APPENDIX D. RESTORATION PERSONNEL SUPPLIES

- Ice chest(s) 48 Quart or Larger
- Drinking Water Cooler
- Gator Aid or Squelcher
- Bottled water
- Insect Repellent & Sun Screen
- Fully supplied First Aid Kit & BBP kit
- Work Zone Protection Signs, Vest, & Traffic Cones
- Trucks fully stocked with tools
- Live Line tools, rubber goods
- Lights & extra batteries or chargers
- Generator or Inverter for Small Microwave and Charging Lights, Batteries
- Outrigger Pads
- Personal Grounds
- All Personal Protective Equipment
- Climbing Tools & Hand tools
- Overshoes & Rainwear
- Drinks, Snacks, Canned Foods
- Personal Hygiene Products
- FR Uniforms & Clothing for 7 Days
- Extra Boots
- · Cash, Phone card
- Prescribed Medicine, Enough for 7 Days

APPENDIX E. FORM FOR REQUESTING ASSISTANCE



Form for Requesting Assistance

Cooperative requesting emergency assistance:		
Telephone number(s):		
	(Use headquarters town nan	
Number and type of	trucks needed:	
Other equipment and	d tools needed:	
Personnel and classi	fications needed:	
Materials needed: _		
Weather and road co	onditions:	
Where crews should	report and to whom:	
Estimate of how lon	g the help may be needed:	
How to contact your	cooperative during the emergency:	
Name of person to r	eceive this information:	
Date:		

APPENDIX F. MUTUAL AID MEMORANDUM OF UNDERSTANDING

In consideration of the mutual commitments given herein, each of cooperatives signing this Mutual Aid Memorandum of Understanding ("MOU") agrees to render aid to any of the other cooperatives as follows:

Responsibilities of Cooperative(s) requesting assistance ("Requesting Cooperative")

- 1. The Requesting Cooperative will make its request in writing within a reasonable time after the aid is needed and with reasonable specificity.
- 2. Plan the organization for receiving help and integrate all assistance with its own personnel and facilities.
- 3. Provide each crew with a map or information, showing the area to which they have been assigned, source of supply, direction of feed and location of sectionalizing equipment.
- 4. Provide a representative from the Requesting Cooperative to perform necessary liaison for each crew or group of units operating together.
- Provide procedures to properly account for materials used and retired, and hours worked by employees.
- 6. Maintain contact with all units. All dispatching operations should be directed by person or persons who are thoroughly acquainted with the system in the affected area.
- 7. Prescribe the number of hours to be worked; however, it is recommended that no more than 16 hours be prescribed in a 24-hour period. Time begins when crews enter vehicles to begin the day including travel to the Requesting Cooperative's jurisdiction, travel to and from job sites, and all meals and ends when they arrive back at place of lodging.
- 8. Provide sleep accommodations for the personnel from the cooperative providing assistance ("Providing Cooperative") and pay for all lodging. Personnel may be required to share a motel room with two double beds.
- 9. Provide or reimburse costs for all meals (breakfast, lunch, and dinner). If Providing Cooperative's crews need to purchase meals during work hours, they will keep itemized receipts to be turned in to their cooperative for reimbursement.
- 10. Provide laundry service to Providing Cooperative personnel as needed.

Responsibilities of Providing Cooperative

- 1. Dispatch properly-trained and equipped personnel and equipment in good working condition.
- Costs to repair damages/breakdowns of the Providing Cooperative's vehicles, costs for the
 Providing Cooperative's preparation for deployment, and costs for the Providing Cooperative's
 training exercises remain the responsibility of the Providing Cooperative and will not be
 reimbursed.
- 3. Inform its own personnel of all aspects of its agreement.

