposes may be eligible for FEMA reimbursement provided it is both viable and cost-effective.

Cost effectiveness is defined as:

1. Up to 15% of the total eligible cost of eligible repairs; or

2. Up to 100% of eligible repair costs for measures listed in Appendix A of DAP9526.1; or
3. A benefit-cost ratio of 1 or greater.

A non-exhaustive list of typical hazard mitigation measures for electrical systems includes the following:

Sample Mitigation Measure

Justification

Installing additional poles to support transformers

100%, listed in Appendix A of DAP9526.1

Installing guy-wires

100%, listed in Appendix A of DAP9526.1

Providing looped distribution service or other redundancies to critical facilities

100%, listed in Appendix A of DAP9526.1

Elevating pad-mounted transformers above BFE (or ABFE where applicable)

100%, listed in Appendix A of DAP9526.1

Replacing damaged poles with higher-rated poles of the same or different material

100%, listed in Appendix A of DAP9526.1

Cross bracing on H Frame Poles

100%, listed in Appendix A of DAP9526.1

Removing large diameter communication lines

100%, listed in Appendix A of DAP9526.1

Upgrade conductor to Wind-Motion Resistant Conductor (e.g., T2 ACSR)

15% of the total eligible cost of eligible repairs

Mid span poles (not specified by code)

15% of the total eligible cost of eligible repairs

Rural Utility Service (RUS) Bulletins

In order for the costs of Federal, State, and local repair or replacement standards which change the pre-disaster construction of a facility to be eligible, 44 CFR §206.226(d), Restoration of damaged facilities, Standards, requires that the standards must:

1. Apply to the type of repair or restoration required;
2. Be appropriate to the pre-disaster use of the facility;
3. Be found reasonable, in writing, and formally adopted and implemented by the State or local government on or before the disaster declaration date, or be a legal Federal requirement applicable to the type of restoration;

4. Apply uniformly to all similar types of facilities within the jurisdiction of the owner of the facility; and
5. For any standard in effect at the time of a disaster, it must have been enforced during the time it was in effect.

Under the authority of the Rural Electrification Act of 1936, the United States Department of Agriculture RUS, Electric Programs Division, makes direct loans and guarantees loans to electric utilities to serve customers in rural areas. Rural electric cooperatives use the loans and loan guarantees to finance construction of electric distribution, transmission, and generation facilities. Through these loans, the Federal government is the majority note-holder for approximately 700 electric systems in 46 states. In accordance with 7 CFR 1724.1(b), Electrical Engineering, Architectural Services and Design Policies and Procedures, all borrowers, regardless of funding sources, are required to comply with RUS requirements for new construction design standards, and the use of RUS accepted material on electric systems.

On July 1, 2005, RUS published Bulletin 1742D-106, Considerations for Replacing Storm-Damaged Conductors, The bulletin provides guidelines to assist rural electric cooperatives in making expedient decisions on whether to repair or replace damaged conductors after disasters. FEMA has reviewed this bulletin and determined that it does not meet the definition of a code or standard as described in 44 CFR §206.226(d). Therefore, FEMA will not accept RUS Bulletin 1742D-106 as a basis for replacing damaged conductors.

To date, rural electric cooperatives have not cited other RUS Bulletins to support their requests for the replacement of conductors. FEMA will evaluate other RUS Bulletins on a case-by-case basis.

Repair of Collateral Damage

The repair of damage to eligible facilities caused during the performance of eligible work is reimbursable under the Public Assistance Program. If rural electric cooperatives, municipal utilities, or public power districts damage their own or other public property while performing emergency repairs to their facilities, the cost to repair the damage may be eligible (see DAP9525.8, Damage to Applicant-Owned Equipment). Rural electric cooperatives often obtain easements from private landowners to access and maintain their transmission and distribution facilities. If private property easements are damaged while making repairs to the disaster-damaged facilities (for example, ruts on the property), the repair of the damage to the private property is eligible for FEMA Public Assistance reimbursement. Applicants shall demonstrate legal responsibility for the repair in the form of a written or statutory easement with an express legal responsibility to repair the damage.

Elizabeth A. Zimmerman

Date

Assistant Administrator

Disaster Assistance Directorate

Conductor Replacement Criteria

Frequently Asked Questions

1. What is a span?

A span is the distance between two poles.

2. What is a line section?

A line section is a group of contiguous spans selected for evaluation. The applicant has flexibility in defining a line section. A line section could be a single span, all the spans between two deadend structures, all the spans on a feeder, all the spans on a tap or any other group of contiguous spans that are evaluated together.

3. What is Criterion 1 and how is it applied?

This criterion relates to visible damage to the conductor in a line section. A conductor span with damage such as broken strands, splices or sleeves (installed as a result of the disaster), birdcaging, severe pitting, burns, kinks or other visible conductor damage is counted in this criterion. The number of conductor spans is calculated by multiplying the number of conductors per span by the number of spans. For example a three phase line section with three spans has 12 conductor spans (4 conductors x 3 spans = 12). If a single conductor span has damage in more than one location it still only counts as one damaged conductor span. If 25% or more of the of the total conductor spans in a line section have visible damage as a direct result of the disaster, then the conductors of that line section are considered eligible for replacement.

