APPENDIX B. EMERGENCY SUPPLIES

A. FACILITY EMERGENCY SUPPLIES LIST

At each Cooperative facility, it will be the responsibility of the facility/site manager to maintain a cache of emergency supplies for use in periods of severe weather likely to result in power outages or facility damage.

The responsible Cooperative manager will ensure that those items with a shelf life, such as batteries, are replaced on an appropriate schedule.

The following are the minimum emergency supplies that will be kept at each Cooperative site. Additional items may be listed in operations and engineering procedures.

- Duct tape
- 10 Flashlights
- Flashlight batteries (4 sets for each flashlight)
- Rain ponchos
- Plastic tarps or sheeting
- Staple gun
- Bungee cords
- Rope
- Backup generator fuel (as appropriate)
- 2-way radios
- Large trash bags with ties
- Leather gloves

B. 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

C. FOR YOUR MEMBERS

- Unopened food freezers can maintain stored frozen foods safely from 36 to 48 hours depending upon the amount of food stores, capacity of the freezer and the normal temperature of operation of the freezer. Sources of dry ice, quantities available and prices will be determined by your statewide if requested.
- During prolonged outages, dry ice can save thousands of pounds of stored food in a disaster area. Power suppliers can supply a real service during disasters by knowing where dry ice can be secured and even making arrangements in advance for it to be sent to a central location, whereby local radios can inform people of its availability.
- Experience during past hurricanes and ice storms points out the necessity of assigning, in advance; a member of your staff who will handle member relations during times of disaster. It is important that he make arrangements with radio stations to keep them informed of your systems' plan for re-establishing service. When telephone services are available, a regular schedule should be set up with a direct circuit from the cooperative office to the radio station that will enable the manager to maintain contact with members.
- There are many cases where members are isolated due to road conditions and they should be warned about energized lines which are down, they should be encouraged to notify the cooperative office when they notice broken lines, poles down, etc. They should be informed as to how your method of re-establishing service is progressing. Members cannot be expected to know when service to your substation has caused their outage. By keeping them thoroughly informed, you will be performing a vital member service and one that can pay handsome dividends for years to come.
- In every cooperative area, there are dairies, hatcheries, etc. which must have electric service, certainly during part of the outage, therefore, it is recommended that a survey be made to determine the availability of portable generators of 5 KW and above. For example: In certain portions of Texas, the National Guard has available portable generators for providing emergency service of this nature. In emergencies, these units are moved from dairy to dairy to provide power for milking. Continuous power is necessary for hospitals or in houses where someone is seriously ill. These portable generators therefore are most important.

APPENDIX C. PROCEDURES FOR OBTAINING MUTUAL AID



A. GOLDEN SPREAD MUTUAL AID AGREEMENT

2. Responsibilities of Assisting Cooperative:



- 3. Resources possibly provided by assisting Cooperatives



4. Member Services Personnel Compensation for Assisting Personnel working Out of State



5. Primary Point of Contact



6. Participating Cooperatives





B. TEC MUTUAL AID AGREEMENT

In consideration of the mutual commitments given herein, each of the Signatories to this



1. Contacting TEC

2. TEC Plan of Action



3. Basic Safety Rules

All safety rules shall be observed with particular emphasis on the following:

1. Rubber Gloves:

a. Rubber gloves shall be worn by all personnel from ground to ground when performing work on any pole or structure carrying energized conductors.

b. Rubber gloves shall be put on before any energized URD compartment or enclosure (including service pedestals) is opened and kept on until the compartment or enclosure is closed and locked or until all equipment is properly grounded, barricaded, and shielded.

c. Rubber gloves must be worn at all rimes when using hot sticks of any kind.

d. Rubber gloves must not be used for direct hand contact on voltages above 5,000 volts except while using properly rated gloves and sleeve from fully insulated aerial devices.

e. Personnel handling butts of poles or any object that might come in contact with energized conductors or apparatus must wear rubber gloves.

2. Grounding:

a. All de-energized conductors and apparatus must be grounded with adequate ground jumpers on all sides as close to work areas as possible before further work on conductors or apparatus involved is begun. Line jumper is not to be considered as an adequate ground.

b. Ground jumpers must be attached and detached with hot stick.

c. All conductors including floating, fallen, or broken conductors must be regarded as energized until properly de-energized, tested, and grounded. d. Pole-setting truck must be grounded when setting or pulling poles in or near energized lines. Points of disconnection must be identified by approved ground jumper installed by each and every crew working on this section regardless of ground previously installed by any other crews. These grounds shall not be removed by anyone other than the crew installing them.

e. Hazardous Energy Control: APPA Safety Manual, Section 626, parts A, B, and C. If a system operator is in charge of the line or equipment and their means of disconnections, the following steps shall be taken:

A designated employee requests that the system operator de-energize the equipment. This designated employee becomes the employee in charge and is responsible for the clearance.

- A. All means through which sources of electric energy may be supplied to the lines and equipment shall be opened and rendered inoperable, when its design does not permit, and tagged to indicate that employees are a work.
- B. Unless its design does not permit, automatic and remote switches that could cause opened disconnecting means to close shall be tagged at the point of control.
- C. Tags shall prohibit the operation of the disconnecting means and indicate that employees are at work.
- D. After the above steps have been taken, the equipment to be worked shall be tested to ensure it is de-energized. Protective grounds shall be installed (refer to OSHA Standard 29CFR 1910.269(n).
- E. The equipment may now be worked as de-energized.
- F. If two or more independent crews will be working on the same lines or equipment, each crew shall independently comply with the above steps.
- G. Transfer of clearance shall be communicated to the system operator and the employees in the crew. The new employee in charge shall now be responsible for the clearance.
- H. Clearance release requires the employee in charge to notify the employees under his direction that the clearance is to be released, determine that employees in the crew are clear or overhead lines and equipment, determine that protective grounds have been removed, report this information to the system operator, and release the clearance.
- I. The person releasing the clearance shall be the same person who requested it, unless the responsibility has been properly transferred.
- J. Tags may not be removed unless the associated clearance has been released.
- K. Only after all the above have successfully accomplished, may the lines and equipment be re-energized.

- L. If no system operator is in charge of the lines or equipment and their means of disconnection, one employee in the crew shall be designated as being in charge of the clearance. The employee in charge shall then take the place of the system operator and complete steps (2) through (13) above.
- M. g. If only one crew will be working on the lines or equipment and if the means of disconnection is accessible and visible to and under the sole control of the employee in charge, then steps (1), (3), (4), (8), and (12) under (e) in this section need not be taken.
- N. h. For more information, refer to OSHA Standards 19CFR 1910.269 and 29 CFR 1910.147.
- O. Operating of switching devices—an approved hot stick must be used to open or close O.C.R's cut-outs, switches or jumpers being used as a disconnecting device.
- P. Operations of cooperative motor vehicles—cooperative personnel must drive cooperative vehicles in accordance with state traffic laws.
- Q. APPA Safety Manual, Section 6, Parts B and C.b. At least two employees will be present while the following types of work are being performed (except as noted in © below).
- R. Installation, repair or removal of de-energized lines if an employee is exposed to contact with other parts energized at more than 600 volts.
- S. Installation, repair or removal of lines energized at more than 600 volts.
- T. Installation, repair or removal of equipment such as transformers, capacitors and regulators, if an employee is exposed to contact with parts energized at more than 600 volts.
- U. Work involving the use of mechanical equipment, other than insulated aerial lifts, near parts energized at more than 600 volts.
- V. Any other work that exposed an employee to electrical hazards greater than those listed above.
 - c. Two employees do not need to be present in the following operations:
- W. Routine switching of circuits (if it can be done safely).
- X. Work performed with live-line tools if the employee is positioned so that they are not within reach of or otherwise exposed to energized parts.
- Y. Emergency repairs necessary to safeguard the general public:
- Z. Testing poles—any employee, before climbing any pole, shall take every possible precaution to insure that it is safe to climb or work upon. If pole is to be dismantled or direction of strain is to be changed, pole must be tested below ground-line or safe guarded by adequate supports. Also, anchor rods must be checked.

AA. No person will be permitted to work while under the influence of alcohol or drugs. It is recommended that no employees indulge in drinking or take drugs that could impair judgment or mote skills while off duty during an emergency.

4. FORM FOR REQUESTING ASSISTANCE FROM TEC



APPENDIX D. ENGINEERING AND OPERATIONS PROCEDURES

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.

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.

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.

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.

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.

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). <u>The labor involved in looking for and estimating damage to the system **is not** reimbursable **except** as <u>Administrative Expense</u>.</u>

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:

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.

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.

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."

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.

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.

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.

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.

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.

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. 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.

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.

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.

For Category F, Utility (permanent repairs), it is extremely important to have in place boardapproved 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.

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.

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.

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.

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.

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.

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.

Keep <u>all</u> receipts during the event, in case the storm or event is later declared a federal disaster.

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.

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.

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.

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.

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.

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.).

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.

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.

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.

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**.

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.

<u>Any verbal contract or agreement</u> 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.

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.

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.

All construction will meet all National Electrical Safety Code (NESC) requirements.

According to RUS standards, all new construction will be at 7.2/12.5 kV.

It is our goal to replace all copper lines with ACSR. Old copper and SCG wire should be replaced:

If four locations per mile have insufficient ground clearance based upon current code, replace whole mile;

If more than two splices per quarter mile, per conductor, replace the entire conductor in the mile (at least from dead-end to dead-end).

When wire is damaged or stressed: Wire shall be deemed stressed when sag is found more than two times normal sag.

Document the reasons for the changes.

Re-tensioning should be done from dead-end to dead-end, not cut and spliced every span.

The minimum pole height and class for primary distribution will be 40 ft., Class 5.

The minimum pole height and class for three phase construction for #1/0 ACSR and smaller is 40 ft, Class 5; for #4/0 and larger is 40 ft., Class 3.

The minimum pole height and class for secondary, service, or overhead guy stub poles will be 30 ft., Class 6.

Surge arrestors are to be installed every one-quarter mile (1/4 mi.).

Minimum wire size will be:

#4 ACSR on taps.

#4 ACSR on three-phase, or down the road (minor) feeders.

#1/0 ACSR for main feeders.

The Cooperative does <u>not</u> normally pay the contractor for retirement of salvaged material because the salvage value of the usable material is less than the labor cost to retire it.

The recommended maximum span length for single-phase construction is 350 ft.; for three-phase construction is 325 ft.

Primary highway road and railroad crossings shall get double support (A1-1, B1-1, or C1-1) construction.

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.