- 4. Provide workers' compensation insurance coverage for injuries sustained by Providing Cooperative's personnel, wherever such injuries might occur.
- 5. Ensure that each employee leaving home to provide mutual aid assistance has sufficient cash or cooperative credit card for incidental expenses. Instruct crew to obtain and keep itemized receipts for all such purchases and turn them in to their cooperative when they have returned home, for reimbursement.
- 6. Bill the Requesting Cooperative for the total actual payroll costs of the Providing Cooperative's personnel at the appropriate rate specified by the Providing Cooperative's pre-disaster pay policy, including whether mutual aid work is paid at both straight time and overtime, as applicable, or at overtime rate only, regardless of whether the mutual aid work is in response to a federally declared disaster. The Providing Cooperative will not bill for overhead cost or profit.
- 7. Submit the documentation described below to the Requesting Cooperative:
 - a. Invoices for all costs requested to be reimbursed;
 - b. Itemized receipts for meals and incidentals (including the names of the workers served);
 - c. Summary of labor costs including: each individual name, job title and function, type of employee (e.g., full-time exempt, full-time non-exempt, part-time, temporary, etc.), days and hours worked, pay rates and fringe benefit rates, description of work (including daily logs/activity reports);
 - d. Labor timesheets:
 - e. Fringe benefit calculations; and
 - f. Pre-disaster pay policy, including whether mutual aid work is paid at both straight time and overtime, as applicable, or at overtime rate only, regardless of whether the mutual aid work is in response to a federally declared disaster.

Resources possibly provided by Providing Cooperatives

- 1. Line personnel (preferably Line/Crew Forman, Journeymen, Apprentice, Groundmen and/or Digger-Operator) with all necessary equipment
- 2. Staking technicians with all necessary equipment (e.g., vehicle, laptop, tablet, iPad, and staking software if compatible, etc.)
- 3. Warehouse personnel
- 4. Vehicle Mechanics
- 5. Customer Services or Coordinating Personnel
- 6. Golden Spread Electric Cooperative, Inc. ("Golden Spread") may serve as primary point of contact for Requesting Cooperative, if requested. Golden Spread will distribute information to all Electric Cooperatives participating in this MOU.

Compensation for Providing Personnel working Out of State

For out-of-state work, all Providing Cooperative personnel who work in the Requesting Cooperative's jurisdiction will also receive wages at the appropriate rate specified by the Providing Cooperative's pre-disaster pay policy for all labor hours worked, including whether mutual aid work is paid at both straight time and overtime, as applicable, or at overtime rate only, regardless of whether the mutual aid work is in response to a federally declared disaster. The Providing Cooperative's dispatching operations that may occur outside of the Requesting Cooperative's state will not be reimbursed.

APPENDIX G. MUTUAL AID AGREEMENT

The following Electric Cooperatives agree to and support implementation of the Mutual Aid Memorandum of Understanding as a guide and agreement for providing personnel and equipment during Mutual Aid for storm or natural disaster restoration.

[remainder of page intentionally left blank; signature pages to follow]

By:_____ Date: _____ Title:____ Signature:_____ Big Country Electric Cooperative, Inc. By:_____ Date:_____ Title:____ Signature:____ Coleman County Electric Cooperative, Inc. By:_____ Title:____ Signature:_____ Concho Valley Electric Cooperative, Inc. By:_____ Date: Title:____ Signature:_____ Deaf Smith Electric Cooperative, Inc. Date: ____ By:_____ Title:____ Signature:

Bailey County Electric Cooperative Association

Farmers Electric Cooperative, Inc.	
Date:	By:
	Title:
	Signature:
Golden Spread Electric Cooperative, Inc.	
Date:	By:
	Title:
	Signature:
Greenbelt Electric Cooperative, Inc.	
Date:	By:
	Title:
	Signature:
Lamb County Electric Cooperative, Inc.	
Date:	By:
	Title:
	Signature:
Lea County Electric Cooperative, Inc.	
Date:	By:
	Title:
	Signature:

Lighthouse Electric Cooperative, Inc.		
Date:	Ву:	
	Title:	
	Signature:	
Lyntegar Electric Cooperative, Inc.		
Date:	Ву:	
	Title:	
	Signature:	
North Plains Electric Cooperative, Inc.		
Date:	Ву:	
	Title:	
	Signature:	
Rita Blanca Electric Cooperative, Inc.		
Date:	Ву:	
	Title:	
	Signature:	
South Plains Electric Cooperative, Inc.		
Date:	Ву:	
	Title:	
	Cianotunos	