4. What is Criterion 2 and how is it applied?

This criterion relates to conductor elongation or stretch in a line section. Any conductors in a span that are out of sag or do not meet clearance requirements as a direct result of the disaster are counted in this criterion. If more than one conductor in a span is out of sag or does not meet clearance requirements it still counts as just one span. This evaluation does not require precise measurement of the conductor temperature or actual sag or clearances. This determination is

to be made using the good judgment of a qualified electrical inspector. If 30% or more of the total spans in a line section are visibly out of sag or do not meet clearance requirements as a direct result of the disaster, then the conductors of that line section are considered eligible for replacement.

5. What is Criterion 3 and how is it applied?

This criterion is related to damage to the poles supporting the conductor in a line section. If a pole was replaced, is in need of replacement or is in need of plumbing (straightening) as a direct result of the disaster, then it counts in this criterion. A pole is considered to be in need of straightening if it is leaning such that it is unsafe to climb. If 40% or more of the total poles in a line section meet this criterion then the conductors in that line section are considered eligible for replacement.

6. What is Criterion 4 and how is it applied?

This criterion relates to damage to the supporting structure other than the poles. If the supporting structure has damage such as a broken crossarm, broken support brace, bent pin, broken tie, broken insulator, broken guy or pulled anchor as a direct result of the disaster then that support structure is counted in this criterion. If more than one element of the support structure is damaged it still only counts as one damaged support structure. If a pole is counted under criterion 3 then the supporting structure should not be counted under criterion 4. If 40% or more of the total number of support structures in a line section are damaged as a direct result of the storm then the conductors of that line section are considered eligible for replacement.

7. What is Criterion 5 and how is it applied?

This criterion relates to the total damage to a line section. If the sum of the percentages calculated for criteria 1 through 4 is 65% or more then the conductors of that line section are considered eligible for replacement. It is possible that the sum of the percentages for criteria 1 through 4 could be more than 100%.

8. What is Criterion 6 and how is it applied?

This criterion is included to account for other methods of demonstrating that the conductor in a line section is damaged beyond repair. If this criterion is applied then supporting evidence must be documented to clearly describe the basis for the conclusion that the conductor in this line section was damaged as a direct result of the disaster and is not suitable for continued service. FEMA will make the final determination on a case-by-case basis.

DISASTER ASSISTANCE
FACT SHEET
DAP9580.6

ELECTRIC UTILITY REPAIR

(PUBLIC AND PRIVATE NONPROFIT)

<p align="center">Emergency Response Plan Force Account Equipment Summary</p>
--

Work Order # or Map Location

Unit Number	Description	Operator's Name	Dates and Hours Worked Each Week							
			Date							
			Hours							
			Hours							
			Hours							
			Hours							
			Hours							
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			Hours							
			Hours							

Instruction Sheet for Force Account Equipment Summary

Who should use this form: Anyone utilizing a Cooperative vehicle that is not already accounted for on a Direct Labor Record Summary (generally, all Operations employees utilizing Cooperative vehicles should use this form.)

How to use this form:

Work Order # or Map Location Enter the work order number (if available) or map location of the project

Unit Number Enter the Cooperative Unit Number for the vehicle utilized

Description Enter the description of the vehicle, including the size and type of vehicle (for example - 1/2 ton pickup; or 3.5 ton bucket truck)

Operator's Name Enter the name of the primary operator of the vehicle

Date Enter the dates the vehicle (s) were used

Hours Enter the hours that the vehicle (s) were used on each date

UPDATEED 11/19/2015

**Emergency Response Plan
Direct Labor Record**

Employee Name (s):

Vehicle Used (Unit Number and Description)

Example - Unit #125 - 1/2 ton pickup:

Work Order or Map # of Project	Dates and Hours Worked Each Week							
	Date							
	Reg.							
	O.T.							
	Veh. Used							
	Reg.							
	O.T.							
	Veh. Used							
	Reg.							
	O.T.							
	Veh. Used							
	Reg.							
	O.T.							
	Veh. Used							
	Reg.							
	O.T.							
	Veh. Used							
	Reg.							
	O.T.							
	Veh. Used							
	Reg.							
	O.T.							
	Veh. Used							

Instruction Sheet for Direct Labor Record

Who should use this form: Anyone who does not already fill out timesheets that account for his or her time by work order (generally speaking - non-operations employees should use this form). Salaried employees should fill out this form when working directly on a work order/project.

When to use the form: To record time directly associated with the design, construction, or retirement of a project.

This form DOES NOT: Take the place of a regular timesheet. Employees who generally fill out a timesheet, will continue to fill out his or her regular timesheet in addition to this form.

How to use this form:

Employee Name (s):	Enter the name or names of the employees whose time is represented
Vehicle Used:	Include the unit number and general description of the vehicle that was used by the employees
Work Order or Map # of the Project	Enter the work order number (if known) or a map number of the location of the project.
Reg. (Regular Time)	Number of hours of regular time worked by the employee or employees on the noted work order each day.
O.T. (Overtime)	Number of hours of overtime worked by the employee or employees on the noted work order each day.
Veh. Used	Total number of hours the vehicle described at the top of the form was utilized each day on the noted work order.