APPENDIX E. GENERAL RECCOMENDATIONS

A. COMMUNICATIONS AND PUBLIC RELATIONS

The types of communications important to normal operating conditions are:

- Telecommunications equipment and handsets
- Facsimile equipment
- Two-Way Radios
- o Cell phones
- Social Media Pages such as Facebook and Twitter
- Email and Internet

The following items are strongly dependent on communications for normal operating conditions and during emergency conditions:

- Public and member communications through print, radio or television.
- Contact with key officials in local, state and/or federal government, such as disaster relief personnel, law enforcement and fire department.
- Internal communications and coordination of recovery efforts.
- \circ $\;$ Contact with employees and their families.
- Contact with vendors and contractors.

Communications, public relations, marketing and key accounts personnel can be utilized for many projects during a disaster. Many duties these departments can carry out may be logistical in nature; that is, personnel may be used to coordinate the delivery of food, equipment, materials and meals, all in addition to their normal duties. Because of their varied experiences, these employees may also assist other departments as needed, including the cooperative's emergency operations center, customer service center, warehouse, temporary warehouse operations, staking, and engineering/operations.

Communications personnel should assist management in drafting News Releases to the cooperative's membership, detailing the extent of the disaster and its impact on both the membership and the co-op. Such letters should be sent to Radio Stations in damaged areas, and include vital data such as the projected length of the outage, and phone numbers for service organizations such as Red Cross, local emergency shelters (churches, schools, etc.), and contact numbers for state emergency management and FEMA.

Public relations, marketing, and key accounts personnel may be able to assist in locating lodging for contractors and co-op crews that will be arriving at the cooperative headquarters within hours. These same departments can also contact area cafes, restaurants, and community service organizations concerning the preparation of meals and laundry services for repair crews. Flat rates for these types of services can often be negotiated with business owners.

- Always communicate honestly and openly with the co-op membership and media. Always estimate outage duration on the high side. And, if you don't know an answer to member or media questions, say so! <u>Most importantly</u>, <u>always tell the truth</u>!
- 2. Write and submit press releases (via e-mail) to local newspapers as often as their print schedules allow. Send daily e-mail disaster updates to your cooperative's Statewide Association, local radio and/or television stations, and other information dispensing resources that can keep the cooperative membership and general public informed about all progress being made in the power restoration effort.
- 3. Assist the engineering/operations departments by documenting the extent of the storm or disaster using both still photographs and videos. FEMA and state emergency management officials may not visit the co-op service area for several days or weeks, so having photos and videos of actual damage as it occurred is helpful. Date and document the times and places that photos and videos were taken.
- 4. Date, document, and describe all work performed by office personnel if it relates to field work, i.e., meal delivery, equipment and materials delivery, materials management at warehouse or satellite warehouse(s), or other activities directly relevant to field work.

RISK MITIGATION EFFORTS

- Steps should be taken to minimize the losses to the cooperative if communication equipment may be affected by an emergency situation. It is strongly encouraged that the following mitigation efforts be taken to prepare for possible emergency situations:
- \circ Consider keeping spare radio transmitter on hand and maintain it offsite.
- Use "Talk-Around" truck-to-truck radios when necessary.
- Provide a direct wired (Bell) telephone that can be used without power.
- \circ $\;$ Assess your telecommunications provider's ability to respond to various disasters.
- \circ Develop an ongoing relationship with your local emergency management agency (EMA).
- Create and keep a contact list available of important community and emergency management personnel.
- Provide designated company spokesperson education on how to interface with the media.
- Establish designated and backup internal official media spokesperson that will deliver the same message when asked questions.
- Develop a canned press release.
- Designate/appoint chain of command for management to assume control of the site.

SHORT-TERM RECOVERY EFFORTS

- Short-term actions to consider during an emergency involving communications include:
- Loss of Radios
- Contact / use Nextel, Verizon, Cingular, etc. mobile phones / 2-way paging.
- \circ Use amateur radio.
- Contact radio vendor for new equipment.
- Neighboring Co-op, other utilities.
- \circ Contact state EMA for information on the emergency management radio system.
- Assess / address coverage issues and safety issues of using alternate radio or phone systems.
- Assess temporary radio range if tower location and/or equipment has changed.
- Use a physical runner.
- Loss of Land Lines or Telecommunications Equipment
- \circ Use mobile phones and obtain more as needed.
- \circ Use stand-alone telephone if internal telecommunications equipment fails.
- Move physical telecom equipment (switch, computer, handsets) to alternate location.
- Contact Phone Company switch number routing, as needed.
- \circ Communicate with State of Texas EMA, National Guard as necessary.
- Use amateur radio (American Radio Relay League).
- Consider using direct way satellite internet for alternate communications methods (email).
- Loss of Cell Phone Service
- \circ Use land lines if possible (field personnel call from member phone or pay phone).
- Use company radio.
- Use amateur radio if all other communications are unavailable.
- \circ Contact primary and alternate wireless communications companies.
- \circ Use pagers.
- Employee communications coverage broadcast pager message to critical employees.
- \circ Ask neighboring co-ops or businesses for assistance.
- External Communications
- Keep public message consistent.
- \circ Consult TEC personnel for assistance with the media message.

LONG-TERM RECOVERY EFFORTS

- Long-term actions to consider following an emergency involving communications include:
- Loss of Radios
- Assess need for a system upgrade and/or frequency change.
- Tower location / height.
- Address FCC requirements.
- Survey neighboring cooperatives regarding the quality of their radio systems to decide if an upgrade to more current technology is needed.
- Contact radio vendors for proposals and equipment upgrade recommendations.
- o Loss of Land Lines or Telecommunications Equipment
- Assess need for a system upgrade.
- Contact vendors for proposals and recommendations.
- Consider local provider change, if available.
- Loss of Cell Phone Service
- \circ Assess need for a system upgrade and/or equipment change.
- Contact vendors for proposals and equipment upgrade recommendations.
- Consider provider change, if available.

Notes / Recommendations

B. INFORMATION SYSTEMS AND PAPER RECORDS

- Nearly as important as loss of personnel is protecting against the loss of electronic data and paper files. Think about the following questions in planning for the cooperative's business contingency:
- What type of backup system is currently in place to restore business information to current operating conditions?
- Have all critical systems been backed up and tested for accuracy?
- Have all critical hard files (paper, etc.) been duplicated and stored in remote locations to protect against loss?
- What type of information systems are in place?
- Can our company rely on other cooperatives and/or vendors to help us restore our data quickly?
- Computers, hardware and data important to normal operating conditions are:
- Mainframe, server, network systems
- o PCs
- Paper (shared or individual)
- Software licenses
- The following items are strongly dependent on the computers, hardware and data for normal operating conditions and during emergency conditions:
 - Maintenance of accounts payable and receivable, payroll, engineering, operations and inventory records.
 - Connectivity between offices (branch or other co-ops).
 - Secure storage of software licenses.

RISK MITIGATION EFFORTS

- Steps should be taken to minimize the losses to the cooperative in the event the computers, data and hard files are affected by an emergency situation. It is strongly encouraged that the following mitigation efforts be taken to prepare for possible emergency situations:
- Designate/appoint chain of command for management to assume control of the site.
- Complete logical network diagrams, to assist in rebuilding system.
- Critical information is backed-up and/or duplicated and stored offsite.
- System backups performed as per pre-determined schedule.
- Establish disaster contract with call center if not already used for after-hours answering service
- Upgrade workflow to include digital imaging and/or paperless work orders.
- Maintain a list of vendors who can supply equipment on short notice.
- Coordinate with a neighboring cooperative or call center for temporary use of their systems.
- Test vendor capabilities and response times to determine impact of varying disasters.

SHORT-TERM RECOVERY EFFORTS

- Short-term actions to consider following an emergency involving loss of computers, hardware and data include:
- Keep adequate supply of paper forms for manual recording of information.
- Temporarily use database at offsite call center.
- Use printout of entire system.
- Contact vendors to acquire essential hardware.
- In-house billing backup restoration.
- TWACS backup restoration (metering and outage info).
- SCADA backup restoration.

LONG-TERM RECOVERY EFFORTS

- Long-term actions to consider following an emergency involving loss of computers, hardware and data include:
- Assess need for system upgrade to move toward paperless workflow (reduced dependence on hard copies of files).
- Document/assess vendor response time and capabilities to improve understanding of future needs.

Notes/Recommendations

C. OFFICE / OFFICE EQUIPMENT / INVENTORY

- Loss of a building or buildings, inability to access your work place, or loss of office equipment and inventory can cause severe consequences to the business. Think about the following questions in planning for the cooperative's business contingency:
- Where will your cooperative temporarily relocate if your building and grounds are inaccessible or destroyed?
- What office equipment (computers, communications, etc.) does your cooperative need to continue to operate effectively?
- Where will you realistically obtain inventory items necessary to continue to function for various lengths of time?
- \circ Items essential to the normal operation of the physical location are:
 - Office and warehouse facilities
 - Equipment and vehicles
 - Tools
 - Communication
 - Computer system(s)
 - Fuel
 - Housing
 - Utilities
 - Security
- The following items are strongly dependent on the physical location for normal operating conditions and during emergency conditions:
- Public and member communications through print, radio or television.
- Contact with key officials in local, state and/or federal government, such as disaster relief personnel, EPA, law enforcement and fire department.
- \circ Internal communications and coordination of recovery efforts.
- Contact with employees and their families.
- Contact with vendors and contractors.
- Dispatching of personnel and equipment.
- Storage and maintenance of equipment and vehicles such as digger derricks, aerial devices, stringing equipment, small vehicles, forklifts, etc.
- Storage and inventory of tools such as heavy presses, hand tools, personal protective equipment, cover-up and other protective devices.
- Storage and dispensing of gasoline, diesel fuel and LP gas for vehicles and equipment.
- Recording and maintaining outage information, automated meter reading equipment Turtle systems), system maps.

- Coordination of co-op and outside crews, including staging, area, assignments, temporary housing and meals.
- Affirming adequate shelter for the families of co-op employees.
- Safeguarding of assets including building, equipment and inventory.
- Non-interruption of utilities for both co-op property and members, if applicable, including electric, gas, propane, water and telephone.
- General maintenance of office and warehouse facilities including structural integrity, sanitary facilities (restrooms, port-a-pots, washrooms/showers), trash disposal (waste, scrap material, hazardous materials, etc.).

RISK MITIGATION EFFORTS

- Steps should be taken to minimize the losses to the cooperative if the physical location, office equipment and/or inventory is affected by an emergency situation. It is strongly encouraged that the following mitigation efforts be taken to prepare for possible emergency situations:
- Designate/appoint chain of command for management to assume control of the site.
- Inventory building contents down to deductible level (insurance). This will help assess needs as well as provide documentation for insurance provider. Maintain the information in a secure location off-site perhaps with your insurance carrier.
- Based on the age of your building(s), start high-level planning for what you would like your next campus to look like and where it could best be located. Visit other Co-ops with newer facilities.
- Don't lose what works! Document best practices.
- Emergency plan should designate a hierarchy of employee responsibility in regard to facility issues in case the person responsible is not accessible.
- Maintain a list of contractors that might be used for various facility-related matters such as clean-up or security.
- Maintain a list of vendors who can supply equipment and materials on short notice.
- Maintain a list of hotels, restaurants and emergency shelters.
- Prepare a list of buildings that can be used on a temporary basis and update it periodically.
- Define minimum office requirements.
- Define minimum connectivity issues.
- Refer to Communications Section for loss of land lines, telecommunications, radios and cell phone service.