Southwest Texas Electric Cooperative, Inc.	
Date:	By: Title: Signature:
Swisher Electric Cooperative, Inc. Date:	By: Title: Signature:
Taylor Electric Cooperative, Inc. Date:	By:
TCEC (Tri-County Electric Cooperative, Inc.)	Title: Signature:
Date:	By: Title: Signature:

APPENDIX H. ENGINEERING AND OPERATIONS PROCEDURES

- 1. Engineering departments should develop and submit to management and boards of directors a policy concerning specific pole and conductor sizes and other items to be used in a "Standard Construction Policy." Co-op staking sheets and work plans may be used as examples to show proof of a "replacement standard" being in place prior to the occurrence of a natural disaster.
- 2. Engineering and operations personnel should note the date and time the first outage occurred due to the disaster, and the date and time the last consumer's electricity is restored.
- 3. The engineering/operations department should solicit at least three (3) bids for permanent repair work to be done, preferably before the conclusion of the 70-hour Emergency Protective Measures period. Bids from contractors must be received, along with price sheets for storm labor and equipment. It is recommended that bids be made on a per-unit basis, rather than hourly. However, if billing is hourly, proof must be shown that the contractor was supervised by the cooperative, complete with daily notes and documentation.
- 4. It is strongly recommended that additional engineering resources be arranged to assist in the daily development of staking sheets, material sheets, and work order information. This will allow the staking department to stay ahead of construction crews, and provides for an orderly flow of necessary and vital information to other key departments.
- 5. Member donated items, such as food, services and labor, must be well documented. It may be necessary for the member or group providing these items to sign an affidavit listing the cost of donated items, or for an invoice to be provided. This could then be included in Administrative Expense by the cooperative.
- 6. Prepare staking sheets as soon as possible for work to be done. Make sure that all permanent work has a staking sheet documenting the completed work. The labor for making the staking sheets should be included in the work order and is FEMA reimbursable (Category F). The labor involved in looking for and estimating damage to the system is not reimbursable except as Administrative Expense.
- 7. Damage surveys: It is strongly recommended that, if possible, co-op personnel resist the urge to send all available human resources into the field to assist in the repair of damage. Instead, the following is advised:
 - a. Send several experienced field personnel on a 'Fast Survey' of the areas in which damage is suspected. Use enough personnel to drive through the damaged area(s) in one day or less.
 - b. Initially, some lineman may need to be utilized to patrol line rather than to repair it. The Fast Survey is designed to rapidly determine the extent of damage throughout the co-ops' system. It will allow for better decision-making concerning crews, materials and equipment.
 - c. Damage reports from survey personnel should list the location, approximate length (1 mile, etc.) of damage in area, the type of damaged pole line, i.e., "south side of section 23, T15N, R1W One mile of 3 phase line, 1/0 conductor on 45-foot, Class 4 poles is down."
 - d. Collect all reports during the survey at the dispatch center or Emergency Operations Center and draw the damaged locations on a Key Map. Start a database using Excel or Access software to log each of the damage reports by line section or map location