UPDATED 11/19/2015

ERCOT Nodal Operating Guides

Section 4: Emergency Operation

November 3, 2023

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4 EMERGENCY OPERATIONS

4.1 Introduction

- (1) Emergency operation is intended to address operating conditions under which the reliability of the ERCOT System is inadequate and there is no solution readily apparent. During a declared system emergency, ERCOT can instruct Transmission Operators (TOs) and Qualified Scheduling Entities (QSEs) to take specific operating actions that would otherwise be discretionary. Upon receiving a Verbal Dispatch Instruction (VDI) from ERCOT, and in compliance with these Operating Guides, the QSEs shall direct relevant Resources or groups of Resources to respond to the instruction. ERCOT shall coordinate with QSEs and TOs to assure that necessary actions are taken to maintain reliability.
- (2) It is essential that good, timely, and accurate communication routinely occur between ERCOT, TOs, and QSEs. QSE and TO personnel shall report unplanned equipment status changes as outlined in this Section. ERCOT System Operators may ask for status updates as required in order to gather information to make decisions on system conditions to determine what type of emergency communication may be appropriate.
- (3) ERCOT may issue communications in the form of Operating Condition Notices (OCNs), Advisories, Watches and Emergency Notices. These communications may relate to but are not limited to, weather, transmission, computer failure, or generation information. ERCOT shall specify the severity of the situation, the area affected, the areas potentially affected, and the anticipated duration of the Emergency Condition. These communications will be issued by ERCOT to inform all TOs and QSEs of the current operating situation. TOs will notify their represented Transmission Service Providers (TSPs) and Load Serving Entities (LSEs). QSEs will in turn notify the appropriate Resources, Retail Electric Providers (REPs) and LSEs. QSEs and TOs shall establish and maintain internal procedures for contingency preparedness or to expedite the resolution of the conditions communicated by ERCOT that threaten system reliability.
- (4) Before deciding which communication to issue, ERCOT must consider the possible severity of the operating situation before an Emergency Condition occurs. If practicable, the market shall be allowed to attempt to mitigate or eliminate any possible Emergency Condition. ERCOT has the responsibility to issue the appropriate communications to facilitate a solution by Market Participants.

4.2 Communication Prior to and During Emergency Conditions

4.2.1 *Operating Condition Notice*

- (1) An Operating Condition Notice (OCN) shall be issued by ERCOT in accordance with Protocol Section 6.5.9.3.1, Operating Condition Notice. OCNs are for communication purposes only.

- (2) ERCOT may require information from Qualified Scheduling Entities (QSEs) and Transmission Operators (TOs). Typical information requested may include, but is not limited to:
 - (a) Resource fuel capabilities;
 - (b) Resource condition details; and
 - (c) Actual weather conditions.
- (3) ERCOT will provide verbal notice of an OCN to TOs and QSEs representing Resources through the TO and QSE Hotlines and post the message electronically to the ERCOT website. When an OCN is issued, it does not place ERCOT in an Emergency Condition. QSEs should notify, as appropriate, their represented QSEs, Resources, Retail Electric Providers (REPs) and Load Serving Entities (LSEs) of OCNs. TOs should notify, as appropriate, their represented Transmission Service Providers (TSPs) and Distribution Service Providers (DSPs) of OCNs.

[NOGRR177: Replace paragraph (3) above with the following upon system implementation of NPRR857:]

- (3) ERCOT will provide verbal notice of an OCN to TOs and QSEs representing Resources through the TO and QSE Hotlines and post the message electronically to the ERCOT website. When an OCN is issued, it does not place ERCOT in an Emergency Condition. QSEs should notify, as appropriate, their represented QSEs, Resources, Retail Electric Providers (REPs) and Load Serving Entities (LSEs) of OCNs. TOs should notify, as appropriate, their represented Transmission Service Providers (TSPs), Distribution Service Providers (DSPs) and Direct Current Tie Operators (DCTOs) of OCNs.

4.2.2 Advisory

- (1) An Advisory will be issued by ERCOT in accordance with Protocol Section 6.5.9.3.2, Advisory, when it recognizes that conditions are developing or have changed such that QSE and/or TO actions may be prudent in anticipation of possible Emergency Conditions.
- (2) ERCOT may require information from QSEs and TOs. Typical information requested may include, but is not limited to:
 - (a) Resource fuel capabilities;
 - (b) Resource condition details; and
 - (c) Actual weather conditions.

- (3) ERCOT shall provide verbal notice of an Advisory to TOs and QSEs representing Resources through the TO and QSE Hotlines and shall post the message electronically to the ERCOT website. When an Advisory is issued, it does not place ERCOT in an Emergency Condition. QSEs shall notify, as appropriate, their represented QSEs, Resources, REPs and LSEs of Advisories. TOs should notify, as appropriate, their represented TSPs and DSPs of Advisories.

[NOGRR177: Replace paragraph (3) above with the following upon system implementation of NPRR857:]

- (3) ERCOT shall provide verbal notice of an Advisory to TOs and QSEs representing Resources through the TO and QSE Hotlines and shall post the message electronically to the ERCOT website. When an Advisory is issued, it does not place ERCOT in an Emergency Condition. QSEs shall notify, as appropriate, their represented QSEs, Resources, REPs, and LSEs of Advisories. TOs should notify, as appropriate, their represented TSPs, DSPs and/or DCTOs of Advisories.