SHORT-TERM RECOVERY EFFORTS

- Short-term actions to consider during an emergency involving loss of physical building, office equipment and inventory include:
- Contact property and casualty insurer.
- External communications keep public message consistent, defer media to TEC personnel if it is too much to handle
- Contact NISC / SEDC / ACE Disaster Team for spare equipment and assistance recovering essential data (see Information Systems & Paper Records section).
- Acquire publicly accessible building (strip mall, warehouse, etc.).
- Use the media to inform the members of the temporary location, if necessary.
- Use realtors as a resource to identify property that can be used as a temporary site or a new permanent site, if needed.
- Lease temporary office trailers.
- Set up various employees to work from home, if necessary. Have a detailed plan in place that identifies what can be done at home and how it can be done.
- Use BRANCH office as a short-term physical location.
- Consider asking for partial property use of neighboring Co-ops, IOUs, municipals, businesses and/or schools.
- Obtain essential office furniture and equipment from local and/or regional suppliers.
- Provide security on site (employees, vendor, fence, guards). Local law enforcement or contracted security services.
- Establish clean up crew for site using employees or contractors.
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LONG-TERM RECOVERY EFFORTS

- Long-term actions to consider following an emergency loss of physical building, office equipment and inventory include:
- Assess current location and layout. Allow for future growth! (list of potential sites developed under risk mitigation).
- Document/assess vendor and contractor response time and capabilities to improve understanding of future needs.
- Consider regional natural disasters and man-made disasters in new building design.
- Restore procedures and processes that worked best.
- Should some business functions be outsourced? Or conversely, should some business functions be done in-house following the disaster experience? These decisions will impact the overall building design and space requirements.

Notes/Recommendations

D. PERSONNEL / HUMAN RESOURCES

- The issue of personnel is a major variable in disaster recovery. How many would there be available for the recovery efforts given different types of emergencies? Think about the following questions in planning for the cooperative's business contingency:
- Will the employees be able to function for an extended period of time?
- Are the employees' homes and families directly affected by loss of personal property and shelter?
- Will new employees have to be hired to fill the spots left by injured or deceased employees?
- Can key employees be borrowed from neighboring cooperatives to keep the cooperative operational?
- Should the cooperative engage in cross-training and job-sharing to mitigate potential losses?
- In the event of an emergency and the potential for loss of personnel, the following items are important to the continuity of service:
 - Safety of employees and their families
 - Preparation for any loss of personnel
 - Prioritize business functions
 - Board notification
 - Action plans developed
- The following items are strongly dependent to the smooth operation of the business during normal operating conditions and/or emergency conditions:
- Complete job descriptions including documented, detailed procedures on how to do each job (similar to JSA).
- Specific "key" positions defined and cross training / job sharing for these positions is ensured.
- Maintain a good working relationship with contractors, municipals, IOUs, retired employees and other cooperatives.
- Key personnel are insured through the company's policy.
- Legal issues involving insurance, workers' compensation etc., in regards to permanent and temporary employees, have been addressed with corporate attorney.
- Identification of a grief counselor.

RISK MITIGATION EFFORTS

- Steps should be taken to minimize the potential for personnel losses in the event of an emergency. It is strongly encouraged that the following mitigation efforts be taken to prepare for possible emergency situations:
- Designate/appoint chain of command for management to assume control of the site.
- Keep job descriptions updated with essential functions.
- Encourage cross training/job sharing among internal employees and develop relationships with contractors, area municipals, IOUs and other cooperatives.
- Maintain an inventory of skills for employees, contractors, retirees, temps, etc. Include normal job duties as well as functions they can perform outside those normal duties.
- Establish an emergency action plan and review annually making special note of any changes.
- Annually practice evacuation drill and shelter drill.
- Develop a list of possible vendors for potential outsourcing of certain work (temporary or permanent).
- Establish a hierarchy of employee responsibility for hiring both temporary and permanent help.

SHORT-TERM RECOVERY EFFORTS

- Short-term actions to consider during an emergency involving loss of personnel include:
- Follow chain of command based on employee loss and business function priorities. Use outside coordination (neighboring Co-op, TEC) as necessary.
- Initiate employee assistance program for employees and families.
- External communications keep public message consistent, defer media to TEC personnel if it is too much to handle.
- Contact TEC staff for safety coordination and assistance.
- Provide medical care, as needed.
- Adjust / stagger employees working hours to increase availability of cooperatives services to members and vendors.
- Use contractors.
- Ask for assistance from other Co-ops.
- Review emergency work plan for employee help.
- Provide personnel and board members with status briefings to keep them apprised of situations.
- Contract with retirees and/or employees' family members to assist with routine business tasks.
- Borrow employees from other cooperatives, TEC, software provider or local business.
- Assist employees and their families as needed.

LONG-TERM RECOVERY EFFORTS

- Long-term actions to consider following an emergency involving loss of personnel include:
- Evaluate staff and responsibilities to limit exposure in future emergencies.
- Assess the cooperative's needs, policies and requirements.
- \circ Consider outsourcing non-essential business practices to reduce risk.
- Develop a long-term succession plan.
Notes/Recommendations

E. WAREHOUSE / POLE YARD / FLEET

- The core function is to keep housing and systems in place so that employees have a place to work. It is important to consider that a large-scale disaster can cripple the entire community, so relying public buildings and community services may not be an option. Think about the following questions in planning for the cooperative's business contingency:
- \circ Are the facilities and infrastructure of the cooperative itself damaged?
- What would the cooperative do if there is no longer a physical facility to operate from and the infrastructure has been severely damaged or destroyed?
- \circ Items essential to the normal operation of the warehouse and/or pole yard are:
 - Warehouse facilities
 - Equipment and vehicles
 - Materials
 - Tools
 - Fuel
 - Utilities
 - Security
- The following items are strongly dependent on the warehouse and pole yard for normal operating conditions and during emergency conditions:
- Storage and maintenance of equipment and vehicles such as digger derricks, aerial devices, stringing equipment, small vehicles, forklifts, etc.
- Storage and inventory of materials such as poles, cross arms, transformers, wire, etc.
- Storage and inventory of tools such as heavy presses, hand tools, personal protective equipment, cover-up and other protective devices.
- Storage and dispensing of gasoline, diesel fuel and LP gas for vehicles and equipment.
- Safeguarding of assets including building, equipment and inventory.
- Non-interruption of utilities for both co-op property and members, if applicable, including electric, gas, propane, water and telephone.
- General maintenance of warehouse facilities including structural integrity, sanitary facilities (restrooms, port-a-pots, washrooms/showers), trash disposal (waste, scrap material, hazardous materials, etc.).

F. PURCHASING AND MATERIALS MANAGEMENT

- Material issue sheets <u>are critical</u> for tracking material from warehouse (or in instances where temporary field warehouses are set up) to the field. Every effort should be made to track all material received from suppliers and all material used by contractors and coop crews in the emergency restoration and permanent repair efforts.
- 2. The material issue sheet should include, at minimum, where (location) material is used, when it was used (day, date), and quantities of construction units specified on the work order.
- 3. If a picking list system is commonly used on work orders, strongly consider switching to staking sheets in order to capitalize material. If material issue sheets are to be used, there must be tickets for <u>all</u> material for which FEMA reimbursement is expected.
- 4. Material should be ordered immediately, or as soon after initial Fast Surveys of damage are completed. Fast Surveys should give warehouse and materials management employees enough information to determine <u>initial orders</u> of poles, cross arms, conductor, splices, and other construction hardware. Utilize the Standard Construction Policy design criteria developed by the cooperative <u>before</u> the disaster so approximate types and quantities of material will be known for ordering.
- 5. Arrange for material delivery points as near as possible to damaged areas. If temporary field warehouses are utilized, it is critical that all material received at those locations be accounted for, and material issued from these field warehouses be precisely tracked, preferably using material issue sheets. It is recommended that a warehouseman or materials management clerk be stationed at each temporary warehouse or satellite facility in order to daily check in material received and check out material to be used by construction crews.
- 6. Some vendors will contract with a cooperative to furnish trailers loaded with materials necessary for rebuilding or repairing lines during a disaster. The vendor is responsible for an inventory of all items, allows removal of items from the trailer only upon completion of material issue sheets, and conducts a follow-up inventory for reconciliation. If this method is employed by the affected cooperative, control must be exercised over material received and checked out. Documentation must be in place to record where (location, by map number and county or parish) the material was used and what construction units were put in place.

- 7. Consider utilizing warehouse or materials management employees from other cooperatives early in the disaster.
- 8. Ask for vehicle inventory sheets from all contractors and other co-op crews before they are allowed to commence work. Carefully monitor material that is issued, and inventory these same vehicles before crews depart for home at the end of their contract term or period of work.
- 9. Try to run all material through the material issue system if possible. Quantities, dates, and locations are much easier to track this way.
- 10. Copies of all material issue sheets should be made and stored with all other records being prepared for audits by FEMA, state emergency management, and TEC personnel.
- 11. Carefully record any and all material coming in from the field that is to be considered as salvage. This is required for reconciliation of co-op material records.

RISK MITIGATION EFFORTS

- Steps should be taken to minimize the losses to the cooperative if the warehouse and pole yard are affected by an emergency situation. It is strongly encouraged that the following mitigation efforts be taken to prepare for possible emergency situations:
- $_{\odot}$ $\,$ Designate/appoint chain of command for management to assume control of the site.
- Inventory building contents down to deductible level (insurance). This will help assess needs as well as provide documentation for insurance provider. Maintain the information in a secure location off-site perhaps with your insurance carrier.
- Based on the age of your building(s), start high-level planning for what you would like your next warehouse and yard to look like and where it could best be located.
- Emergency plan should designate a hierarchy of employee responsibility in regard to facility issues in case the person responsible is not accessible.
- Maintain a list of contractors that might be used for various facility-related matters such as clean-up or security.
- \circ Maintain a list of vendors who can supply equipment and materials on short notice.
- Prepare a list of potential buildings that can be used on a temporary basis and update it periodically.
- Refer to Communications Section for loss of land lines, telecommunications, radios and cell phone service.

SHORT-TERM RECOVERY EFFORTS

- Short-term actions to consider during an emergency involving loss of warehouse and pole yard include:
- External communications keep public message consistent, defer media to TEC personnel if it is too much to handle
- Acquire accessible building (warehouse, etc.).
- Establish temporary yard, security, fencing.
- Establish electricity on-site and lighting.
- Consider asking for partial property use of neighboring Co-ops, IOUs, municipals, businesses and/or schools.
- Provide forklift and material handling capabilities.
- Construction trailer for security storage.
- Contact Property and Casualty Insurer.
- Track inventory and minimums needed.
- Work off printed material list and/or vendor history.
- Obtain essential equipment and materials from local and/or regional suppliers.
- Provide security on site (employees, vendor, fence, guards). Local law enforcement or contracted security services.
- Establish salvage yard.
- Establish cleanup crew for site using employees or contractors.