- number. This will help the engineering and operations departments document the scope and location of the damage for later accounting purposes.
- e. If possible, allow survey teams to use cell phones to report damage; designate someone to log these reports onto the Key Map and also log the reports into the database. This is also the time to note the locations of any lines that may be blocking major roadways, since main roads will need to be cleared quickly.
- f. Do not allow survey teams to stop and draw staking sheets or to make detailed material sheets during the initial Fast Survey. The goal is to rapidly drive through the damage area(s) to determine the extent and locations of damage. The information gathered will then be used to determine crew and material requirements. The earlier the co-op gets a handle on the extent of the damage, the earlier proper staking sheets can be developed for known damage locations.
- 8. Beginning repairs: Concentrate on the areas that will allow the cooperative to get power restored to the most consumers with the least amount of work, and to critical loads, if any. Begin work at substations and work main feeder lines outward from that point. If damage is extensive in an area, staking technicians may need to be sent ahead of repair crews in order to draw staking sheets and set stakes. Identify in advance all feeder lines and critical loads.
- 9. Some lines can be repaired with little or no staking; others will have to be staked as if they are new construction. In the case of strong tornadoes or hurricanes, the pole line may be completely obliterated, with no poles left for reference points. In these cases, the line may have to be completely re-staked prior to reconstruction.
- 10. Ice storms, on the other hand, may break poles down, but type of framing and original hole locations will still be known. Repair crews can reset new poles in these instances without staking sheets or stakes, unless the damage involves Codes and Standards changes, which may necessitate re-staking due to changes in ruling spans being made for proper clearance purposes.
- 11. Quick staking sheet drawings listing pole framing requirements are very helpful for repair crews, but in ice storms, with a visible pole line in place, it may not be necessary for staking technicians to 'wheel off' spans or set stakes. Whether damage is caused by an ice storm, hurricane or tornado, staking teams will have to coordinate with repair crews, and vice-versa.
- 12. Inspect and document the repairs: Once repairs are underway, use engineering personnel to inspect completed repair locations. Consider using consultants or additional engineering help from neighboring co-ops. Engineering teams will have to look for all poles and construction units that were set or replaced during the disaster. Some repairs may have been made without benefit of written records; the purpose of the engineering follow-up inspection is to further document repair locations and materials used.
- 13. The second purpose of the inspection is similar to work order inspections. List the material units used at each damaged pole location, noting any cleanup or corrections that may be required in order to bring the line into compliance with current co-op, RUS and NESC Codes and Standards.
- 14. For Category F, Utility (permanent repairs), it is extremely important to have in place board-approved co-op design standards and staking tables. This customized "Standard Construction Policy" should spell out standard pole heights, conductor sizes and ruling spans to be used at the cooperative, and should be utilized every day by co-op staking personnel.
- 15. The third purpose of the inspection is to have engineers check surrounding areas for damaged lines possibly overlooked during the initial Fast Survey. Some lines may serve idle or seasonal services and should be closely evaluated for rebuild or retirement.

- 16. Inspection notes must be detailed and listed by map location number. The notes should be entered into a database for easy retrieval and subsequent evaluation. Documentation of all work performed during the disaster is a major task, but is absolutely critical if a cooperative expects to qualify and receive FEMA reimbursement. These records will be used to ensure the system is returned to current Codes and Standards, and to help document material and labor costs associated with all reconstruction efforts.
- 17. Contracts from contractors: The co-op must have in place, or be prepared to receive from at least three (3) different sources, bids for permanent repairs. This is preferable during the 70-hour Emergency Protective Measures period immediately following the disaster. During the initial emergency period, if a contract has not been signed by the contractor, any record of contact, arrival times, and/or anything discussed by phone or in person with the contractor should be documented. OIG auditors may allow these costs from contractors, but only if the co-op proves such verbal agreement existed via documentation.
- 18. Contractors unfamiliar with local co-op service areas will require supervision and instruction by local co-op employees. It is suggested that trained and experienced employees be used to supervise these contractor crews, such as those employees from the co-op's staking department, marketing department, or key accounts department.
- 19. If predicted storms appear to be extremely destructive in nature (forecasted ice storms, hurricanes, or tornado outbreaks), consider creating work orders in advance to charge all time and materials to.
- 20. If possible and if needed, use in-house contractors and any of their extra crews before calling in or bidding other contract crews. In-house crews are contractors the cooperative presently employs for contract construction work. Make sure the in-house contractor has their emergency storm repair rates on file with the cooperative, as well as rates for permanent repairs.
- 21. Keep <u>all</u> receipts during the event, in case the storm or event is later declared a federal disaster.
- 22. Work Orders: Some co-ops prefer to make one work order per disaster. Counties (or parishes, etc.) are designated with map location numbers noted on all time sheets, staking sheets and material sheets.
- 23. On-file contracts: Some co-ops retain contracts and keep them on file from contractors. Included in those contracts is a sheet pertaining to emergency storm work. However, it is usually a good practice to call in contractors within the first 24 to 36 hours of the disaster if damage warrants their assistance. Again, bids for repairs should be let during the 70-hour Emergency Protective Measures period, and before permanent repairs begin.
- 24. In-house contractors: These are contractors already under contract with the cooperative and are usually already familiar with the co-op's crews and service area. These contractors may or may not need the direct supervision of a cooperative employee, depending upon their knowledge of the co-op's system, its substations, main feeder circuits, critical loads, etc.
- 25. Rights-Of-Way (R-O-W) contractors: Some co-ops maintain rights-of-way contractors on an annual basis. These R-O-W contractors can be very beneficial during a disaster, especially if needed for debris removal. These contractors may still need to be supervised by co-op personnel, and will need to provide complete details of their daily work to the affected cooperative, preferably submitting detailed invoices on a weekly basis.
- 26. Co-op R-O-W supervisors can be very helpful in preparing damage report maps, locations of work to be performed, and in preparing transformer or pole replacement reports. Because of