4.2.3 Watch

- (1) A Watch may be issued by ERCOT in accordance with Protocol Section 6.5.9.3.3, Watch, when it recognizes that conditions have developed such that an Emergency Condition may be imminent.
- (2) ERCOT may require information from QSEs and TOs. Typical information requested may include, but is not limited to:
 - (a) Resource fuel capabilities;
 - (b) Resource condition details; and
 - (c) Actual weather conditions.
- (3) When a post-contingency overload of an element cannot be rectified, including through the use of CMPs, ERCOT shall issue a Watch.
- (4) ERCOT shall provide verbal notice of the Watch to TOs and QSEs representing Resources through the TO and QSE Hotlines and shall post the message electronically to the ERCOT website. When a Watch is issued, it does not place ERCOT in an Emergency Condition. QSEs shall notify, as appropriate, their represented QSEs, Resources, REPs and LSEs of Watches. TOs shall notify, as appropriate, their represented TSPs and DSPs of Watches.

[NOGRR177: Replace paragraph (4) above with the following upon system implementation of NPRR857:]

- (4) ERCOT shall provide verbal notice of the Watch to TOs and QSEs representing Resources through the TO and QSE Hotlines and shall post the message electronically to the ERCOT website. When a Watch is issued, it does not place ERCOT in an Emergency Condition. QSEs shall notify, as appropriate, their represented QSEs, Resources, REPs, and LSEs of Watches. TOs shall notify, as appropriate, their represented TSPs, DSPs and/or DCTOs of Watches.

4.2.4 Emergency Notice

- (1) An Emergency Notice will be issued by ERCOT in accordance with Protocol Section 6.5.9.3.4, Emergency Notice, when ERCOT is operating in an Emergency Condition. This includes when ERCOT is considered to be in an insecure state when ERCOT Transmission Grid status is such that a Credible Single Contingency event presents the threat of uncontrolled separation of cascading Outages and/or large-scale service disruption to Load (other than Load being served from a single-feed transmission service) and/or overload of a Transmission Facility, and no timely solution is obtainable from the market.
- (2) ERCOT shall provide verbal notice of an Emergency Notice to TOs and QSEs representing Resources through the TO and QSE Hotlines and shall post the message electronically to the ERCOT website.
- (3) When an Emergency Notice is issued, ERCOT is operating in an Emergency Condition. QSEs shall notify their represented QSEs, Resources, REPs and LSEs as appropriate of Emergency Notices. TOs shall notify their represented TSPs, DSPs and LSEs as appropriate of Emergency Notices.

[NOGRR177: Replace paragraph (3) above with the following upon system implementation of NPRR857:]

- (3) When an Emergency Notice is issued, ERCOT is operating in an Emergency Condition. QSEs shall notify, as appropriate, their represented QSEs, Resources, REPs and LSEs of Emergency Notices. TOs shall notify, as appropriate, their represented TSPs, DSPs, DCTOs, and LSEs of Emergency Notices.

4.3 Operation to Maintain Transmission System Security

- (1) ERCOT shall continue to operate according to Security Criteria outlined in Section 2.2.2, Security Criteria, unless an Emergency Condition has been declared by ERCOT.
- (2) Transmission Overload – ERCOT can:
 - (a) Order adjustment to unit generation schedules, switching of Transmission Elements or Load interruption to relieve the overloaded Transmission Element;

- (b) Order a Transmission Element whose loss would not have a significant impact on the reliability of transmission system switched out to increase interconnected system transfers.
- (3) Violation of security criteria – ERCOT can order changes to unit dispatch or commitment to eliminate or avoid a security criteria violation. Normally these changes should be performed through market control mechanisms including Security-Constrained Economic Dispatch (SCED) or Reliability Unit Commitment (RUC) as described in the Protocols, but if an ERCOT Operator finds these mechanisms insufficient to resolve the violation, the ERCOT Operator may require any other action necessary to address the violation.
- (4) Partial Blackout or Blackout – ERCOT shall implement Black Start procedures.

4.3.1 Real-Time and Short Term Planning

- (1) ERCOT will conduct Real-Time and short term planning based on the security criteria established in these Operating Guides. Operations during Forced and Planned Outages will also follow these criteria. Line Ratings are provided to ERCOT in accordance with Protocols and these Operating Guides. ERCOT will employ Constraint Management Plans (CMPs) and use of Remedial Action Schemes (RASs) to facilitate the use of the ERCOT Transmission Grid while maintaining system security and reliability in accordance with the Protocols, these Operating Guides, and applicable North American Electric Reliability Corporation (NERC) Reliability Standards. ERCOT will address operating conditions under which the reliability of the ERCOT System is inadequate and no solution is readily apparent in accordance with the Protocols and these Operating Guides.

4.4 Block Load Transfers between ERCOT and Non-ERCOT System

- (1) Under Watch, Energy Emergency Alert (EEA) conditions, or for local transmission constraints, it may become necessary to implement Block Load Transfer (BLT) schemes which will transfer Loads normally located in ERCOT to a non-ERCOT System. Similarly, when a non-ERCOT System experiences certain transmission contingency or short supply conditions, ERCOT may be requested to transfer Loads normally located in the non-ERCOT System to ERCOT. All BLTs must comply with Protocol Section 6.5.9.5, Block Load Transfers between ERCOT and Non-ERCOT Control Areas.