LONG-TERM RECOVERY EFFORTS

- Long-term actions to consider following an emergency involving loss of warehouse and pole yard include:
- Assess current location and layout. Allow for future growth! (list of potential sites developed under risk mitigation).
- Document/assess vendor and contractor response time and capabilities to improve understanding of future needs.
- Consider regional natural disasters and man-made disasters in new building design.
- Should some business functions be outsourced? Or conversely, should some business functions be done in-house following the disaster experience? These decisions will impact the overall building design and space requirements.

Notes/Recommendations

APPENDIX F. FEMA CONSIDERATIONS

A. POST-DISASTER AUDIT PREPARATION

- Helpful information concerning post-disaster audits can be found in the following two (2) documents:
- 2. "Audit Tips for Managing Disaster-Related Project Costs" (15 pages), which is a publication of the Federal Emergency Management Agency and the Office of Inspector General; and "Consolidated Audit Guide, Audit of Disaster Assistance Grant Programs" (36 pages revised March, 2001), also a joint publication of FEMA and OIG. Copies of these two documents have been included with this section. It is strongly recommended that all cooperative managers, accountants, and engineering/operations personnel review these two documents prior to a disaster event.
- 7 CFR Chapter XVII (1-1-99 Edition) Subpart B RUS Audit Requirements, §1773.3 "Annual Audit" states the financial audit requirements for electric cooperatives. Section (e) stipulates the following in regards to OMB Circular A-133: "Audits of States, Local Governments, and Non-Profit Organizations <u>does not</u> apply to audits of RUS electric and telecommunications cooperatives and commercial telecommunications borrowers." [56 FR 63360, December 3, 1991, as amended at: 59 FR 659, January 6, 1994; 63 FR 38722, July 17, 1998]
- 4. Accounting personnel should refer to and utilize several data sources during their internal audit preparations, including the use of FEMA cost codes, fringe benefit calculation sheets, the TEC "Mutual Aid Plan for the Electric Cooperatives of Texas, each cooperative's Employee Policy Manual, including relevant personnel organization charts and employee job descriptions.
- 5. All calculations used to determine percentages for fringe benefits should be retained and documented for use during the FEMA and/or OIG audit.
- 6. Have an Organization Chart of all cooperative employees, indicating what area or department they worked in before and during the disaster. This will help resolve questions about force account labor when it is classified into FEMA Categories A, Debris Removal; B, Emergency Protective Measures; and F, Utilities (Permanent Repairs).

- 7. Compile a list of employee rates of pay before, during and after the disaster.
- 8. Keep documents that denote the date and time the first outage occurred, and the date and time the last consumer's electric service was restored.
- 9. Compile a check register for each month that disaster damages were paid. The check register should match all PWs submitted in order to prevent duplication of charges to FEMA.
- 10. Maintain individual time sheets for every person on which labor was claimed during the disaster. Contractors should submit (at minimum) weekly time sheets detailing their employees' activities to the cooperative; these time sheets must be signed by the individual employee or by the crew foreman. The equipment used should also be listed on time sheets.
- 11. Payroll calculations for the duration of the disaster should be available for the auditors. The cooperative must be able to verify that dollars paid match amounts claimed for cooperative employee's payroll.
- 12. Keep records of any and all salvaged material that was sold; this will be deducted from FEMA reimbursements made to the cooperative.
- 13. Contractor and cooperative employee hotel and meal receipts should be maintained, preferably listing who stayed in what room and who purchased what meals (indicating which FEMA Category the expense will fall in either A, B, or F).
- 14. Keep all administrative allowance funds separate.
- 15. If possible, have contractors submit invoices by PW number.
- 16. FEMA and OIG auditors suggest setting up a general ledger account number with several sub-accounts labeled Contractor, In-House Contractor, Labor, etc. It is recommended that the accounting department start using these accounts as soon as the disaster occurs. Keep FEMA funds separate from normal day-to-day costs.
- 17. Keep all FEMA publications, such as the Public Assistance Policy Digest (FEMA 321) and any Appendices, and the FEMA Public Assistance Guide (FEMA 322) as available reference materials.
- 18. Require personnel from the accounting, engineering and operations departments to read all FEMA and OIG publications as they relate to Public Assistance, and require attendance at all FEMA or state emergency management training sessions, specifically

those relating to disasters and Public Assistance to eligible applicants, such as electric cooperatives.

19. Maintain a copy of the cooperative's signed "Mutual Aid Agreement" that has also been filed with the National Rural Electric Cooperative Association (NRECA) and your state's Statewide Association. Auditors will request a review of this agreement.

B. FEMA CATEGORIES OF WORK

EMERGENCY WORK

Category A: Debris Removal

Clearance of trees and woody debris, building wreckage, sand, mud, silt, vehicles and other disaster-related material deposited on public property.

Note: This includes tree clearing from power lines and rights-of-way. It <u>may</u> include poles.

Category B: Emergency Protective Measures

Measures taken before, during and after a disaster to save lives, protect public health and safety, and protect improved public and private property. Clearing roads, protecting lines and electric control centers are included. FEMA assumes that this period will last only 70 hours so longer times will require your proof that service was not restored until later.

Note: Notify TEC and/or OEM if the emergency time is passing the 70 hour time limit.

Notes: 1) In Categories A & B, FEMA assumes that Co-op employees would be doing this work during regular duty hours, so they only pay overtime for any cooperative employee doing this work. However, FEMA will pay all costs for contractors or temporary hires to do this work.

2) FEMA requires "Monitors" to supervise debris contractors. Cooperatives should provide this supervision to insure re-imbursement of time and material contracts. Monitor expense is reimbursable expense. Daily diaries should be kept on all supervision of time and material contractors.

PERMANENT WORK

Category C: Roads and Bridges

Category D: Water Control Facilities

Category E: Buildings and Equipment

This category includes repair or replacement of buildings, including their contents and systems, heavy equipment, and vehicles.

Category F: Utilities

Repair of water treatment and delivery systems, power generation facilities and distribution lines, and sewage collection and treatment facilities.

Note: This is where most Electric Cooperative work is included.

Category G: Parks, Recreational Facilities and Other Items

Repair and restoration of parks, playgrounds, pools, cemeteries, beaches and other work not characterized adequately in Categories A-F above. Natural or unimproved areas are not eligible.

Notes: 1) Unlike Categories A & B, FEMA will pay all costs of the Federal share (which means 75% of the cost of regular time for employees, equipment and contractors).

(2) FEMA expects that all contractors have signed formally bid contracts. However, if a Cooperative bids 10 contractors with 10 different bids and needs all 10 contractors, the Co-op may use them, BUT needs to retain bidding documents and have an explanation of the Co-op's bidding procedures.

<u>FEMA will NOT allow a cost-plus contract.</u> They do NOT like time and material contracts past the first 70 hours. They prefer unit cost or lump-sum contracts. Co-ops may be able to keep contractors on a unit cost basis, especially continuing contract contractors. If Co-ops keep contractors on time and material contracts (at their own risk), Co-ops MUST provide daily supervision, preferably with diaries, to insure that productive work is being performed. All work done after service is restored, especially that triggered by Codes and Standards, should be competitively and formally bid.

CODES AND STANDARDS

When a facility must be repaired or replaced, FEMA may pay for upgrades that are necessary to meet specific requirements of current Codes and Standards. The National Electric Safety Code

is the Co-op's determining code. RUS Construction Standards and Bulletins and Co-op- specific written Standards will prevail. Local Co-op Standards must be written and approved by at least the Manager/CEO (Board approval is recommended) in advance of the disaster and totally followed on a day-to-day basis. A sample "Standard" is attached.

FEMA's specific rules are:

- For the cost of the upgrade to be eligible, the Code or Standard requiring the upgrade must:
- Apply to the repair work being performed.
- Be appropriate to the pre-disaster use of the facility.
- Be reasonable, formally adopted in writing, and implemented prior to the disaster declaration date.
- Apply uniformly to all facilities of the type being repaired within the applicant's jurisdiction.
- Be enforced during the time that it was in effect.

DECLARATIONS

The President declares the emergency by county after initial damage assessment is done by State and County officials. FEMA requires approximately \$1.11 per capita of state damage and \$2.20 per capita of county damage to justify a declaration. Often it is the Electric Cooperatives that have sufficient damage to allow a county to be declared. Once a county is declared, FEMA record keeping should be initiated. Expenses in non-declared counties must be kept separate. Cost records by declared county are not required and may increase internal Co-op accounting costs.

PROJECT WORKSHEETS

FEMA authorizes re-imbursement by preparing one or several Project Worksheets (PW). Each Category of Work has its own PW(s). They may cover a specific project or a time period. Co-ops do not keep property records by county, so PW's need NOT be prepared by county. PW's over \$1,000,000 go to FEMA's national office for approval and will be delayed.

DOCUMENTATION

Assign work order numbers for each Category of the disaster as soon as the possibility occurs for a FEMA-declared event. Verify the proper allocation of costs to these Work Orders.

Backup documents are required for ALL costs. Undocumented expenses will NOT be reimbursed. Start early collecting all backup, including bills, invoices and timesheets showing each worker and contract employee and their equipment, including the hours worked, where

worked (not just "Storm") and what was done. This is the source document for a Co-op's claim. Each should be reviewed and approved by the supervisor as legitimate.

Use the FEMA spreadsheets for time, equipment and employee benefits. A Co-op's computer records are 'as paid;' FEMA records are 'as eligible.' Employees may be reassigned and FEMA authorizes only the rate of the normal employee doing the assigned job, not necessarily what the employee is paid. Sometimes FEMA accepts only overtime costs. Some folks may not be working on the disaster. A spreadsheet of contractor invoices and expenses will suffice. Co-op computer printouts of material charges are acceptable.

FEMA thinks Co-op storeroom/warehouse employees' time charges are loaded into material charges and will disallow their time and equipment costs. Work with your Co-op's Project Officer to make this happen as an adder or multiplier.

Each Co-op employee thinks their only job is to get the lights back on as soon as possible safely, but this is not the case if a Co-op expects FEMA reimbursement. FEMA IS NOT INTERESTED IN GETTING ELECTRIC SERVICE RESTORED, EXCEPT TO EMERGENCY FACILITIES. BUT THEY ARE VERY INTERESTED IN PROPERTY DAMAGE AND CONTROLLING THESE COSTS, NOW AND IN THE FUTURE.

MATERIAL

In normal line construction, material costs approximate half the total project cost. But in disasters, labor costs are much larger. Each Co-op has rigorous material control practice in effect.