- their experience, some co-ops may choose to make these R-O-W supervisors their disaster Project Officers. This will obviously vary from co-op to co-op.
- 27. Notify all other departments of work orders assigned to the disaster. Other departments should also be informed of activity codes that may be assigned. Coordinate specifically with the accounting department to ensure that copies of all time sheets, invoices, checks and cash receipts are obtained. Keep a working file that is designated by work order number, FEMA Category A through F, and location (map number, county, etc.).
- 28. Utilize marketing, public relations, or key accounts employees, based on their experience and level of training, to deliver food and/or materials to crews in the field. Ask them to keep all receipts and detailed logs of material and/or equipment delivered.
- 29. Arrange for fuel (diesel, gas, etc.) from suppliers throughout the co-op's service area. Have a contingency plan to deliver properly-sized backup generators to these fuel suppliers in case their pumps have no electricity due to the disaster.
- 30. Have all contactors sign a simple contract stating that they are indeed contractors and that they agree to "hold harmless" the cooperative from liability, worker's compensation claims, damage to hotel/motel rooms, and damage to public/private property due to their crews' negligence. Include in this agreement that weekly invoicing for work performed by the contractor is expected by the cooperative.
- 31. Engineering firms may need to be used to prepare bid specifications. Utilize their services during a disaster situation. This will also help in allowing the cooperative's in-house engineering and staking department personnel to stay ahead of contractors and construction crews with staking and material sheets, which is absolutely necessary.
- 32. As soon as possible during the disaster, utilize public relations personnel, part-time employees, or possibly retirees to take both still pictures and videos of the damage. This serves two purposes: 1.) It makes a permanent record of the amount of ice that was on the line or the level of devastation caused by a hurricane or tornado, thus making damage repair estimates more realistic; and, 2.) Photos and videos can be used to show FEMA and/or state emergency management personnel conditions that caused the damage to the cooperative's system. Remember that FEMA and/or state emergency management personnel often do not show up at the cooperative until several days (or weeks) have passed, so these photos and videos can play a very important role in verifying and validating damage assessments and the necessary levels of permanent repairs to be stipulated in PWs.
- 33. Any verbal contract or agreement between contractors and cooperative personnel should be written down and recorded. A checklist should be made by the engineering/operations departments of documentation to be required from all contract crews. This documentation will serve as backup for review of billing invoices submitted by contractors. If documentation is not present and does not backup an invoice submitted by the contractor, the contractor should be required to find and submit the proper documents before payment is made to the contractor by the cooperative.
- 34. Contractors should be required to submit weekly invoices, including time sheets, detailing individual crew member names, where they worked, hours worked, equipment used, etc., and listing costs for pieces of equipment used in both the emergency restoration and permanent repair efforts.
- 35. Engineering/operations personnel should be prepared to document and explain the process used by the local cooperative to select work crews, whether from other co-ops (through the Mutual Aid Plan) or from contract construction crews. An 'Action Plan' detailing how the co-

op selected contractors and why specific equipment was requested for the emergency restoration and permanent repairs process should also be developed.

NOTE: Department of Public Safety officials should be notified anytime a cooperative declares an Emergency Outage Situation due to a disaster, thus extending "Hours of Service" driving regulations for certain personnel.