4.5 Energy Emergency Alert (EEA)

4.5.1 General

- (1) At times it may be necessary to reduce ERCOT System demand because of a temporary decrease in available electricity supply. The reduction in supply could be caused by emergency Outages of generators, transmission equipment, or other critical facilities; by short-term unavailability of fuel or generation; or by requirements or orders of

government agencies. To provide an orderly, predetermined procedures for curtailing Demand during such emergencies, ERCOT shall initiate and coordinate the implementation of the Energy Emergency Alert (EEA) in accordance with Protocol Section 6.5.9.4, Energy Emergency Alert.

- (2) The goal of the EEA is to provide for maximum possible continuity of service while maintaining the integrity of the ERCOT System to reduce the chance of cascading outages.

4.5.2 *Operating Procedures*

- (1) The ERCOT System Operators have the authority to make and carry through decisions that are required to operate the ERCOT System during emergency or adverse conditions. ERCOT will have sufficiently detailed operating procedures for emergency or short supply situations and for restoration of service in the event of a Partial Blackout or Blackout. These procedures will be distributed to the personnel responsible for performing specified tasks to handle emergencies, remedy short supply situations, or restore service. Transmission Service Providers (TSPs) will develop procedures to be filed with ERCOT describing implementation of ERCOT requests in emergency and short supply situations, including interrupting Load, notifying others and restoration of service.

[NOGRR177: Replace paragraph (1) above with the following upon system implementation of NPRR857:]

- (1) The ERCOT System Operators have the authority to make and carry through decisions that are required to operate the ERCOT System during emergency or adverse conditions. ERCOT will have sufficiently detailed operating procedures for emergency or short supply situations and for restoration of service in the event of a Partial Blackout or Blackout. These procedures will be distributed to the personnel responsible for performing specified tasks to handle emergencies, remedy short supply situations, or restore service. Transmission Service Providers (TSPs) and Direct Current Tie Operators (DCTOs) will develop procedures to be filed with ERCOT describing implementation of ERCOT requests in emergency and short supply situations, including interrupting Load, notifying others and restoration of service.

- (2) ERCOT and each TSP will endeavor to maintain transmission ties intact if at all possible. This will:
 - (a) Permit rendering the maximum assistance to an area experiencing a deficiency in generation;
 - (b) Minimize the possibility of cascading loss to other parts of the system; and
 - (c) Assist in restoring operation to normal.

[NOGRR177: Replace paragraph (2) above with the following upon system implementation of NPRR857:]

- (2) ERCOT and Transmission Operators (TOs) will endeavor to maintain transmission ties intact if at all possible. This will:
 - (a) Permit rendering the maximum assistance to an area experiencing a deficiency in generation;
 - (b) Minimize the possibility of cascading loss to other parts of the system; and
 - (c) Assist in restoring operation to normal.

- (3) ERCOT's operating procedures will meet the following goals while continuing to respect the confidentiality of market sensitive data. If all goals cannot be respected simultaneously then the priority order listed below shall be respected:
 - (a) Maintain station service for nuclear generating facilities;
 - (b) Securing startup power for power generating plants;
 - (c) Operating generating plants isolated from ERCOT without communication;
 - (d) Restoration of service to critical Loads such as:
 - (i) Military facilities;
 - (ii) Facilities necessary to restore the electric utility system;
 - (iii) Law enforcement organizations and facilities affecting public health; and
 - (iv) Communication facilities.
 - (e) Maximum utilization of ERCOT System capability;
 - (f) Utilization of Ancillary Services to the extent permitted by ERCOT System conditions;
 - (g) Utilization of the market to the fullest extent practicable without jeopardizing the reliability of the ERCOT System;
 - (h) Restoration of service to all Customers following major system disturbances, giving priority to the larger group of Customers; and

- (i) Management of Interconnection Reliability Operating Limits (IROLs) shall not change.

4.5.3 Implementation

- (1) ERCOT shall be responsible for monitoring system conditions, initiating the EEA levels below, notifying all Qualified Scheduling Entities (QSEs) representing Resources and Transmission Operators (TOs), and coordinating the implementation of the EEA conditions while maintaining transmission security limits. QSEs and TOs will notify all the Market Participants they represent of each declared EEA level.
- (2) During the EEA, ERCOT has the authority to obtain energy from non-ERCOT Control Areas using Direct Current Tie(s) (DC Tie(s)) or by using Block Load Transfers (BLTs) to move load to non-ERCOT Control Areas. ERCOT maintains the authority to curtail energy schedules flowing into or out of the ERCOT System across the DC Ties in accordance with North American Electric Reliability Corporation (NERC) scheduling guidelines.
- (3) ERCOT, at management's discretion, may at any time issue an ERCOT-wide appeal through the public news media for voluntary energy conservation.
- (4) There may be insufficient time to implement all levels in sequence. ERCOT may immediately implement EEA Level 2 when clock-minute average system frequency falls below 59.91 Hz for 15 consecutive minutes. ERCOT may immediately implement Level 3 of the EEA any time the clock-minute average system frequency falls below 59.91 Hz for 20 consecutive minutes or when steady-state frequency falls below 59.8 Hz for any duration of time. ERCOT shall immediately implement Level 3 any time the steady-state frequency is below 59.5 Hz for any duration.
- (5) Percentages for Level 3 Load shedding will be based on the previous year's TSP peak Loads, as reported to ERCOT, and will be reviewed by ERCOT and modified annually.
- (6) The ERCOT System Operator shall declare the EEA levels to be taken by QSEs and TSPs. QSEs and TSPs shall implement actions under that level (and all above if not previously accomplished) and if ordered by the ERCOT shift supervisor or his designate, shall report back to the ERCOT System Operator when the requested level has been completed.