DO NOT reduce inventory tracking anytime during a disaster or it jeopardizes reimbursement. Material issue forms may prove clumsy during the height of confusion, but Cooperatives still have the responsibility for proper material control. Co-ops may elect to switch from individual material issue tickets that show what was issued and where it was going to "as built" staking sheets with "picking lists" generated from the material units. This is a valid method but must be properly maintained.

STAKING SHEETS

Staking sheets are a Co-op's normal record of construction expenditures and should be maintained throughout the disaster. It is very easy to ignore them at first and think that they can and will be done later, after the fact. Co-op staking engineers are a valuable resource to guide foreign crews, supervise construction, coordinate work and locate damage. All are reimbursable except to locate damage. Their time needs to be either a part of the permanent repair effort and/or recording in final staking sheet form, the repairs made or to be made. Staking sheets are the accounting vehicle that identifies the work done, where it was done and what material was used. These important and necessary documents allow funds to be moved

from 'Construction Work In Progress' to 'Plant.' It can be easier to prepare them daily covering work done. If not, as soon as possible, apply the necessary resources to prepare them on all work done. Consider using other Co-op staking engineers or engineering consultants to actually prepare the staking sheets, not lists of work done or needed to be done. <u>FEMA will not pay for looking for damage or surveys</u>.

DONATED RESOURCES

Members, charitable organizations, the National Guard or friends and family donate valuable time, equipment and even food or it's preparation to help restoration efforts. FEMA will indirectly reimburse Co-ops for these donations IF the Co-op keeps adequate records of them. Someone in the Co-op organization (Member Services, Manager, Disaster Coordinator) should encourage help and maintain lists of who did what, hours spent each day and what equipment or food was donated. Other than belated thank you letters, and if the FEMA Project Officer is told, this log will be used to calculate the Donated Resource credit the Cooperative will receive to reduce the 25% share of the project cost.

ADMINISTRATIVE ALLOWANCE

The Stafford Act stipulates that each grant recipient (Co-ops) be provided an allowance to meet some costs of administrating and accounting for this grant. The allowance covers the direct and indirect costs of administering the FEMA grant. Examples of appropriate activities are:

- Identifying damage;
- Attending Applicant Briefings;
- Completing forms necessary to request assistance;
- Establishing files and providing copies of documentation;
- \circ Assessing damage, collecting cost data and developing cost estimates;
- Working with State (OEM) officials during project monitoring and final inspection;
- Preparing for audits.

Allowance is determined from a sliding scale found in FEMA manuals but approximates 2%. By law, the Cooperative is not required to submit documentation for its administrative allowance.

Note: There is an Office of Management and Budget circular discussing Private Non-Profits (PNP's), such as Electric Cooperatives, administrative costs and accounting requirements. It is <u>OMB Circular A-122</u> – "Cost Principles for Nonprofit Organizations" and can be found on the web at http://www.whitehouse.gov/omb/circulars/index-education.html.

FEMA ADVANCE FUNDS

FEMA rules require Co-ops to place Advance Funds and Immediate Needs Funds in NONinterest bearing accounts. Any interest over \$100 earned in a calendar year must be returned to FEMA.

ADVANCED FUNDS

FEMA allows 75% of their 75% share of approved funds to be advanced if it is needed. Co-ops must explain the need (such as needed to continue repairs and restoration). Co-ops can get ALL their FEMA funds when 75% of the PW work is done, if it is requested.

IMMEDIATE NEEDS FUNDS (INF)

This early payment is intended for financial hardships. A Co-op's request for INF is approved by the Federal Coordinating Officer (FCO) and the State Coordinating Officer (SCO).

EXPEDITED PROJECT WORKSHEET

This is a method for funds to be advanced early in lieu of INF. This advances a Co-op 75% of the PW amount (FEMA's share) early.

PROJECT WORKSHEET PROBLEMS

Keep a copy of the original PW and compare it to the FEMA prepared PW. Co-ops may have to request this from OEM. Contact OEM over any changes. FEMA is required to explain any changes to grant fund recipients.

TIME EXTENSIONS

Emergency Work (Categories A & B) time limits are 6 months to get work done, with a possible 6 month extension granted by state OEM. Permanent work time limits are 18 months, with up to 30 months possible extension granted by OEM. Extension requests must be in writing to OEM and should be done BEFORE the time limit has expired. FEMA may require money returned if done after time limit (without approved extension).

ADDITIONAL DAMAGE

FEMA expects any additional damage, not covered on approved PW's, to be reported within 30 days after Applicant Briefing meetings. In a large disaster, Co-ops may not have even found all damage by that time. Keep OEM notified as more damage is discovered.

OVER-RUNS

Any changes in Scope or possible over-runs <u>should be reported to OEM as soon as possible</u>. Over-runs are scrutinized for possible non-reimbursement.

HAZARD MITIGATION

There are two types of Hazard Mitigation eligible for re-imbursement by FEMA. One is theoretically available anytime (Section 404) and it is administered at Texas Emergency Management. The other is specific disaster-related (Section 406) and <u>approval must be</u> <u>obtained during or shortly after the disaster</u>, with completion to be done within six months.

HAZARD MITIGATION, SECTION 406

Projects seeking approval under Section 406 need to strengthen the electric system so that less damage should be incurred in future, similar disasters. Unfortunately, Co-ops need to <u>identify</u> these desired improvement projects to the FEMA Project Officer <u>before</u> a Category "F" PW is approved. Cost justification is <u>not</u> necessary at that time.

Section 406 is a source for funding of cost-effective measures that would reduce or eliminate the threat of future damage to a facility damaged during a disaster. These measures MUST apply only to the damaged elements of a facility in the current disaster, rather than to other, undamaged parts of the facility or the entire system.

Section 406 mitigation measures are considered part of the total eligible cost of repair, restoration, reconstruction, or replacement of a facility. Co-ops may not get funds approved and spend them on alternate projects or improved projects if a new replacement facility is involved.

Upgrades required to meet applicable Codes and Standards are NOT "mitigation measures" because these measures are a part of eligible restoration work. However, some Cooperatives have had ruined copper wire replacement done as 406 mitigation. It should have been Category "F," Codes and Standards.

PROJECT GUIDANCE – FEMA RR POLICY # 9526.1, attached (signed August 13, 1998) Hazard Mitigation Funding Under Section 406 (Stafford Act)

In this internal policy, several suggested appropriate projects are listed. The electric power distribution recommendations are:

"E." ELECTRIC POWER DISTRIBUTION:

Pad mounted transformers – elevating above the base flood elevation, or lowering them or burying them in non-flood, high wind areas;

Using multiple poles to support transformers;

Burying lines;

Anchoring or otherwise protecting fuel tanks from movement in a disaster;

Replacing damaged poles with higher class pole, or with a different material pole such as replacing wood poles with spun concrete;

Adding guy wire or other additional support to power lines;

Removing large diameter communications lines from power poles;

Providing looped distribution service or other redundancies in the electrical service to "*critical facilities*."

FEMA's definition of "critical facilities" has been defined as:

- Fire Departments
- Police Departments
- Hospitals
- Nursing Homes
- Waste Water Treatment Plants
- Potable Water Treatment Plants
- Emergency Operations Centers
- Power Generation Plants
- The Electric Cooperative's "Emergency Operations Center" may well qualify for these funds.

ELIGIBLE FACILITY

Mitigation funds are available only to damaged facilities in the current eligible declared disaster. Poles that were broken in a previous storm, but not the current storm, are NOT eligible. The only possible exception is when one pole of a highway crossing broke and the highway was blocked; mitigation may allow replacement of both structures and wire with added strength.

FEASIBILITY

Any project must be technically feasible and cost effective. Projects that would cost no more than 15% of the actual damaged facility cost can be approved by the PAC. Projects that cost less than 100% of the damaged facility cost can be approved by the FEMA Public Assistance Officer after review by the 406 Hazard Mitigation Officer on site for the current disaster.

How FEMA views a Co-op's MITIGATION project for cost justification

FEMA performs a Cost vs. Benefit Analysis on mitigation projects. It goes like this:

- The Co-op describes the proposed project.
- The Co-op costs out the proposed project.
- \circ Determine the cost of the completed repair of the damaged section to be improved.
- \circ Calculate the average cost per pole of the disaster (<u>total cost</u> / # poles broken).
- If project cost is less than 15% of average repair cost of facility, project will be approved by local PAC.
- If project cost is less than average repair cost of facility, project should be approved.
- Dig out previous costs to repair <u>same line section</u>.
- FEMA will apply costs in "present worth" spreadsheets to justify expenditure. This favors recent repair costs but does give some weight to previous costs.
- \circ When project is approved, PW will be revised to include mitigation repairs.

EXAMPLE

- \circ For the current disaster, the average cost of each broken pole is \$2,200.
- The cost estimate to replace 2 poles, stronger wire and anchors crossing highway is \$4,300.
- Project should be approved. (2 poles x \$2200= \$4400 is greater than the mitigation project cost.)
- \circ RUS recommends that the following values be included in the design criteria:
- The maximum voltage drop on primary distribution lines not exceed 8 volts (120 volt base) after no more than 2 stages of re-regulation beyond the substation.
- The following equipment not be thermally loaded by more than the percentages shown:
- Power Transformers 105% of nameplate rating;
- \circ Substation and Line Regulators 100% of nameplate rating;
- Oil Circuit Recloser 70% of nameplate rating;
- Primary conductors not be loaded over 80% of their thermal rating (50% for major tie lines between substations);
- Conductors be replaced if found to contain an average of over 2 splices per phase per span in a 1 mile (1.6 kilometer) section; and
- No more than an average of 5 consumer outage hours, per consumer, per year, excluding outages caused by major storms or the power supplier, for the past 5 consecutive in any specific area.
 - All electrical utilities are required to conform to the NESC by State Law.
 - RUS Regulations and Bulletins: 7 CFR Part 1710-1794
 - Sec. 1726.20 Standards and Specifications.

- All materials, equipment, and construction must meet the minimum requirements of all applicable RUS standards and specifications. (See Part 1728, Electrical Standards and Specifications for Materials and Construction, of this chapter, which is applicable regardless of the source of funding.) The materials and equipment must be year 2000 compliant, as defined in 7 CFR 1710.112 (c).
 - Sec. 1728.20 Establishment of standards and specifications.
- National and other standards. RUS will utilize standards of national standardizing groups, such as the American National Standards Institute (ANSI), American Wood Preservers' Association (AWPA), the various national engineering societies and the National Electrical Safety Code (NESC), to the greatest extent practical. When there are no national standards or when RUS determines that the existing national standards are not adequate for rural electric systems, RUS will prepare standards for material and equipment to be used on systems of electric borrowers. RUS standards and specifications will be codified or listed in Sec. 1728.97, Incorporation by Reference of Electric Standards and Specifications. RUS will also prepare specifications for materials and equipment when it determines that such specifications will result in reduced costs, improved materials and equipment, or in the more effective use of engineering services.
- Deviations from Standards. No member of the RUS staff will be permitted to authorize deviations from the standard specifications, or to establish or change the technical standards, or to authorize the use of items that have not received acceptance by the Technical Standards Committees, except as provided for under Sec. 1728.70, or by authorization and/or delegation of authority by the Administrator of RUS.
- Category of Items. Items appearing in the List of Materials are listed by categories of generic terms, which are used in RUS construction standards incorporated by reference in Sec. 1728.97. RUS will establish and define these categories and will establish all criteria for acceptability within these categories.
- The code or standard must apply uniformly to all facilities of the type being repaired within the applicant's jurisdiction.