[NOGRR177: Replace paragraph (6) above with the following upon system implementation of NPRR857:]

- (6) The ERCOT System Operator shall declare the EEA levels to be taken by QSEs, TSPs, and DCTOs. QSEs, TSPs, and DCTOs shall implement actions under that level (and all above if not previously accomplished) and if ordered by the ERCOT shift supervisor or his designate, shall report back to the ERCOT System Operator when the requested level

has been completed.

- (7) During EEA Level 3, ERCOT must be capable of shedding sufficient firm Load to arrest frequency decay and to prevent generator tripping. The amount of firm Load to be shed may vary depending on ERCOT Transmission Grid conditions during the event. Each TSP will be capable of shedding its allocation of firm Load, without delay. The maximum time for the TSP to interrupt firm Load will depend on how much Load is to be shed and whether the Load is to be interrupted by Supervisory Control and Data Acquisition (SCADA) or by the dispatch of personnel to substations. Since the need for firm Load shed is immediate, interruption by SCADA is preferred. The following requirements apply for an ERCOT instruction to shed firm Load:
 - (a) Load interrupted by SCADA will be shed without delay and in a time period not to exceed 30 minutes;
 - (b) Load interrupted by dispatch of personnel to substations to manually shed Load will be implemented within a time period not to exceed one hour;
 - (c) The initial clock on the firm Load shed shall apply only to Load shed amounts up to 1000 MW total. Load shed amount requests exceeding 1000 MW on the initial clock may take longer to implement; and
 - (d) If, after the first Load shed instruction, ERCOT determines that an additional amount of firm Load should be shed, another clock will begin anew. The time frames mentioned above will apply.
- (8) Each TSP, or its designated agent, will provide ERCOT a status report of Load shed progress within 30 minutes of the time of ERCOT's instruction or upon ERCOT's request.
- (9) During EEA Level 2 or 3, for those constraints that meet the criteria identified in paragraph (3)(a) of Section 4.5.3.1, General Procedures Prior to EEA Operations, ERCOT may control the post-contingency flow to within the 15-Minute Rating in Security-Constrained Economic Dispatch (SCED). After Physical Responsive Capability (PRC) is restored to at least 3,000 MW or the Emergency Condition has ended, whichever is later, and ERCOT has determined that system conditions have improved such that the chance of re-entering into an EEA Level 2 or 3 is low, ERCOT shall restore control to the post-contingency flow to within the Emergency Rating for these constraints that utilized the 15-Minute Rating in SCED.
- (10) During EEA Level 2 or 3, for those constraints that meet the criteria identified in paragraph (3)(b) of Section 4.5.3.1, ERCOT shall continue to enforce constraints associated with double-circuit contingencies throughout an EEA if the double-circuit failures are determined to be at high risk of occurring, due to system conditions. For all other double-circuit contingencies identified in paragraph (3)(b) of Section 4.5.3.1, ERCOT will enforce only the associated single-circuit contingencies during EEA Level 2 or 3. ERCOT shall resume enforcing such constraints as a double-circuit contingency after PRC is restored to at least 3,000 MW or the Emergency Condition has ended,

whichever is later, and ERCOT has determined that system conditions have improved such that the chance of re-entering into an EEA Level 2 or 3 is low. For constraints related to stability limits that are not IROLs, ERCOT may elect not to enforce double-circuit contingencies during EEA Level 3 only.

4.5.3.1 General Procedures Prior to EEA Operations

- (1) Prior to declaring EEA Level 1 detailed in Section 4.5.3.3, EEA Levels, ERCOT may perform the following operations consistent with Good Utility Practice:
 - (a) Provide Dispatch Instructions to QSEs for specific Resources to operate at an Emergency Base Point to maximize Resource deployment so as to increase Responsive Reserve (RRS) levels on other Resources;
 - (b) Commit specific available Resources as necessary that can respond in the timeframe of the emergency. Such commitments will be settled using the Hourly Reliability Unit Commitment (HRUC) process;
 - (c) Start Reliability Must-Run (RMR) Units available in the time frame of the emergency. RMR Units should be loaded to full capability;
 - (d) Utilize available Resources providing RRS, ERCOT Contingency Reserve Service (ECRS), and Non-Spinning Reserve (Non-Spin) services as required;
 - (e) Instruct TSPs and Distribution Service Providers (DSPs) or their agents to reduce Customer Load by using existing, in-service distribution voltage reduction measures if ERCOT determines that the implementation of these measures could help avoid entering into EEA and ERCOT does not expect to need to use these measures to reduce the amount of Load shedding that may be needed in EEA Level 3. A TSP, DSP, or their agent shall implement these instructions if distribution voltage reduction measures are available and already installed. If the TSP, DSP, or their agent determines in their sole discretion that the distribution voltage reduction would adversely affect reliability, the voltage reduction measure may be reduced, modified, or otherwise changed from maximum performance to a level of exercise that has no negative impact to reliability; and
 - (f) ERCOT shall use the PRC and system frequency to determine the appropriate Emergency Notice and EEA levels.
- (2) When PRC falls below 3,000 MW and is not projected to be recovered above 3,000 MW within 30 minutes following the deployment of Non-Spin, ERCOT may deploy available contracted Emergency Response Service (ERS)-10 and ERS-30 via an Extensible Markup Language (XML) message followed by a Verbal Dispatch Instruction (VDI) to the QSE Hotline. The ERS-10 and ERS-30 ramp periods shall begin at the completion of the VDI.