TITLE 44--EMERGENCY MANAGEMENT AND ASSISTANCE

CHAPTER I--FEDERAL EMERGENCY MANAGEMENT AGENCY

AGREEMENTS TO STATE AND LOCAL GOVERNMENTS

PART 13--UNIFORM ADMINISTRATIVE REQUIREMENTS FOR GRANTS AND COOPERATIVE

Subpart C--Post-Award Requirements

Sec. 13.36 Procurement.

(a) States. When procuring property and services under a grant, a State will follow the same policies and procedures it uses for procurements from its non-Federal funds. The State will ensure that every purchase order or other contract includes any clauses required by Federal statutes and executive orders and their implementing regulations. Other grantees and subgrantees will follow paragraphs (b) through (i) in this section.

(b) Procurement standards. (1) Grantees and subgrantees will use their own procurement procedures which reflect applicable State and local laws and regulations, provided that the procurements conform to applicable Federal law and the standards identified in this section.

(2) Grantees and subgrantees will maintain a contract administration system which ensures that contractors perform in accordance with the terms, conditions, and specifications of their contracts or purchase orders.

(3) Grantees and subgrantees will maintain a written code of standards of conduct governing the performance of their employees engaged in the award and administration of contracts. No employee, officer or agent of the grantee or subgrantee shall participate in selection, or in the award or administration of a contract supported by Federal funds if a conflict of interest, real or apparent, would be involved. Such a conflict would arise when:

(i) The employee, officer or agent,

(ii) Any member of his immediate family,

(iii) His or her partner, or

(iv) An organization which employs, or is about to employ, any of the above, has a financial or other interest in the firm selected for award. The grantee's or subgrantee's officers, employees or agents will neither solicit nor accept gratuities, favors or anything of monetary value from contractors, potential contractors, or parties to subagreements.

Grantee and subgrantees may set minimum rules where the financial interest is not substantial or the gift is an unsolicited item of nominal intrinsic value. To the extent permitted by State or local law or regulations, such standards or conduct will provide for penalties, sanctions, or other disciplinary actions for violations of such standards by the grantee's and subgrantee's officers, employees, or agents, or by contractors or their agents. The awarding agency may in regulation provide additional prohibitions relative to real, apparent, or potential conflicts of interest.

(4) Grantee and subgrantee procedures will provide for a review of proposed procurements to avoid purchase of unnecessary or duplicative items. Consideration should be given to consolidating or breaking out procurements to obtain a more economical purchase. Where appropriate, an analysis will be made of lease versus purchase alternatives, and any other appropriate analysis to determine the most economical approach.

(5) To foster greater economy and efficiency, grantees and subgrantees are encouraged to enter into State and local intergovernmental agreements for procurement or use of common goods and services.

(6) Grantees and subgrantees are encouraged to use Federal excess and surplus property in lieu of purchasing new equipment and property whenever such use is feasible and reduces project costs.

(7) Grantees and subgrantees are encouraged to use value engineering clauses in contracts for construction projects of sufficient size to offer reasonable opportunities for cost reductions. Value engineering is a systematic and creative analysis of each contract item or task to ensure that its essential function is provided at the overall lower cost.

(8) Grantees and subgrantees will make awards only to responsible contractors possessing the ability to perform successfully under the terms and conditions of a proposed procurement. Consideration will be given to such matters as contractor integrity, compliance with public policy, record of past performance, and financial and technical resources.

(9) Grantees and subgrantees will maintain records sufficient to detail the significant history of a procurement. These records will include, but are not necessarily limited to the following: rationale for the method of procurement, selection of contract type, contractor selection or rejection, and the basis for the contract price.

(10) Grantees and subgrantees will use time and material type contracts only--

(i) After a determination that no other contract is suitable, and

(ii) If the contract includes a ceiling price that the contractor exceeds at its own risk.

(11) Grantees and subgrantees alone will be responsible, in accordance with good administrative practice and sound business judgment, for the settlement of all contractual and administrative issues arising out of procurements. These issues include, but are not limited to source evaluation, protests, disputes, and claims. These standards do not relieve the grantee or subgrantee of any contractual responsibilities under its contracts. Federal agencies will not substitute their judgment for that of the grantee or subgrantee unless the matter is primarily a Federal concern. Violations of law will be referred to the local, State, or Federal authority having proper jurisdiction.

(12) Grantees and subgrantees will have protest procedures to handle and resolve disputes relating to their procurements and shall in all instances disclose information regarding the protest to the awarding agency. A protestor must exhaust all administrative remedies with the grantee and subgrantee before pursuing a protest with the Federal agency. Reviews of protests by the Federal agency will be limited to:

(i) Violations of Federal law or regulations and the standards of this section (violations of State or local law will be under the jurisdiction of State or local authorities) and

(ii) Violations of the grantee's or subgrantee's protest procedures for failure to review a complaint or protest. Protests received by the Federal agency other than those specified above will be referred to the grantee or subgrantee.

(c) Competition. (1) All procurement transactions will be conducted in a manner providing full and open competition consistent with the standards of section 13.36. Some of the situations considered to be restrictive of competition include but are not limited to:

(i) Placing unreasonable requirements on firms in order for them to

qualify to do business,

(ii) Requiring unnecessary experience and excessive bonding,

(iii) Noncompetitive pricing practices between firms or between affiliated companies,

(iv) Noncompetitive awards to consultants that are on retainer contracts,

(v) Organizational conflicts of interest,

(vi) Specifying only a ``brand name'' product instead of allowing ``an equal'' product to be offered and describing the performance of other relevant requirements of the procurement, and (vii) Any arbitrary action in the procurement process.

(2) Grantees and subgrantees will conduct procurements in a manner that prohibits the use of statutorily or administratively imposed in- State or local geographical preferences in the evaluation of bids or proposals, except in those cases where applicable Federal statutes expressly mandate or encourage geographic preference. Nothing in this section preempts State licensing laws. When contracting for architectural and engineering (A/E) services, geographic location may be a selection criteria provided its application leaves an appropriate number of qualified firms, given the nature and size of the project, to compete for the contract.

(3) Grantees will have written selection procedures for procurement transactions. These procedures will ensure that all solicitations:

(i) Incorporate a clear and accurate description of the technical requirements for the material, product, or service to be procured. Such description shall not, in competitive procurements, contain features which unduly restrict competition. The description may include a statement of the qualitative nature of the material, product or service to be procured, and when necessary, shall set forth those minimum essential characteristics and standards to which it must conform if it is to satisfy its intended use. Detailed product specifications should be avoided if at all possible. When it is impractical or uneconomical to make a clear and accurate description of the technical requirements, a ``brand name or equal'' description may be used as a means to define the performance or other salient requirements of a procurement. The specific features of the named brand which must be met by offerors shall be clearly stated; and

(ii) Identify all requirements which the offerors must fulfill and all other factors to be used in evaluating bids or proposals.

(4) Grantees and subgrantees will ensure that all prequalified lists of persons, firms, or products which are used in acquiring goods and services are current and include enough qualified sources to ensure maximum open and free competition. Also, grantees and subgrantees will not preclude potential bidders from qualifying during the solicitation period.

(d) Methods of procurement to be followed--(1) Procurement by small purchase procedures. Small purchase procedures are those relatively simple and informal procurement methods for securing services, supplies, or other property that do not cost more than the simplified acquisition threshold fixed at 41 U.S.C. 403(11) (currently set at \$100,000). If small purchase procedures are used, price or rate quotations shall be obtained from an adequate number of qualified sources. (2) Procurement by sealed bids (formal advertising). Bids are publicly solicited and a firmfixed-price contract (lump sum or unit price) is awarded to the responsible bidder whose bid, conforming with all the material terms and conditions of the invitation for bids, is the lowest in price. The sealed bid method is the preferred method for procuring construction, if the conditions in Sec. 13.36(d)(2)(i) apply. (i) In order for sealed bidding to be feasible, the following conditions should be present:

(A) A complete, adequate, and realistic specification or purchase description is available;

(B) Two or more responsible bidders are willing and able to compete effectively and for the business; and

(C) The procurement lends itself to a firm fixed price contract and the selection of the successful bidder can be made principally on the basis of price.

(ii) If sealed bids are used, the following requirements apply:

(A) The invitation for bids will be publicly advertised and bids shall be solicited from an adequate number of known suppliers, providing them sufficient time prior to the date set for opening the bids;

(B) The invitation for bids, which will include any specifications and pertinent attachments, shall define the items or services in order for the bidder to properly respond;

(C) All bids will be publicly opened at the time and place prescribed in the invitation for bids;

(D) A firm fixed-price contract award will be made in writing to the lowest responsive and responsible bidder. Where specified in bidding documents, factors such as discounts, transportation cost, and life cycle costs shall be considered in determining which bid is lowest. Payment discounts will only be used to determine the low bid when prior experience indicates that such discounts are usually taken advantage of; and

(E) Any or all bids may be rejected if there is a sound documented reason.

(3) Procurement by competitive proposals. The technique of competitive proposals is normally conducted with more than one source submitting an offer, and either a fixed-price or cost-reimbursement type contract is awarded. It is generally used when conditions are not appropriate for the use of sealed bids. If this method is used, the following requirements apply:

(i) Requests for proposals will be publicized and identify all evaluation factors and their relative importance. Any response to publicized requests for proposals shall be honored to the maximum extent practical;

(ii) Proposals will be solicited from an adequate number of qualified sources;

(iii) Grantees and subgrantees will have a method for conducting technical evaluations of the proposals received and for selecting awardees;

(iv) Awards will be made to the responsible firm whose proposal is most advantageous to the program, with price and other factors considered; and

(v) Grantees and subgrantees may use competitive proposal procedures for qualifications-based procurement of architectural/engineering (A/E) professional services whereby competitors' qualifications are evaluated and the most qualified competitor is selected, subject to negotiation of fair and reasonable compensation. The method, where price is not used as a selection factor, can only be used in procurement of A/E professional services. It cannot be used to purchase other types of services though A/E firms are a potential source to perform the proposed effort.

(4) Procurement by noncompetitive proposals is procurement through solicitation of a proposal from only one source, or after solicitation of a number of sources, competition is determined inadequate.

(i) Procurement by noncompetitive proposals may be used only when the award of a contract is infeasible under small purchase procedures, sealed bids or competitive proposals and one of the following circumstances applies:

(A) The item is available only from a single source;

(B) The public exigency or emergency for the requirement will not permit a delay resulting from competitive solicitation;

(C) The awarding agency authorizes noncompetitive proposals; or

(D) After solicitation of a number of sources, competition is determined inadequate.

(ii) Cost analysis, i.e., verifying the proposed cost data, the projections of the data, and the evaluation of the specific elements of costs and profits, is required.

(iii) Grantees and subgrantees may be required to submit the proposed procurement to the awarding agency for pre-award review in accordance with paragraph (g) of this section.

(e) Contracting with small and minority firms, women's business enterprise and labor surplus area firms. (1) The grantee and subgrantee will take all necessary affirmative steps to assure that minority firms, women's business enterprises, and labor surplus area firms are used when possible.

(2) Affirmative steps shall include:

(i) Placing qualified small and minority businesses and women's business enterprises on solicitation lists;

(ii) Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;

(iii) Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority business, and women's business enterprises;

(iv) Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority business, and women's business enterprises;

(v) Using the services and assistance of the Small Business Administration, and the Minority Business Development Agency of the Department of Commerce; and

(vi) Requiring the prime contractor, if subcontracts are to be let, to take the affirmative steps listed in paragraphs (e)(2) (i) through (v) of this section.

(f) Contract cost and price. (1) Grantees and subgrantees must perform a cost or price analysis in connection with every procurement action including contract modifications. The method and degree of analysis is dependent on the facts surrounding the particular procurement situation, but as a starting point, grantees must make independent estimates before receiving bids or proposals. A cost analysis must be performed when the offeror is required to submit the elements of his estimated cost, e.g., under professional, consulting, and architectural engineering services contracts. A cost analysis will be necessary when adequate price competition is lacking, and for sole source procurements, including contract modifications or change orders, unless price reasonableness can be established on the basis of a catalog or market price of a commercial product sold in substantial quantities to the general public or based on prices set by law or regulation. A price analysis will be used in all other instances to determine the reasonableness of the proposed contract price.

(2) Grantees and subgrantees will negotiate profit as a separate element of the price for each contract in which there is no price competition and in all cases where cost analysis is performed. To establish a fair and reasonable profit, consideration will be given to the

complexity of the work to be performed, the risk borne by the contractor, the contractor's investment, the amount of subcontracting, the quality of its record of past performance, and industry profit rates in the surrounding geographical area for similar work.

(3) Costs or prices based on estimated costs for contracts under grants will be allowable only to the extent that costs incurred or cost estimates included in negotiated prices are consistent with Federal cost principles (see Sec. 13.22). Grantees may reference their own cost principles that comply with the applicable Federal cost principles.

(4) The cost plus a percentage of cost and percentage of construction cost methods of contracting shall not be used.

(g) Awarding agency review.

(1) Grantees and subgrantees must make available, upon request of the awarding agency, technical specifications on proposed procurements where the awarding agency believes such review is needed to ensure that the item and/or service specified is the one being proposed for purchase. This review generally will take place prior to the time the specification is incorporated into a solicitation document. However, if the grantee or subgrantee desires to have the review accomplished after a solicitation has been developed, the awarding agency may still review the specifications, with such review usually limited to the technical aspects of the proposed purchase.

(2) Grantees and subgrantees must on request make available for awarding agency preaward review procurement documents, such as requests for proposals or invitations for bids, independent cost estimates, etc. when:

(i) A grantee's or subgrantee's procurement procedures or operation fails to comply with the procurement standards in this section; or

(ii) The procurement is expected to exceed the simplified acquisition threshold and is to be awarded without competition or only one bid or offer is received in response to a solicitation; or

(iii) The procurement, which is expected to exceed the simplified acquisition threshold, specifies a ``brand name'' product; or

(iv) The proposed award is more than the simplified acquisition threshold and is to be awarded to other than the apparent low bidder under a sealed bid procurement; or

(v) A proposed contract modification changes the scope of a contract or increases the contract amount by more than the simplified acquisition threshold.

(3) A grantee or subgrantee will be exempt from the pre-award review in paragraph (g)(2) of this section if the awarding agency determines that its procurement systems comply with the standards of this section.

(i) A grantee or subgrantee may request that its procurement system be reviewed by the awarding agency to determine whether its system meets these standards in order for its system to be certified. Generally, these reviews shall occur where there is a continuous high-dollar funding, and third-party contracts are awarded on a regular basis.

(ii) A grantee or subgrantee may self-certify its procurement system. Such selfcertification shall not limit the awarding agency's right to survey the system. Under a self-certification procedure, awarding agencies may wish to rely on written assurances from the grantee or subgrantee that it is complying with these standards. A grantee or subgrantee will cite specific procedures, regulations, standards, etc., as being in compliance with these requirements and have its system available for review.

(h) Bonding requirements. For construction or facility improvement contracts or subcontracts exceeding the simplified acquisition threshold, the awarding agency may accept the bonding policy and requirements of the grantee or subgrantee provided the awarding agency has made a determination that the awarding agency's interest is adequately protected. If such a determination has not been made, the minimum requirements shall be as follows:

(1) A bid guarantee from each bidder equivalent to five percent of the bid price. The ``bid guarantee'' shall consist of a firm commitment such as a bid bond, certified check, or other negotiable instrument accompanying a bid as assurance that the bidder will, upon acceptance of his bid, execute such contractual documents as may be required within the time specified.

(2) A performance bond on the part of the contractor for 100 percent of the contract price. A ``performance bond'' is one executed in connection with a contract to secure fulfillment of all the contractor's obligations under such contract.

(3) A payment bond on the part of the contractor for 100 percent of the contract price. A ``payment bond'' is one executed in connection with a contract to assure payment as required by law of all persons supplying labor and material in the execution of the work provided for in the contract.

(i) Contract provisions. A grantee's and subgrantee's contracts must contain provisions in paragraph (i) of this section. Federal agencies are permitted to require changes, remedies, changed conditions, access and records retention, suspension of work, and other clauses approved by the Office of Federal Procurement Policy.

(1) Administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as may be appropriate. (Contracts more than the simplified acquisition threshold)

(2) Termination for cause and for convenience by the grantee or subgrantee including the manner by which it will be effected and the basis for settlement. (All contracts in excess of \$10,000)

(3) Compliance with Executive Order 11246 of September 24, 1965, entitled ``Equal Employment Opportunity,'' as amended by Executive Order 11375 of October 13, 1967, and as supplemented in Department of Labor regulations (41 CFR chapter 60). (All construction contracts awarded in excess of \$10,000 by grantees and their contractors or subgrantees)

(4) Compliance with the Copeland ``Anti-Kickback'' Act (18 U.S.C. 874) as supplemented in Department of Labor regulations (29 CFR Part 3). (All contracts and subgrants for construction or repair)

(5) Compliance with the Davis-Bacon Act (40 U.S.C. 276a to 276a-7) as supplemented by Department of Labor regulations (29 CFR Part 5). (Construction contracts in excess of \$2000 awarded by grantees and subgrantees when required by Federal grant program legislation)

(6) Compliance with Sections 103 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 327-330) as supplemented by Department of Labor regulations (29 CFR Part 5). (Construction contracts awarded by grantees and subgrantees in excess of \$2000, and in excess of \$2500 for other contracts which involve the employment of mechanics or laborers)

(7) Notice of awarding agency requirements and regulations pertaining to reporting.

(8) Notice of awarding agency requirements and regulations pertaining to patent rights with respect to any discovery or invention which arises or is developed in the course of or under such contract.

(9) Awarding agency requirements and regulations pertaining to copyrights and rights in data.

(10) Access by the grantee, the subgrantee, the Federal grantor agency, the Comptroller General of the United States, or any of their duly authorized representatives to any books, documents, papers, and records of the contractor which are directly pertinent to that specific contract for the purpose of making audit, examination, excerpts, and transcriptions.

(11) Retention of all required records for three years after grantees or subgrantees make final payments and all other pending matters are closed.

(12) Compliance with all applicable standards, orders, or requirements issued under section 306 of the Clean Air Act (42 U.S.C. 1857(h)), section 508 of the Clean Water Act (33 U.S.C. 1368), Executive Order 11738, and Environmental Protection Agency regulations (40 CFR part 15). (Contracts, subcontracts, and subgrants of amounts in excess of \$100,000)

(13) Mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Pub. L. 94-163, 89 Stat. 871).[53 FR 8078, 8087, Mar. 11, 1988, as amended at 60 FR 19639, 19645, Apr. 19, 1995]

Coop – FEMA close out procedures

Coop Standards

Every Coop should have a Standard Construction Policy, signed by the Manager, and preferably

Board approved (included in Board Minutes) showing at least the following:

Statement that all construction will comply with the current edition of the NESC

Possible

Minimum pole height and class	40' class 5
Maximum pole <u>average</u> spacing (ruling span)	300'
Minimum wire size(s) and where used	#1/0 ACSR down section lines

Maximum number of splices per conductor acceptable in a mile of line #4 ACSR taps with current < 10 amps 4

No automatic splices in slack spans

Copper clad wire should be replaced as economical or for NESC or strength reasons:

Wire found in four spans per mile, with sag exceeding TWICE design final sag is over-stretched and ruined and entire mile is to be replaced. If you have better criteria, share it.

Wire found with inadequate ground clearance must be corrected. If 4 or more spans per mile (pro-rated), replace all conductor in entire mile.

Wire and poles may re-used temporarily to get the power on, but records should show the intended later replacement Category F (Permanent Replacement). Temp repairs are Category B (Emergency Protective Measures). Overtime only is reimbursable for your crews; 100% reimbursable contractors.

Any other specific construction practice you adopt

Policy must be your standard practice, and NOT just for FEMA events.

Any other specific construction practice you adopt

Management policies for overtime payment/bonuses for salaried employees after ___ (100) hours of emergency. Policy must be in place prior to event and used on all events, FEMA or not.

Material Issue

Extreme care is necessary in tracking material issue/use. If material issue tickets are used, there MUST be tickets for ALL material you expect FEMA reimbursement. If picking lists from Work Orders (Staking Sheets) are used to capitalize material, a policy change should be done.

Contracts

FEMA allows Time and Material contracts for emergency period, usually interpreted as the first 70 hours. They then expect re-bid contracts from at least 3 contractors. Verbal contracts are acceptable BUT record of bids and bidders must be kept. FEMA prefers Lump Sum or Unit Price contracts after 70 hours. This is impossible for electric cooperatives to do. Lump sum would require Staking Sheets to specify work and formal bid documents issued. Multiple and different contracts could be used if additional contractors are necessary, but FEMA prefers you jawbone all contractors down to lowest bid prices. This is usually not possible. FEMA teaches a lump sum contract for a geographic area. Few, if any, electrical contractors would even consider this. It may work fine for debris removal in a city.

If Time and Material contracts are allowed after 70 hours, Coop supervision and documentation daily are required. Inspection is usually done but seldom documented. It's worth the effort to continue Time and Material contracts.

Mutual Aid Agreements are used by FEMA as a trip device to deny FEMA funds. Agreements cannot be signed by all possible mutual aid partners any more than contracts can be in place for all **possible contractors**. Mutual aid should be treated like any other contractors. If the agreements specify assistance for free (which is stupid), then you must abide by the agreement. Such agreements should specify the extent of the free help. Agreements should say that the helping partner shall bill all costs at their normal costs. Any adders should be specified in the agreement.

Prepare Staking Sheets ASAP after work done. I've worked with a Coop that assigned a Staking Engineer in the Dispatcher Office and prepared daily all sheets from work done and called in. After work is completed, area must be scoured to make sure all staking sheets are done and all work is included on the sheets. The work of making the staking sheets is FEMA reimbursable. But the looking for damage is not (Administrative Costs). PW's should specify countable quantities of work to be done whenever possible. Be prepared to explain overruns and higher costs than estimated. Suggest notifying OEM when overruns are <u>anticipated</u>. That requires constant tracking of the PW progress, something Coop's normally do not do. This implies a full time accounting manager for the FEMA work (Administrative Costs).

It was noted that during an Inspector General's audit of FEMA disbursements to Co-ops, some of the following items are of particular interest to the auditors:

- \circ $\;$ Time sheet entries for office personnel.
- Bid information for work to be performed by contractors (work must be bid).
- \circ Compliance with FEMA statutes.
- All work done subsequent to restoration effort must be included in PW scope of work.
- Accurate and documented descriptions of work performed by office personnel if it related to field personnel, i.e., delivering meals/material to field, warehouse work, etc.
- Have documents detailing costs for pieces of equipment used by other Coops and Contractors in both the restoration and reconstruction effort.
- Keep an accurate accounting of all overheads as they relate to both restoration and reconstruction activities.
- Be prepared to document and explain the process your Co-op used to select work crews, whether from another Co-op or a Contractor, i.e., the Mutual Aid Plan.
- An action plan on how your Co-op selected its Contractors; least expensive to most expensive list, list of equipment needed in order to respond to the damage, etc.
- Document the rationale behind selecting the crews you brought in; in other words, it's not good enough to just simply say, "We just had to get everyone that we could get in order to get our customer's lights back on as quickly as possible." That's not good enough for the IG's auditors. They want to know WHY you brought in who you did. Getting your customer's power back on means nothing to them... how you did it and how you documented doing it (materials, labor, bids, accounting for all of this) does matter to them, and whether or not the proper statutes were followed.
- Shortest audit period: 2 to 4 weeks.
- \circ Longest audit period: 6 to 12 months.
- Notes from conversations with CEO's, CFO's, and Cooperative Accountants across the U.S. who have been through an Audit by the Office of Inspector General in relation to disbursement of FEMA disaster funds to Electric Cooperatives.

- These auditors will go by the "original setup" conducted by the FEMA team, meaning if it's not in their original scope of work and in the approved PW, then FEMA and the Inspector General's audit staff WILL NOT allow it (reimbursement).
- Mostly done on a "Phase I" (emergency power restoration) and "Phase II" (debris removal and permanent repairs) basis. Keep records and documentation from the date of the original disaster, and keep track of ALL RECORDS and INVOICES, TIME SHEETS and other pertinent data, through ALL PAY PERIODS related to the disaster.
- On time sheets: note what Office Personnel were doing in relation to the disaster. If they were making meals, delivering them, or delivering equipment and supplies during the restoration effort and subsequent recovery, then their time can be reimbursed. This is a very touchy area with the auditors, and accurate records and descriptions of work performed by Office Personnel are very important.
- These OIG Auditors will always want to see your bids for projects from Contractors. They will come in with the attitude that "this Co-op has used some FEMA money illegally" and you (the Co-op) must prove to them otherwise.
- Auditors will always have heartburn on overhead from Contractors, and their travel time to and from the job. Transportation costs are always highly questioned, both from Contractors and from Co-op crews. As a side note, it seems to be the OIG Auditor's opinion that FEMA should first send in auditors to show a Co-op how to track material and costs BEFORE a disaster occurs! (Not a bad idea, actually!)
- Make notes about what your Co-op does as a matter of routine, i.e.; policies or procedures that explain why you do things the way you do in emergency situations. This should also include how you handle the selection of Contractors and Co-op crews during disaster or mutual assistance situations. Should also include a paragraph or two on the Co-op's "action plan" (Mutual Aid Agreement) and how that plan or agreement addresses selection of Contractors (do you have a list and is it sorted from least expensive to most expensive, etc.) their qualifications, etc. What your priorities are for getting Contractors versus Co-op crews to help, etc., and any other pertinent information.
- Document and detail your decision-making process for rebuilding your system during the disaster. Did you have a policy addressing how you will rebuild the system in just such a scenario? Did you have this on record BEFORE the disaster occurred? If not, you should have such a policy (suggested by several Co-ops).

- Also document your Co-op's rationale for getting lines back on and the priority nature of certain line segments (Three-phase feeders first, etc.)
- It's also a good idea to do the following: get a signed contract from a Contractor ahead of time (standard RUS contract for time and materials) and have a separate price sheet listed as "Exhibit A" for storm repair work. Then update the contract annually with the Contractor. Exhibit A can be changed to reflect current storm repair prices.
- "Phase I" is generally described as the "Emergency Repairs" period of time for power restoration, but is usually not a long period of time. "Phase II" is considered to be the period of time after Emergency Repairs are made and includes Debris Removal and Permanent Repairs, necessary to get the line back in the condition it was in prior to the disaster. (This last statement is subject to bringing the line into compliance with NESC Code and RUS construction and design requirements.) If you have a written policy for procedures to accomplish "Phase II" from your field people (Engineers and Construction Supervisors) then you are ahead of the game. Remember: getting the lights back on means nothing to an OIG Auditor; they only go by provisions of the Stafford Act and by GAO accounting rules to make sure you and your Co-op spent federal money the exact way it was intended to be spent!

<u>DO NOT SIGN</u> an agreement or a contract for a <u>type "A-133" audit</u> if presented to you by OIG Auditors. This is a type of "governmental audit" that RUS Borrowers have an exemption from. For further information about such documentation, contact Steve Piecara or Gary Bartlett with NRECA (1-703-907-5500). You might also want to talk this over with Jonathan Glazier, an attorney for NRECA, and with your own auditor that performs financial audits for your Cooperative. (Exemption is in 7 CFR, Part 1773.3) Note: ODCEM may have this as a requirement in their "Set 2 Forms" for FEMA reimbursement. Sid will contact ODCEM officials to try and clarify and, if possible, correct such language.

Keep track of all "Damage Survey Reports" conducted by FEMA field personnel when they were making their PWs. Estimates should be on the high side. Get ALL documents and records from Contractors, including their time sheets, etc., not just their invoices or their bills. Not cost plus, but their actual prices for work performed, too.

Damage reports by County might be asked for. Line restoration and debris removal by County or Work Order might be asked for as well.
Force Labor is tough to get for Office Personnel, unless they were actually in the field or delivering meals, equipment, etc., to crews in the field or to temporary warehouses that were set up during the disaster. For any salaried employee, document what they did, especially if it involved overtime. Must show auditors a policy that you had in place prior to the disaster that allows compensation for salaried employees IF they were doing work tied to the disaster.

Retain copies of invoices for both federal and state authorities. Keep LOTS of PHOTOS of the damage to your system. Date and document the times and places of damage shown in the photos or of any film footage that is taken of damage in disaster-declared areas. In short, <u>DOCUMENT</u>, <u>DOCUMENT</u>, <u>DOCUMENT</u>!

C. LEC SPECIFIC MAJOR STORM / FEMA PROCEDURES

STORM MAINTENANCE – 593.100

Key word is Maintenance – Just like a normal maintenance day but Storm Related

This might be the initial 24-72 hours of the storm. POWER RESTORATION is priority.

- Patrolling / Riding Line
- o Fusing
- Stubbing/straighten existing pole
- Repair Grounds
- Transferring Load, switching, reconnect circuits
- Re-adjust guys
- Re-Sagging Line
- Tree Trimming
- Preplacement of MINOR material

Employee Self-Serve - task STORM LINE 593.100 should be used for branch managers & engineering for patrolling line during the storm to identify initial damages. Use "Comments" to make notes of area(s) patrolled.

CONSTRUCTION/RETIREMENT – WORK ORDER

At this point you are re-building the damaged line. Changing out poles, cross arms, etc. It is just like any Construction / Retirement WO. You are issuing MAJOR MATERIAL. (Poles, cross arms etc.) There may be instances when Operations determines that multiple WO's are needed by branch locations.

CUSTOMER SERVICE / ADMINISTRATION

Customer Service use ESS task STORM DMG Customer Calls 903.100 for answering member calls (Overtime)

Administration use ESS task STORMAMDIN for time related to compiling documentation for FEMA reimbursement. Use "Comments" to make specific notes on that was done. (Verify Payroll, GPS coordinates, Tickets, etc.)

Reiterate importance of documentation to outside crews.

- Outage Ticket
- Service Order Notes
- o Field Memos
- Pole Sheets
- Special Equipment (green sheets)
- Time cards should reflect correct coding between maintenance or WO and vehicle # & miles.
- Reference WO # on all paperwork.

Utilize Engineering personnel assigned to follow contractors to record and document on Field Memo the contractor name, daily work performed, material, hours worked and number in crews. Field Memo should be signed and date work completed and returned to branch manager for permanent file. This will be used to substantiate contractor invoices by Accounting.

Conductor Damage – Could qualify for replacement / upgrade. Must meet FEMA criteria in order to qualify for reimbursement.

Hazard Mitigation – Improvements that would prevent future damage can qualify for Federal or State reimbursement if meets FEMA criteria.

Properly document any environmental issues. Copies invoices and payments for oil spill cleanup.

Properly document debris removal and disposal. Copies of invoices and payments.

Develop Procurement Policy to reflect Lyntegar current polices.

Utilize Milsoft Outage Reports and Outage Viewer/Manager for documentation of outages by time period and county. Data can be exported to Excel spreadsheet and used as foundation to FEMA worksheet. Each relevant outage can substantiate damages, labor, material and transportation costs by GPS locations. Filter Outage Viewer historical data by cause code (Ice) to narrow events.

APPENDIX G. ALTERNATIVE FUEL AND STORAGE CAPABILITIES



SUBSTATION	XFMR KVA	4 F	ANS 65C	SPARE	
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APPENDIX H. SUBSTATION TRANSFORMERS AND SPARES