- (a) ERS-10 and ERS-30 may be deployed at any time in a Settlement Interval. ERS-10 and ERS-30 may be deployed either simultaneously or separately, and in any order, at the discretion of ERCOT operators.
 - (b) Upon deployment, QSEs shall instruct their ERS Resources in ERS-10 and ERS-30 to perform at contracted levels consistent with the criteria described in Section 8.1.3.1.4, Event Performance Criteria for Emergency Response Service Resources, until either ERCOT releases the ERS-10 and ERS-30 deployment or the ERS-10 and ERS-30 Resources have reached their maximum deployment time.
 - (c) ERCOT shall notify QSEs of the release of ERS-10 and ERS-30 via an XML message followed by VDI to the QSE Hotline. The VDI shall represent the official notice of ERS-10 and ERS-30 release.
 - (d) Upon release, an ERS Resource shall return to a condition such that it is capable of meeting its ERS performance requirements as soon as practical, but no later than ten hours following the release.
- (3) When a Watch is issued for PRC below 3,000 MW and ERCOT expects system conditions to deteriorate to the extent that an EEA Level 2 or 3 may be experienced, ERCOT shall evaluate constraints active in SCED and determine which constraints have the potential to limit generation output.
- (a) Upon identification of such constraints, ERCOT shall coordinate with the TSPs that own or operate the overloaded Transmission Facilities associated with those constraints, as well as the Resource Entities whose generation output may be limited, to determine whether:

[NOGRR177: Replace paragraph (a) above with the following upon system implementation of NPRR857:]

- (a) Upon identification of such constraints, ERCOT shall coordinate with the TSPs and DCTOs that own or operate the overloaded Transmission Facilities associated with those constraints, as well as the Resource Entities whose generation output may be limited, to determine whether:
 - (i) A 15-Minute Rating is available that allows for additional transmission capacity for use in congestion management, if an EEA Level 2 or 3 is declared, and post-contingency actions can be taken within 15 minutes to return the flow to within the Emergency Rating. Such actions may include, but are not limited to, reducing the generation that increased output as a result of enforcing the 15-Minute Rating rather than the Emergency Rating;

- (ii) Post-contingency loading of the Transmission Facilities is expected to be at or below Normal Rating within two hours; or
- (iii) Additional transmission capacity could allow for additional output from a limited Generation Resource by taking one of the following actions:
 - (A) Restoring Transmission Elements that are out of service;
 - (B) Reconfiguring the transmission system; or
 - (C) Making adjustments to phase angle regulator tap positions.

If ERCOT determines that one of the above-mentioned actions allows for additional output from a limited Generation Resource, ERCOT may instruct the TSPs to take the action(s) during the Advisory to allow for additional output from the limited Generation Resource.

- (b) ERCOT shall also coordinate with TSPs who own and operate the Transmission Facilities associated with the double-circuit contingencies for the constraints identified above to determine whether the double-circuit failures are at a high risk of occurring due to system conditions, which may include: severe weather conditions forecasted by ERCOT in the vicinity of the double-circuit, weather conditions that indicate a high risk of insulator flashover on the double-circuit, repeated Forced Outages of the individual circuits that are part of the double-circuit in the preceding 48 hours, or fire in progress in the right of way of the double-circuit.

[NOGRR177: Replace paragraph (b) above with the following upon system implementation of NPRR857:]

- (b) ERCOT shall also coordinate with TSPs and DCTOs who own and operate the Transmission Facilities associated with the double-circuit contingencies for the constraints identified above to determine whether the double-circuit failures are at a high risk of occurring due to system conditions, which may include: severe weather conditions forecasted by ERCOT in the vicinity of the double-circuit, weather conditions that indicate a high risk of insulator flashover on the double-circuit, repeated Forced Outages of the individual circuits that are part of the double-circuit in the preceding 48 hours, or fire in progress in the right of way of the double-circuit.

- (c) The actions detailed in this Section shall be supplemental to the development and maintenance of Constraint Management Plans (CMPs) as otherwise directed by the Protocols or Operating Guides.

- (4) When a Watch is issued for PRC below 3,000 MW, QSEs shall suspend any ongoing ERCOT-required Resource performance testing.

4.5.3.2 General Procedures During EEA Operations

- (1) ERCOT Control Area authority will re-emphasize the following operational practices during EEA operations to minimize non-performance issues that may result from the pressures of the emergency situation.
 - (a) ERCOT shall suspend Ancillary Service obligations that it deems to be contrary to reliability needs;
 - (b) ERCOT shall notify each QSE representing Resources and TO via ERCOT QSE and TO Hotlines of each declared EEA level and shall post the declared EEA level electronically to the ERCOT website;
 - (c) QSEs and TOs shall notify each represented Market Participant of declared EEA level;
 - (d) ERCOT, QSEs and TSPs shall continue to respect confidential market sensitive data;

[NOGRR177: Replace paragraph (d) above with the following upon system implementation of NPRR857:]

- (d) ERCOT, QSEs, TSPs, and DCTOs shall continue to respect confidential market sensitive data;

- (e) QSEs shall update Current Operating Plans (COPs) to limit or remove capacity when unexpected start-up delays occur or when ramp limitations are encountered;
- (f) QSEs shall report when On-Line or available capacity is at risk due to adverse circumstances;
- (g) QSEs, TSPs, and all other Entities must not suspend efforts toward expeditious compliance with the applicable EEA level declared by ERCOT nor initiate any reversals of required actions without ERCOT authorization;

[NOGRR177: Replace paragraph (g) above with the following upon system implementation of NPRR857:]

- (g) QSEs, TSPs, DCTOs, and all other Entities must not suspend efforts toward expeditious compliance with the applicable EEA level declared by ERCOT nor initiate any reversals of required actions without ERCOT authorization;

- (h) ERCOT shall define procedures for determining the proper redistribution of reserves during EEA operations; and

- (i) QSEs shall not remove an On-Line Generation Resource without prior ERCOT authorization unless such actions would violate safety, equipment, or regulatory or statutory requirements. Under these circumstances, QSEs shall immediately inform ERCOT of the need and reason for removing the On-Line Generation Resource from service.

4.5.3.3 EEA Levels

- (1) ERCOT will declare an EEA Level 1 when PRC falls below 2,500 MW and is not projected to be recovered above 2,500 MW within 30 minutes without the use of the following actions that are prescribed for EEA Level 1:
 - (a) ERCOT shall take the following steps to maintain steady state system frequency near 60 Hz and maintain PRC above 2,000 MW:
 - (i) Request available Generation Resources, that can perform within the expected timeframe of the emergency, to come On-Line by initiating manual HRUC or through Dispatch Instructions;
 - (ii) Use available DC Tie import capacity that is not already being used;
 - (iii) Issue a Dispatch Instruction for Resources to remain On-Line which, before start of emergency, were scheduled to come Off-Line; and
 - (iv) Instruct QSEs to deploy undeployed ERS-10 and ERS-30.

[NOGRR221: Insert item (v) below upon system implementation of NPRR1010:]

- (v) At ERCOT's discretion, manually deploy, through Inter-Control Center Communications Protocol (ICCP), available RRS and ERCOT Contingency Reserve Service (ECRS) capacity from Generation Resources having a Resource Status of ONSC and awarded RRS or ECRS.

- (b) QSEs shall:
 - (i) Ensure COPs, telemetered status, and telemetered High Sustained Limits (HSLs) are updated and reflect all Resource delays and limitations; and

[NOGRR221: Replace paragraph (i) above with the following upon system implementation of NPRR1010:]

- (i) Ensure COPs, telemetered status, and telemetered HSLs, Normal Ramp Rates, Emergency Ramp Rates, and Ancillary Service capabilities are

updated and reflect all Resource delays and limitations; and

- (ii) Ensure that each of its Energy Storage Resources (ESRs) suspends charging until the EEA is recalled, except under the following circumstances:
 - (A) The ESR has a current SCED Base Point Instruction, Load Frequency Control (LFC) Dispatch Instruction, or manual Dispatch Instruction to charge the ESR;
 - (B) The ESR is actively providing Primary Frequency Response; or
 - (C) The ESR is co-located behind a Point of Interconnection (POI) with onsite generation that is incapable of exporting additional power to the ERCOT System, in which case the ESR may continue to charge as long as maximum output to the ERCOT System is maintained.

[NOGRR229: Replace paragraph (ii) above upon system implementation of NPRR995:]

- (ii) Ensure that each of its Energy Storage Resources (ESRs) and Settlement Only Energy Storage Systems (SOESSs) suspends charging until the EEA is recalled, except under the following circumstances:
 - (A) The ESR has a current SCED Base Point Instruction, Load Frequency Control (LFC) Dispatch Instruction, or manual Dispatch Instruction to charge the ESR;
 - (B) The ESR or SOESS is actively providing Primary Frequency Response; or
 - (C) The ESR or SOESS is co-located behind a Point of Interconnection (POI) with onsite generation that is incapable of exporting additional power to the ERCOT System, in which case the ESR may continue to charge as long as maximum output to the ERCOT System is maintained.

- (2) ERCOT may declare an EEA Level 2 when the clock-minute average system frequency falls below 59.91 Hz for 15 consecutive minutes. ERCOT will declare an EEA Level 2 when PRC falls below 2,000 MW and is not projected to be recovered above 2,000 MW within 30 minutes without the use of the following actions that are prescribed for EEA Level 2: