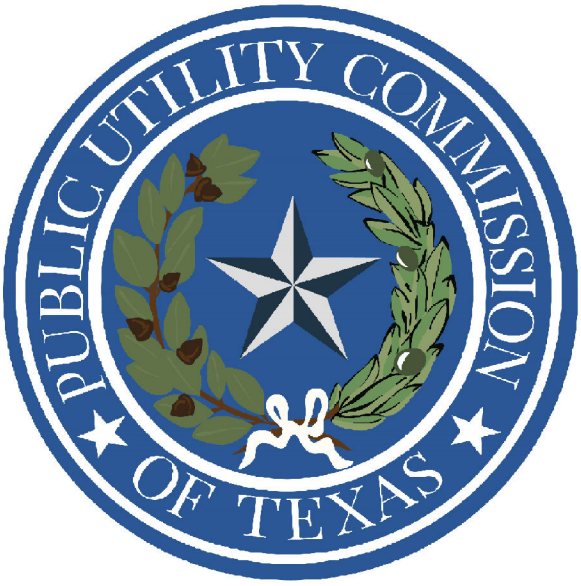

Filing Receipt

Received - 2022-04-03 03:03:46 PM
Control Number - 53385
ItemNumber - 3

PROJECT NO. 53385

AFFIDAVIT OF CHIEF EXECUTIVE OFFICE/GENERAL MANAGER FOR UNITED ELECTRIC COOPERATIVE SERVICES, INC.

STATE OF TEXAS §
COUNTY OF JOHNSON §

BEFORE ME, the undersigned authority, on this day personally appeared the undersigned Chief Executive Officer/General Manager who, after being duly sworn, stated on his or her oath that he or she is entitled to make this Affidavit, and that the statements contained below are true and correct.

I, Cameron Smallwood, swear or affirm that all relevant operating personnel within the electric cooperative are familiar with the contents of the emergency operations plan that is being filed by the cooperative, and such personnel are committed to following the plan and the provisions contained therein in the event of a system-wide or local emergency that arises from natural or manmade disasters, except to the extent deviations are appropriate under the circumstances during the course of an emergency.

Additionally, the Emergency Operations Plan was initiated on January 10, 2021, and the event was reviewed on October 12, 2021, in lieu of an annual test. The Public Utility Commission and the Texas Department of Emergency Management were invited to join the review via Microsoft TEAMs. Upon completion of the review and updates/revisions that were made as a result, the General Field Representative of the Rural Utility Service was notified; and on at the Cooperative's December 2021 Board of Director's meeting that was held on December 20, 2021, the Board was provided with an update and allowed to review the changes that were made to the EOP.

I also swear that redacted copies of the Cooperative's Emergency Operations Plan have been distributed to local jurisdictions as needed. Finally, I hereby swear that the EOP includes a business continuity plan, and that the Cooperative's Emergency Response Coordinator, who will interact with local, state, and federal emergency management officials in the event of an emergency as needed, does have the latest National Incident Management System (NIMS) training.

Cameron Smallwood
Chief Executive Officer/General Manager
United Electric Cooperative Services, Inc.

Sworn and subscribed before me this 31 **day of** March, 2022.

Notary Public in and for the State of Texas

HEATHER WIGINGTON
Notary Public, State of Texas
Notary ID 12559966-3
My Commission Exp. 02-27-2026

United Cooperative Services Emergency Operations Plan (EOP)/Emergency Response Plan (ERP)
Version 1.2022

Executive Summary

Description/Summary

In every business, there exists a need for speedy recovery from different types of disasters. Acts of God and man-made disasters have been known to cripple or destroy business functions and even entire organizations. Since the terror attacks that occurred on September 11, 2001, electric utility interest in a disaster recovery plan has significantly increased.

Given their natural exposure to weather related outages, electric utilities have long proven disaster mitigation plans in place to recover their electrical grid. For example, Texas Electric Cooperatives currently maintains an Emergency Work Plan that provides disaster planning resources and mutual aid agreements between member electric cooperatives.

The missing element of disaster preparedness is a comprehensive plan that allows quick access to information about everyday business systems.

Several types of disasters can occur that threaten our ability to efficiently provide service to our consumers. Disasters such as fire, tornado, and earthquake can result in total loss situations where tools and equipment, on-site data, hardware, software, facilities, and even personnel are lost. Severe weather, such as lightning, and floods can be damaging to sensitive electrical equipment and the ability to do business from a particular location. Both of these disasters tie in with the potential for loss of power or other utilities. Sabotage can be either from external forces causing damage to structures, facilities, data through hacking or viruses, or from internal sources (personnel) damaging company resources.

The purpose of this Disaster Recovery Plan is to speed a cooperative's recovery from a wide range of disasters, which, though it may have a low probability of occurring, would nonetheless have a huge impact on a cooperative's ability to manage business systems. It will enable neighboring electric cooperatives to share resources more efficiently, establish procedures for mitigating losses, and provide quick access to critical business operations information.

Objective

- The objective of this preparation manual is to provide the cooperative with a process to improve the effectiveness and responsiveness of all aspects of cooperative business following various disasters. The TEC Member Services Department coordinates this manual to assist a cooperative in developing a comprehensive plan by focusing on the following:
- Identification of the business and operations functions that could be affected by a wide range of disasters;
- Mitigation efforts that will have a direct effect of reducing the impact on critical functions;
- Short-term tactical restoration recommendations, and
- Long-term strategic restoration and/or risk reduction recommendations.

Application Specific to United Cooperative Services

This document was created by TEC as a general guideline to emergency response. UCS has adopted this document as a basis for its Emergency Restoration/Response Plan to keep some consistency of plans from surrounding cooperative neighbors in the State of Texas. UCS has not edited content (outside of the impact of addendums) and understands it is not set up organizationally similar to the organization depicted in this document. This document gives very good direction to UCS to follow during an emergency situation. With that said, it is up to the Emergency Response Team of UCS to review this document prior to or within 24 hours following the emergency situation to ensure guidelines are agreed to and followed throughout the response to the emergency situation. Further, if an emergency is anticipated, the Team should review the plan and prepare beforehand (hurricane projected to cross service territory).

The addendums to this document give more specific information as to how this plan should operate with specifics to UCS. The addendums follow in the below numbered tab format:

TAB 1: ERP Structure and Guides; Disaster Specific Information; and Annexes

TAB 2: Contacts and Key Accounts Lists

TAB 3: Processes, Guidelines and Procedures

TAB 4: Regulatory Agencies

TAB 5: Other

This document has been accepted and approved by the UCS Executive Staff, CEO and Board of Directors as UCS' Emergency Restoration Plan (ERP) as required by CFR 1730.28.

Specific Sections and Page Numbers as Required in Project No. 51841, Review of 16 TAC § 25.53 Relating to Electric Service Emergency Operations Plan

Approval and implementation section – Pages 145 – 146
Communication plan section – Pages 147 – 148
A plan to maintain pre-identified supplies for emergency response – Pages 148 – 152
A plan for staffing during emergency response – Page 150
A plan for how the co-op identifies weather-related hazards and process to activate EOP Pages 152 - 154

Annexes

- Weather Emergency Annex Pages 155 – 175
- Load Shed Annex Pages 176 – 183
- Pandemic and Epidemic Annex Pages 184 – 329
- Wildfire Annex Page 330
- Cyber and Physical Security Annex – **CONFIDENTIAL – REDACTED**
- Active Shooter Annex Page 332

Record of Distribution
All Cooperative employees are updated and trained on the Emergency Operations Plan/Emergency Response Plan each year at the Cooperative's January employee meetings. Version 1.2022 of the EOP/ERP reviewed with the Employee Group on January 20, 2022, and January 21, 2022 as part of United's January 2022 employee meetings.

Additionally, all employees have access to the Cooperative's updated EOP/ERP on the Circuit (United's employee Microsoft SharePoint Application).

Chief Executive Officer/General Manager's Affidavit
See Attached

Emergency Response Coordinators
Emergency Coordinator - Quentin Howard
Senior Vice President System Engineering
Office: 254-918-6127
Cell: 817-253-5406
Home: 254-968-0917
Quentinh@ucs.net

Secondary Emergency Coordinator - Jared Wennermark
Senior Vice President of Cooperative Planning and Procurement
Office: 817-782-8358
Cell: 817-648-5927
Home: 817-426-0892
Jared@ucs.net

Emergency Response Plan

version 1.2022

United Electric Cooperative
Services, Inc.

(UCS)

Emergency Coordinator

Quentin Howard
Senior Vice President System Engineering

FEMA certifications:
ICS 100
ICS 200
ICS 700
ICS 800

Office: 254-918-6127
Cell: 817-253-5406
Home: 254-968-0917

Secondary Emergency Coordinator

Jared Wennermark
Senior Vice President of Cooperative Planning and Procurement

Office: 817-782-8358
Cell: 817-648-5927
Home: 817-426-0892

Need / Purpose

- In every business, there exists a need for speedy recovery from different types of disasters. Acts of God and man-made disasters have been known to cripple or destroy business functions and even entire organizations. Since the terror attacks that occurred on September 11, 2001, electric utility interest in a disaster recovery plan has significantly increased.
- Given their natural exposure to weather related outages, electric utilities have long proven disaster mitigation plans in place to recover their electrical grid. For example, Texas Electric Cooperatives currently maintains an Emergency Work Plan that provides disaster planning resources and mutual aid agreements between member electric cooperatives.
- The missing element of disaster preparedness is a comprehensive plan that allows quick access to information about everyday business systems.
- Several types of disasters can occur that threaten our ability to efficiently provide service to our consumers. Disasters such as fire, tornado, and earthquake can result in total loss situations where tools and equipment, on-site data, hardware, software, facilities, and even personnel are lost. Severe weather, such as lightning, and floods can be damaging to sensitive electrical equipment and the ability to do business from a particular location. Both of these disasters tie in with the potential for loss of power or other utilities. Sabotage can be either from external forces causing damage to structures, facilities, data through hacking or viruses, or from internal sources (personnel) damaging company resources.
- The purpose of this Disaster Recovery Plan is to speed a cooperative's recovery from a wide range of disasters, which, though it may have a low probability of occurring, would nonetheless have a huge impact on a cooperative's ability to manage business systems. It will enable neighboring electric cooperatives to share resources more efficiently, establish procedures for mitigating losses, and provide quick access to critical business operations information.

Objective

- The objective of this preparation manual is to provide the cooperative with a process to improve the effectiveness and responsiveness of all aspects of cooperative business following various disasters. The TEC Member Services Department coordinates this manual to assist a cooperative in developing a comprehensive plan by focusing on the following:
- Identification of the business and operations functions that could be affected by a wide range of disasters;
- Mitigation efforts that will have a direct effect of reducing the impact on critical functions;
- Short-term tactical restoration recommendations, and
- Long-term strategic restoration and/or risk reduction recommendations.

IMPORTANT NOTE: APPLICATION TO UCS

This document was created by TEC as a general guideline to emergency response. UCS has adopted this document as a basis for its Emergency Restoration/Response Plan to keep some consistency of plans from surrounding cooperative neighbors in the State of Texas. UCS has not edited content (outside of the impact of addendums) and understands it is not set up organizationally similar to the organization depicted in this document. This document gives very good direction to UCS to follow during an emergency situation. With that said, it is up to the Emergency Response Team of UCS to review this document prior to or within 24 hours following the emergency situation to ensure guidelines are agreed to and followed throughout the response to the emergency situation. Further, if an emergency is anticipated, the Team should review the plan and prepare beforehand (hurricane projected to cross service territory).

The addendums to this document give more specific information as to how this plan should operate with specifics to UCS. The addendums follow in the below numbered tab format:

TAB 1: ERP Structure and Guides; Disaster Specific Information; and Annexes

TAB 2: Contacts and Key Accounts Lists

TAB 3: Processes, Guidelines and Procedures

TAB 4: Regulatory Agencies

TAB 5: Other

This document has been accepted and approved by the UCS Executive Staff, CEO and Board of Directors as UCS' Emergency Restoration Plan (ERP) as required by CFR 1730.28.

This document should be reviewed and tested by the Emergency Response Team of UCS annually as required by CFR 1730.28.

EMERGENCY SERVICE RESTORATION PLAN

UCS maintains an emergency operations plan in anticipation of natural disasters or situations involving curtailments or major interruptions in electrical service. The plan establishes organizational and personnel assignments, describes emergency communication procedures and lists emergency contacts. It also contains information concerning members with life sustaining electrical equipment and plans for communication with all customer classes.

A significant portion of the plan concerns the coordination of emergency assistance with Local Office of Emergency Management and other local emergency agencies, neighboring cooperatives, construction contractors, and other utilities. It outlines procedures for securing assistance according to the plan developed by Texas Electric Cooperatives through TEC Loss Control.

Our plan has been revised based on the model developed by Texas Electric Cooperatives so that there would be significant uniformity from cooperative to cooperative. The Table of Contents is attached to illustrate the elements of the plan.

PURPOSE
Plan the restoration of service to our members prior to interruptions due to storms or other causes. The plan should maximize time, effort, and opportunity. This plan will be a guideline that will be varied as the situation requires.

SCOPE
This plan will establish:
1. The levels of the emergency from pre-storm watch to major destruction.
2. The guidelines to be used at each level.
3. Assign responsibilities and duties to each department and sometime to specific individuals.

This plan will be reviewed periodically and continually updated by the Cooperative Planning Department in coordination with efforts from TEC. Official copies will be maintained in all *UCS offices.*

A critique of the plan and its effectiveness should be conducted following each major outage. The critique should generate improvements to the plan and formulate solution strategies with regard to noted weaknesses in the plan.

DEFINITION OF EMERGENCY LEVELS

Pre-Storm Watch

The situation is prior to the arrival of an anticipated storm. This is a precautionary situation that would follow a weather broadcast of severe nature. The Dispatcher will monitor the situation and advise the Senior Foreman. The Dispatcher and/or Senior Foreman may request the assistance of phone operators to answer calls..

- EXPECTED OUTAGE TIME-NONE
- CUSTOMERS OUT OF SERVICE-NONE
- INITIATED BY: DISPATCHER/SENIOR FOREMAN

Level 1

An emergency/outage where cooperative crews are able to restore service in less than 4-hours without the assistance of outside crews. Personnel assemble as needed.

- EXPECTED OUTAGE TIME: 0 TO 4 HOURS
- CUSTOMERS OUT OF SERVICE: LESS THAN 100 MEMBERS
- INITIATED BY: OPERATIONS MANAGER

Level 2

An emergency where cooperative crews are able to restore service in less than 8-hours without the assistance of outside crews. All construction, operations, and service personnel report.

- EXPECTED OUTAGE TIME: 4-12 HOURS
- CUSTOMERS OUT OF SERVICE: SUBSTATION OR MAJOR CIRCUIT
- INITIATED BY: OPERATIONS MANAGER

Level 3

An emergency where cooperative crews are going to need outside help to restore service. All Cooperative employees must report.

- EXPECTED OUTAGE TIME: MORE THAN 12 HOURS
- CUSTOMERS OUT OF SERVICE: DIVISION LEVEL - WIDE SPREAD DAMAGE
- INITIATED BY: OPERATIONS MANAGER OR SENIOR VICE PRESIDENT OF SYSTEM ENGINEERING/OPERATIONS

DUTIES FOR ALL GROUPS

Operating Group

- Coordination and direction for the operating activities required for the restoration of the transmission and distribution system during the entire period of any and all emergencies:
- Staff the facilities at the Operations Center for the required operational restoration functions.
- Provide central communication and status information updates to the District Managers and Communications Coordinator.
- Determine problems and a course of action to follow.
- Set priorities for switching, patrolling, and restoration.
- Control and direct all instructions for switching and patrolling.
- Determine extent of service interruptions by member count and by area.
- Log all events during the outage.
- Determine manning requirements and call out appropriate personnel.
- Determine the need for outside contractor assistance.
- Provide Technicians to support relaying, PORSCHE, SCADA, substation and radio system problems.

Operations Superintendent

- Responsible for determining proper course of action to restore transmission and distribution systems to operating condition.
- Responsible for determining the priority for restoration.
- Determines the level of the emergency.
- Insures all operating personnel are functioning as prescribed.
- Secures outside contract assistance if necessary.
- Determine and execute relief schedules during extended service restoration.

System Operators

- Coordinate and dispatch all switching and patrol operations between the field and the Operations Superintendent.
- Monitor SCADA and PORSCHE Systems.
- Maintain a list of employees' phone numbers and addresses. Call-out personnel upon the request of the Superintendent.
- Track working time on all service and construction crews.

Engineering Personnel

- Sort outage reports and determine location and possible cause of the outage.
- Determine location of protective devices and switches involved for the restoration of power and recommend a course of action.
- Identify each problem area on the system map.
- Track the location of personnel in the field and post on the map.

Member Service Group

- Provide trained and courteous personnel for answering member outage calls and verifying power restoration to members.
- Assist with the prioritizing of outage calls with regard to special needs or critical loads.

- Provide members with addition information with respect to anticipated outage time and the extent of the damage as supplied by the Communication Officer's publications.
- Confirm restoration of power by follow-up phone call.

District Management

- Provide a list of members with special, life-support, or other critical problems.
- Communicate with and identify key account customers for the Operations Group.
- Coordinate and assemble phone answerers as requested.
- Maintain function of offices with reduced staff during normal business hours.
- Continually train personnel in the outage management program and the capabilities of the phone answering system.

Member Service Clerks

- Answer member outage calls courteously, calmly and professionally.
- Collect complete information using outage management program.
- Call customers back when service is restored.
- Apologize for the inconvenience and give the correct time.

Construction Group

- Repair, sectionalize, or restore all damaged transmission and distribution systems to acceptable operating condition during the emergency
- Provide adequate personnel and equipment to repair or sectionalize damaged equipment.
- Provide personnel for patrolling circuits.
- Assist in the determination of severity and extent of damage to the transmission and distribution systems.
- Coordinate material requirements with Engineering to the material supplier.
- Periodically review and determine the best utilization of equipment and personnel.
- Request mechanic personnel for emergency equipment and vehicular repair as needed.

Line Superintendents

- Coordinate, in the field, the execution of the power restoration plan by maximizing the available crews, equipment, and material.
- Establish a crew rotation plan when restoration of the system is exceeding 16 hours.
- Meet daily with the Operations group to assist in the development of the Restoration Plan for the following day.

Facilitators

- Includes any and/or all remaining employees of the Cooperative. Their duties will be assigned by the Manager (on duty). Their duties will vary from day-to-day and will address any special needs of the membership, cooperative, or the workforce.

The following list of duties and activities are representative only.

- May be directed to determine the extent of damage by field inspection.
- May provide guidance to damage areas and accumulate material lists.
- May coordinate and deliver materials and meals to Construction Crews.
- May guide out-of-town crews to the damaged areas.
- May visit members that are on life support systems if communication system is not working.

- May provide additional support to critical or "key" accounts.
- May help transport employees to and from homes or from one crew location to another.

Communications Group

- Coordinate news releases and public service announcements with the General Manager. Establish and maintain information flow to the membership and the employee service group.
- Responsible for preparing news releases, public service announcements, and other pertinent information as may be deemed necessary for general instructions, safety, and well being of the membership.
- Updates the Board of Directors on the current situation as advised by the Operations Superintendent and General Manager.

Issue updated information on a timely basis.

All Personnel - Report information about employees or the operations and activities of the Cooperative to the Communications Specialist.

Dispatchers or System Operating Personnel - In the event of a major electric system outage or emergency (one in which a substation or major feeder is interrupted for more than a few minutes in a heavily populated area or the same condition in a very rural area that is likely to last several hours), the Engineering Representative should be notified immediately. If advisable, then notify the Communications Representative, and the General Manager where a decision will be made to either contact the news media or wait for an inquiry. Depending on the nature of the situation, the Communications Representative may decide to call in the Communications Specialist to write a report (take photos, etc.) for either a news release or member advisory in the Texas Coop Power or by special letter.

Communications Representative - Review and approve all news and press releases and advise the General Manager accordingly. Serve as the official spokesperson for the Cooperative in answering inquiries and making position statements. Confer with appropriate department managers on matters requiring either media response or news releases in order to assure accuracy of reporting.

Engineering Representative - Notify the Communications Representative of system operating outages and other emergency conditions or situations that could invite media attention or need media or member advisories

Accounting Representative - Notify the Communications Representative of rate and/or billing matters or other situations that could invite media attention or need media or member advisories. Act as official spokesman in the absence of both the Communications Representative and the General Manager on matters relating to his department.

Computer Services Representative - Notify the Communications Representative of any media inquiries or situations that need media or member advisories.

Field Crews - Keep Dispatchers and Engineering Representative fully informed of any situation that would invite media attention. In situations where the media is on location, cooperate fully to the extent that neither safety nor efficiency of work is impaired. Answer all questions as briefly as possible without speculating.

Complaint Handling Procedures
During an emergency, the cooperative's telephone system will be staffed around the clock in order to receive information from customers, emergency authorities and others. Also, personnel will be on duty at all times to receive outage reports from consumers appearing in person.

Coordination With Visiting Work Crews
If visiting crews operate on the same radio frequency as the cooperative, the dispatchers will communicate directly with the radio-equipped trucks. For those trucks operating on a different frequency or without radio equipment, the cooperative may issue hand-held radios to communicate with the dispatchers

Critical Loads
When telephone service is not available, the cooperative will attempt to notify critical loads either before or at the onset of an emergency through broadcast radio and television announcements, working with law enforcement officers and utility personnel in the field.

ENGINEERING and OPERATIONS

1. Engineering departments should develop and submit to management and boards of directors a policy concerning specific pole and conductor sizes and other items to be used in a "Standard Construction Policy." Co-op staking sheets and work plans may be used as examples to show proof of a "replacement standard" being in place prior to the occurrence of a natural disaster.

2. Engineering and operations personnel should note the date and time the first outage occurred due to the disaster, and the date and time the last consumer's electricity is restored.

3. The engineering/operations department should solicit at least three (3) bids for permanent repair work to be done, preferably before the conclusion of the 70-hour Emergency Protective Measures period. Bids from contractors must be received, along with price sheets for storm labor and equipment. It is recommended that bids be made on a per-unit basis, rather than hourly. However, if billing is hourly, proof must be shown that the contractor was supervised by the cooperative, complete with daily notes and documentation.

4. It is strongly recommended that additional engineering resources be arranged to assist in the daily development of staking sheets, material sheets, and work order information. This will allow the staking department to stay ahead of construction crews, and provides for an orderly flow of necessary and vital information to other key departments.

5. Member donated items, such as food, services and labor, must be well documented. It may be necessary for the member or group providing these items to sign an affidavit listing the cost of donated items, or for an invoice to be provided. This could then be included in Administrative Expense by the cooperative.

6. Prepare staking sheets as soon as possible for work to be done. Make sure that all permanent work has a staking sheet documenting the completed work. The labor for making the staking sheets should be included in the work order and is FEMA reimbursable (Category F). <u>The labor involved in looking for and estimating damage to the system **is not** reimbursable **except** as Administrative Expense</u>.

7. Damage surveys: It is strongly recommended that, if possible, co-op personnel resist the urge to send all available human resources into the field to assist in the repair of damage. Instead, the following is advised:

    a. Send several experienced field personnel on a 'Fast Survey' of the areas in which damage is suspected. Use enough personnel to drive through the damaged area(s) in one day or less.

    b. Initially, some lineman may need to be utilized to patrol line rather than to repair it. The Fast Survey is designed to rapidly determine the extent of damage throughout the co-ops' system. It will allow for better decision-making concerning crews, materials and equipment.

c. Damage reports from survey personnel should list the location, approximate length (1 mile, etc.) of damage in area, the type of damaged pole line, i.e., "south side of section 23, T15N, R1W – One mile of 3 phase line, 1/0 conductor on 45-foot, Class 4 poles is down."

d. Collect all reports during the survey at the dispatch center or Emergency Operations Center and draw the damaged locations on a Key Map. Start a database using Excel or Access software to log each of the damage reports by line section or map location number. This will help the engineering and operations departments document the scope and location of the damage for later accounting purposes.

e. If possible, allow survey teams to use cell phones to report damage; designate someone to log these reports onto the Key Map and also log the reports into the database. This is also the time to note the locations of any lines that may be blocking major roadways, since main roads will need to be cleared quickly.

f. Do not allow survey teams to stop and draw staking sheets or to make detailed material sheets during the initial Fast Survey. The goal is to rapidly drive through the damage area(s) to determine the extent and locations of damage. The information gathered will then be used to determine crew and material requirements. The earlier the co-op gets a handle on the extent of the damage, the earlier proper staking sheets can be developed for known damage locations.

8. Beginning repairs: Concentrate on the areas that will allow the cooperative to get power restored to the most consumers with the least amount of work, and to critical loads, if any. Begin work at substations and work main feeder lines outward from that point. If damage is extensive in an area, staking technicians may need to be sent ahead of repair crews in order to draw staking sheets and set stakes. Identify in advance all feeder lines and critical loads.

9. Some lines can be repaired with little or no staking; others will have to be staked as if they are new construction. In the case of strong tornadoes or hurricanes, the pole line may be completely obliterated, with no poles left for reference points. In these cases, the line may have to be completely re-staked prior to reconstruction.

10. Ice storms, on the other hand, may break poles down, but type of framing and original hole locations will still be known. Repair crews can reset new poles in these instances without staking sheets or stakes, unless the damage involves Codes and Standards changes, which may necessitate re-staking due to changes in ruling spans being made for proper clearance purposes.

11. Quick staking sheet drawings listing pole framing requirements are very helpful for repair crews, but in ice storms, with a visible pole line in place, it may not be necessary for staking technicians to 'wheel off' spans or set stakes. Whether damage is caused by an ice storm, hurricane or tornado, staking teams will have to coordinate with repair crews, and vice-versa.

12. Inspect and document the repairs: Once repairs are underway, use engineering personnel to inspect completed repair locations. Consider using consultants or

additional engineering help from neighboring co-ops. Engineering teams will have to look for all poles and construction units that were set or replaced during the disaster. Some repairs may have been made without benefit of written records; the purpose of the engineering follow-up inspection is to further document repair locations and materials used.

13. The second purpose of the inspection is similar to work order inspections. List the material units used at each damaged pole location, noting any cleanup or corrections that may be required in order to bring the line into compliance with current co-op, RDUP and NESC Codes and Standards.

14. For Category F, Utility (permanent repairs), it is extremely important to have in place board-approved co-op design standards and staking tables. This customized "Standard Construction Policy" should spell out standard pole heights, conductor sizes and ruling spans to be used at the cooperative, and should be utilized every day by co-op staking personnel.

15. The third purpose of the inspection is to have engineers check surrounding areas for damaged lines possibly overlooked during the initial Fast Survey. Some lines may serve idle or seasonal services and should be closely evaluated for rebuild or retirement.

16. Inspection notes must be detailed and listed by map location number. The notes should be entered into a database for easy retrieval and subsequent evaluation. Documentation of all work performed during the disaster is a major task, but is absolutely critical if a cooperative expects to qualify and receive FEMA reimbursement. These records will be used to ensure the system is returned to current Codes and Standards, and to help document material and labor costs associated with all reconstruction efforts.

17. Contracts from contractors: The co-op must have in place, or be prepared to receive from at least three (3) different sources, bids for permanent repairs. This is preferable during the 70-hour Emergency Protective Measures period immediately following the disaster. During the initial emergency period, if a contract has not been signed by the contractor, any record of contact, arrival times, and/or anything discussed by phone or in person with the contractor should be documented. OIG auditors may allow these costs from contractors, but only if the co-op proves such verbal agreement existed via documentation.

18. Contractors unfamiliar with local co-op service areas will require supervision and instruction by local co-op employees. It is suggested that trained and experienced employees be used to supervise these contractor crews, such as those employees from the co-op's staking department, marketing department, or key accounts department.

19. If predicted storms appear to be extremely destructive in nature (forecasted ice storms, hurricanes, or tornado outbreaks), consider creating work orders in advance to charge all time and materials to.

20. If possible and if needed, use in-house contractors and any of their extra crews before calling in or bidding other contract crews. In-house crews are contractors the cooperative presently employs for contract construction work. Make sure the in-house

contractor has their emergency storm repair rates on file with the cooperative, as well as rates for permanent repairs.

21. Keep **all** receipts during the event, in case the storm or event is later declared a federal disaster.

22. Work Orders: Some co-ops prefer to make one work order per disaster. Counties (or parishes, etc.) are designated with map location numbers noted on all time sheets, staking sheets and material sheets.

23. On-file contracts: Some co-ops retain contracts and keep them on file from contractors. Included in those contracts is a sheet pertaining to emergency storm work. However, it is usually a good practice to call in contractors within the first 24 to 36 hours of the disaster if damage warrants their assistance. Again, bids for repairs should be let during the 70-hour Emergency Protective Measures period, and before permanent repairs begin.

24. In-house contractors: These are contractors already under contract with the cooperative and are usually already familiar with the co-op's crews and service area. These contractors may or may not need the direct supervision of a cooperative employee, depending upon their knowledge of the co-op's system, its substations, main feeder circuits, critical loads, etc.

25. Rights-Of-Way (R-O-W) contractors: Some co-ops maintain rights-of-way contractors on an annual basis. These R-O-W contractors can be very beneficial during a disaster, especially if needed for debris removal. These contractors may still need to be supervised by co-op personnel, and will need to provide complete details of their daily work to the affected cooperative, preferably submitting detailed invoices on a weekly basis.

26. Co-op R-O-W supervisors can be very helpful in preparing damage report maps, locations of work to be performed, and in preparing transformer or pole replacement reports. Because of their experience, some co-ops may choose to make these R-O-W supervisors their disaster Project Officers. This will obviously vary from co-op to co-op.

27. Notify all other departments of work orders assigned to the disaster. Other departments should also be informed of activity codes that may be assigned. Coordinate specifically with the accounting department to ensure that copies of all time sheets, invoices, checks and cash receipts are obtained. Keep a working file that is designated by work order number, FEMA Category A through F, and location (map number, county, etc.).

28. Utilize marketing, public relations, or key accounts employees, based on their experience and level of training, to deliver food and/or materials to crews in the field. Ask them to keep all receipts and detailed logs of material and/or equipment delivered.

29. Arrange for fuel (diesel, gas, etc.) from suppliers throughout the co-op's service area. Have a contingency plan to deliver properly-sized backup generators to these fuel suppliers in case their pumps have no electricity due to the disaster.

30. Have all contactors sign a simple contract stating that they are indeed contractors and that they agree to "hold harmless" the cooperative from liability, worker's compensation claims, damage to hotel/motel rooms, and damage to public/private property due to their crews' negligence. Include in this agreement that weekly invoicing for work performed by the contractor is expected by the cooperative.

31. Engineering firms may need to be used to prepare bid specifications. Utilize their services during a disaster situation. This will also help in allowing the cooperative's in-house engineering and staking department personnel to stay ahead of contractors and construction crews with staking and material sheets, **which is absolutely necessary**.

32. As soon as possible during the disaster, utilize public relations personnel, part-time employees, or possibly retirees to take both still pictures and videos of the damage. This serves two purposes: **1.)** It makes a permanent record of the amount of ice that was on the line or the level of devastation caused by a hurricane or tornado, thus making damage repair estimates more realistic; and, **2.)** Photos and videos can be used to show FEMA and/or state emergency management personnel conditions that caused the damage to the cooperative's system. Remember that FEMA and/or state emergency management personnel often do not show up at the cooperative until several days (or weeks) have passed, so these photos and videos can play a very important role in verifying and validating damage assessments and the necessary levels of permanent repairs to be stipulated in PWs.

33. **Any verbal contract or agreement** between contractors and cooperative personnel should be written down and recorded. A checklist should be made by the engineering/operations departments of documentation to be required from all contract crews. This documentation will serve as backup for review of billing invoices submitted by contractors. If documentation is not present and does not backup an invoice submitted by the contractor, the contractor should be required to find and submit the proper documents before payment is made to the contractor by the cooperative.

34. Contractors should be required to submit weekly invoices, including time sheets, detailing individual crew member names, where they worked, hours worked, equipment used, etc., and listing costs for pieces of equipment used in both the emergency restoration and permanent repair efforts.

35. Engineering/operations personnel should be prepared to document and explain the process used by the local cooperative to select work crews, whether from other co-ops (through the Mutual Aid Plan) or from contract construction crews. An 'Action Plan' detailing how the co-op selected contractors and why specific equipment was requested for the emergency restoration and permanent repairs process should also be developed.

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

ACCOUNTING ISSUES

The stability of the electric utility industry makes us slightly less susceptible to business interruption when compared to businesses that will likely lose significant market share if they cannot deliver their products and services in a competitive environment. However, it is important to plan for recovery from a large-scale disaster. Think about the following questions in planning for the cooperative's business contingency:
How will your cooperative continue to collect payments from walk-in consumers if your physical location has been destroyed?
How strong are your relationships with your money lenders and vendors?
What type of physical security do you need to have in place if you are operating from a temporary location?
Should you have backup banking arrangements in place prior to any type of disaster?
In the event of an emergency, the following accounting functions are important to the continuity of service.

- Accounts payable
- Accounts receivable
- Banking
- Payroll
- Availability of short-term cash
- Records and recordkeeping
- Security
- The following accounting functions are necessary for the smooth operation of the business during normal operating conditions and/or emergency conditions:
- Maintenance of accounting records.
- Safeguarding of accounting records.
- Non-interruption of accounting functions, including payroll time sheets and receipt tracking.
- Establishment of lines of credit with current / new vendors, CFC, RDUP and/or CoBank.
- Contact with banking institutions, insurance carriers and vendors.
- Public and member communications through print, radio or television.

1. Project Worksheets (PWs) should specify quantifiable and verifiable quantities of work to be done whenever possible. Accounting personnel should be prepared to explain any cost over-runs or the reasons for higher costs than were estimated. **Notify the state emergency management office immediately if an over-run is anticipated**. The progress of a PW should be tracked constantly, and may require the use of a full-time accounting manager for any FEMA-related work performed at the cooperative.

2. On the first day of the disaster, implement activity codes for tracking work by location and by type of work, i.e., rights-of-way clearing, emergency restoration, permanent repair, etc. These activity codes **must** be used by all employees on their time sheets and accountants **must** use them on contractor invoices.

3. Maintain close contact with the engineering department regarding work order numbers assigned, or to be assigned, to the disaster. To expedite information gathering, activity codes by county **may** be assigned to work projects.

4. The co-op should keep a log of all contract crews hired during the disaster. The log should include company names, their hotel/motel expenses, and meal expenses, with crewmembers' names and their local accommodations.

5. Contractors should be made responsible for maintaining their expense records and for submitting invoices to the cooperative on a weekly basis. In addition to crew names on receipts, it would be helpful to list the crews' weekly work location by county, map number, etc. Also, if the time and expenses are related to time spent by the contractor driving to the cooperative, the contractor should so specify on the invoice or receipt. If receipts are not included with invoices, then no payments should be made by the cooperative until such time as missing receipts are supplied or the charge is removed from the billing.

6. After FEMA's Project Officer has been assigned and begins working with the cooperative, assign the PW numbers to all invoices. Prepare a spreadsheet that summarizes the PWs, including the invoices, check numbers, vendor names, and amounts. If possible, make copies of all documents and place with the spreadsheet. Make copies of all spreadsheets that are created and place them on a disk (CD) and file them in the cooperative's vault, a safety deposit box, or a safe and secure place.

7. Keep all receipts from co-op crews; consider utilizing credit cards for supervisors in order to better maintain records from the disaster.

8. Make copies of all time sheets, invoices, checks and cash receipts as they are obtained. Keep a working file designated by work order number, FEMA disaster Category A through F, and by location.

9. In order to show details of work, it is recommended that a folder be set up in Excel (or other spreadsheet software used by the local cooperative) and to save all work documents on a shared server platform. This allows the following:

    A. Payroll detail to be captured from time sheets. A spreadsheet can be prepared showing daily time, including regular hours and wages, overtime hours and wages, with employee names, numbers, and titles for each FEMA Category A through F. This also allows for preparation of a cover sheet with total hours and total dollars, including breakdown of costs by county. It is suggested that space be set aside on the spreadsheet for a supervisor's signature, certifying the true and accurate nature of the time sheets and other materials to be reviewed.

    B. Prepare a similar spreadsheet(s) for contract employees, temporary employment service personnel, or other temporary employees. Contractor certificates of insurance and relevant contracts with the cooperative should also be attached with the spreadsheet. A supervisor's signature verifying accuracy is recommended.

    C. Prepare a cover sheet for all contractors' invoices for Category F damage, outlined by specific contractor, invoice numbers, dates of invoices, check

numbers, amounts, and distribution by county. A supervisor's signature verifying accuracy of information and invoices is recommended.

D. Print a detailed listing of all material from the material systems. Maintain copies of warehouse pick lists and any documents used to gather materials information. It is recommended that a special inventory be taken as soon as possible after the disaster to reinforce documentation. If a co-op has inventory on consignment, the vendor should also balance their inventory.

E. Prepare a Totals page of all FEMA Categories, by county, and present a grand total of the disaster damage incurred by the cooperative. This gives confirmation that detailed spreadsheets are in balance.

10. Create a check register in Excel or other spreadsheet software, keeping it in check number order. Create a column to reference the PW that applies to each check written for reimbursement. This register will prevent duplicate claims from occurring on multiple PWs.

11. Keep all records of calculations involving percentages for fringe benefits for employees.

12. Keep all records and documents in **one** location; copy **any** document that could **possibly** be related to the disaster. **Do not** let documents get separated.

13. Keep copies of all contractors' contracts. If no written contract exists, keep notes of any verbal agreements, their stipulated rates of pay, and requests for copies of their certificates of insurance.

14. 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 Categories A, Debris Removal; B, Emergency Protective Measures; and F, Utilities (Permanent Repairs).

15. Make a copy of the Worker's Compensation report for each month that disaster work is performed and keep on file for auditors.

16. Require all contractors to send in copies of their employees' time sheets on a weekly basis. It is also advisable to keep co-op employees' time sheets in this file as well. Make copies of co-op employees' individual rates of pay at the time of disaster and keep on file with their time sheets for the length of the disaster.

17. Keep all payroll audit reports for the time frame of the disaster; also keep all payroll calculations for the disaster period.

18. Make a copy of all journal entries made regarding the disaster.

19. Keep copies of all cash sheets that show when the cooperative received FEMA or state emergency management agency disbursements.

20. Remember: all contractors' billing is date-sensitive. Therefore, all billings should include: when, with what equipment, by whom, and how much (labor/materials), all to be accounted for on a daily basis and submitted to the cooperative, weekly, at minimum.

21. It is **imperative** that co-op and contractor labor be accounted for in proper disaster Categories A through F, and correlated with time sheet information.

22. Maintain documents detailing costs for pieces of equipment used by other cooperatives and/or by contractors during emergency restoration and permanent repair efforts; consult FEMA equipment price lists for allowable comparisons.

23. Keep an accurate accounting of all overheads as they relate to emergency restoration and permanent repair activities.

Risk Mitigation Efforts

- Steps should be taken to minimize the losses to the cooperative in the event the accounting functions 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.
- Assess neighboring cooperatives for "best fit" of accounting practices. It may be necessary to use them as a contingency site until permanent business location can be restored.
- Create and keep a contact list of banking institutions, insurance carriers, vendors, etc. in a secure offsite location
- Establish rapport with a secondary financial institution to reduce vulnerability.
- Consider off-site storage of backup records.

Short-Term Recovery Efforts

- Short-term actions to consider following an emergency involving loss of accounting functions include:
- Reestablish communications.
- Contact insurance carrier.
- Reestablish central information systems and then desktop systems as needed.
- If needed, use central billing system provider to estimate and send customers' bills.
- Ensure payroll is quickly operational – if no ACH (Automated Clearing House), write checks by hand.
- Secure short-term loans as necessary and communicate with vendors on lines of credit.
- Establish credit agreements and accounts.
- Provide for ongoing local payables (motels, restaurants, gas stations, suppliers).
- Confirm local banking arrangements are operational.
- Use credit cards as necessary to defer cash movement to the next month or longer.
- Utilize neighboring cooperatives, as necessary.
- Use emergency bill stuffers / messages to communicate with members.
- Provide for receipt tracking, payroll time sheets, etc.
- Keep excellent records of disaster losses and restoration efforts for FEMA, may need to educate FEMA personnel on disaster definition at the cooperative level.

Long-Term Recovery Efforts

- Long-term actions to consider following an emergency involving loss of accounting functions include:
- Use "bill stuffers" to communicate important messages to members.
- Assess losses to stored documents to determine if facilities provided adequate protection of important papers.
- Assess need for a system upgrade and/or equipment change with replacement.
- Contact vendors for proposals and equipment upgrade recommendations.

COMMUNICATIONS and PUBLIC RELATIONS

- The types of communications important to normal operating conditions are:

- Telecommunications equipment and handsets
- Facsimile equipment
- Radios
- Cell phones
- 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.
    - Contact with employees and their families.
    - Contact with vendors and contractors.

1. 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.

2. Communications personnel should assist management in drafting letters (sample copies included herein) 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 all members 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.

3. 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.

4. 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! Most importantly, always tell the truth!

5. 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. Mailing weekly letters to consumers in damaged areas is strongly advised, since they will not have electricity and thus have limited access to radio/TV broadcasts.

6. Post daily updates on co-op phone message systems, at post offices, restaurants, and community centers.

7. 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.

8. 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.

9. If members or others donate food, services or labor, ask them to provide receipts or invoices for the items, or ask that they sign an affidavit listing the cost or value of items being provided for use by the cooperative. This may be credited toward the cooperative's Administrative Expense.

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:
- Consider keeping spare radio transmitter on hand and maintain it offsite.
- Consider "Talk-Around" truck-to-truck radios when purchasing new systems.
- Provide a direct wired (Bell) telephone that can be used without power.
- Assess your telecommunications provider's ability to respond to various disasters.
- Establish agreements with local communications companies to get priority on use of their tower space if needed for radio equipment.
- Establish disaster contract with a call center if not already used for after-hours answering service.
- Develop a plan to switch incoming telephone calls to CRC or equivalent call center.
- 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.
- Encourage / pay for employees' amateur radio licenses.
- Establish relationship with local (county) American Radio Relay League liaison
    - (http://www.arrl.org/ - national)

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.
- Use amateur radio.
- Contact radio vendor for new equipment.
- Neighboring Co-op, other utilities.
- 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.
- Lease tower space, use spare radio transmitter or rent one.
- Assess temporary radio range if tower location and/or equipment has changed.
- Use a physical runner.
- Loss of Land Lines or Telecommunications Equipment
- Forward to Call Center, another co-op, business, employees= homes.
- Use mobile phones and obtain more as needed.
- 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.
- 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 (e-mail).
- Loss of Cell Phone Service
- 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.
- Contact primary and alternate wireless communications companies.
- Use pagers.
- Employee communications coverage — broadcast pager message to critical employees.
- Ask neighboring co-ops or businesses for assistance.
- External Communications
- Keep public message consistent.
- 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.
- 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
- Assess need for a system upgrade and/or equipment change.
- Contact vendors for proposals and equipment upgrade recommendations.
- Consider provider change, if available.

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
- 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.
- NISC, SEDC, ACE or in-house billing backup restoration.
- TURTLE backup restoration (outage info).
- SCADA backup restoration.
- Use of Wildblue Internet Satellite is an option to consider.

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.

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?
- 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.
- 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 Daffron 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 TEC 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 cleanup crew for site using employees or contractors.

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.

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.
- Consider outsourcing non-essential business practices to reduce risk.
- Develop a long-term succession plan.

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:
- 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?

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, crossarms, 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.).

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:
- 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.
- 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.

PURCHASING and MATERIALS MANAGEMENT

1. Material issue sheets **are critical** 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 co-op 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 **all** 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 **initial orders** of poles, cross arms, conductor, splices, and other construction hardware. Utilize the Standard Construction Policy design criteria developed by the cooperative **before** 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.

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.

EMERGENCY OPERATIONS CENTERS

1. For the purposes of this manual, Emergency Operations Centers shall be defined as cooperative dispatch centers or other emergency communications centers used by the cooperative in times of disaster.

2. Emergency Operations Centers should be equipped with standby generators to provide for continuous phone and radio communications during emergency disaster conditions. Such centers should also have the capability and capacity to add extra phone lines to handle additional calls from consumers.

3. While cell phones are affordable, convenient and efficient, it should be noted that the use of cell phones during certain disaster conditions might be severely limited or impaired. This is especially true during ice storms and hurricanes, when cellular transmission towers are often rendered virtually useless due to ice or wind damage. In emergencies such as tornadoes, high volume calling often causes congestion, thus making cell phone calling ineffective. However, if cellular towers are unaffected by the disaster, cell phones are an effective tool that can be utilized by initial Fast Survey crews to report system damage estimates to the co-op.

4. Computerized weather monitoring software programs are highly recommended for use in co-op Emergency Operations Centers. may also be available through other agencies as subscription services.

5. The only FEMA reimbursable expense for phone support is **the overtime** for full-time, hourly employees in the Emergency Operations Center. Part-time, temporary, or contract phone support personnel are eligible for reimbursement for both regular and overtime hours (Category B).

ENVIRONMENTAL ISSUES

1. Debris removal: Defined by FEMA as the clearance, removal, and/or disposal of items such as trees, sand, gravel, building components, wreckage, vehicles, and personal property. For debris removal to be eligible for FEMA reimbursement, the work performed must be necessary to:
   a) Eliminate an immediate threat to lives, public health and safety;
   b) Eliminate immediate threats of significant damages to improved public or private property;
   c) Ensure the economic recovery of the affected community.

2. Examples of eligible debris removal activities:
   a) Debris removal from a street or highway to allow the safe passage of emergency vehicles;
   b) Debris removal from public property to eliminate health and safety hazards, such as the threat of fire.

3. Examples of ineligible debris removal activities:
   a) Removal of debris, such as tree limbs and trunks, from natural (unimproved) wilderness areas;
   b) Removal of pre-disaster sediment from engineered channels;
   c) Removal of debris from a natural channel unless the debris poses an immediate threat of flooding to improved property.

4. Debris removal from private property is generally **not** eligible because it is the property owner's responsibility. If property owners move the disaster-related debris to a public right-of-way, the local government may be reimbursed for curbside pickup and disposal. If the debris significantly impacts the public health and safety of a community, FEMA may fund debris removal from private property by the state or local government (county or municipality).

5. It is recommended that contract crews or in-house right-of-way contract crews be used for debris removal activities following a disaster. All time charged by these crews should be eligible for reimbursement should a disaster be declared.

6. If contract crews are to be used, at least three (3) bids should be let for the work to be done.

7. For bRDUPh and tree debris removal, it is recommended that contracts be arranged on a footage basis, with co-op personnel mapping and verifying the measurement of all footage estimates. Such mapping and documentation should be filed and copied for later use by FEMA and state emergency management representatives to verify eligible footage of debris removal and disposal.

8. The cooperative should maintain and keep readily available copies of their Release of Liability for Broken Poles form. The cooperative should keep a copy of the signed release form for all property owners where poles were left on private property. Individuals who remove poles from temporary storage areas that may be set up by FEMA following a disaster must also sign such forms.

9. Burning of damaged utility poles is **prohibited**; if poles are to be chipped, the chips **are not to be used** for mulch or bedding. Chipped utility poles must be disposed of at a permitted Subtitle D landfill. A list of such permitted landfills is attached as a part of this section. The following is a list of options for the reuse and/or disposal of damaged wood poles, the preferred method listed first:

   a) Reuse: The cooperative may choose to contact the landowner where the damaged utility poles are located and offer the poles to them; if this is the case – and the landowner accepts the poles – then the poles **are not** subject to Department of Environmental Quality (DEQ) regulation.

   b) The cooperative may transport the damaged poles to one of their facilities (pole yard, etc.) and offer the poles for reuse. Poles taken for reuse **do not** fall under DEQ jurisdiction or regulation. As with (a) above, a signed liability release form is recommended.

   c) The cooperative may transport the damaged poles to a site approved by the Emergency Disposal Site Evaluation and Registry procedure to stockpile and offer poles for reuse from the site. The Emergency Disposal Site Evaluation and Registry form(s) must be completed, submitted and approved before a disposal site is used. The section "Guidelines for Emergency Burning, Burial and/or Stockpiling of Solid Waste" outlines the site criteria. (This is attached as a part of the Emergency Disposal Site Evaluation and Registry form.)

   d) Disposal: The preferred method of disposal is to dispose of the poles at a permitted Subtitle D landfill The landfill should be contacted prior to transport for specific instructions. **NOTE:** Permitted C and D landfills **cannot accept** utility poles for disposal.

   e) Damaged poles may be buried at an approved site using the Emergency Disposal Site Evaluation and Registry procedure. The Emergency Disposal Site Evaluation and Registry form must be completed, submitted and approved before a disposal site is used. The section "Guidelines for Emergency Burning, Burial and/or Stockpiling of Solid Waste" outlines the site criteria. Such criteria should be reviewed when locating a potential disposal site. **NOTE:** The bottom of the disposal pit must be at least five feet (5') from known groundwater. It is preferred that the burial site be in clay or clay loam soils. The burial site cannot be in sandy soils. The local DEQ environmental specialist for the cooperative's area will be available to assist in evaluating a site and in completing necessary forms. The local DEQ environmental specialist **must** visit and approve the site **before it is used by the cooperative**. **Do not submit the form without a DEQ environmental specialist's signature**. If a city, town or county does not own or operate the site, the attached Legal Access Agreement must also be completed.

10. Site selection: Local DEQ environmental specialists can assist the cooperative in finding a suitable site and in complying with any state and/or federal environmental requirements. Staging areas and disposal sites can be located on publicly owned property or on private property.

11. Any questions regarding the above listed criteria for the reuse or disposal of wood utility poles should be directed to the state environmental enforcement office regarding regulations concerning the reuse and/or disposal of treated wood utility poles following a disaster situation.

12. Historic preservation and cultural resources: There may be numerous structures or sites within a declared disaster area that are historic in nature or are listed as cultural resources. These might include buildings, bridges, other structures or specific sites. Such structures and sites are protected under federal law (Section 106 of the National Historic Preservation Act), and as such, **require any eligible recipient of federal disaster funds to notify the following entities prior to reconstruction efforts being initiated:**

State Historic Preservation Office

Texas Historical Commission
1511 Colorado, Austin, TX 78701
PO Box 12276, Austin, TX 78711-2276

thc@thc.state.tx.us	Phone	Fax
Administration	512-463-6100	512-463-8222
Staff Services	512-463-6100	512-475-4872

POST-DISASTER AUDIT PREPARATION

1. Helpful information concerning post-disaster audits can be found in the following two (2) documents:
   "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.

2. 7 CFR Chapter XVII (1-1-99 Edition) Subpart B – RDUP 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 **does not** apply to audits of RDUP 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]

3. 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.

4. All calculations used to determine percentages for fringe benefits should be retained and documented for use during the FEMA and/or OIG audit.

5. 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).

6. Compile a list of employee rates of pay before, during and after the disaster.

7. 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.

8. 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.

9. 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.

10. 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.

11. Keep records of any and all salvaged material that was sold; this will be deducted from FEMA reimbursements made to the cooperative.

12. 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).

13. Keep all administrative allowance funds separate.

14. If possible, have contractors submit invoices by PW number.

15. 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.

16. 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.

17. 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.

18. 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.

FEMA Categories of Work

FEMA identifies the Categories of Work as follows:

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 re-imburseable expense. Daily diaries should be kept on all supervision of time and material contractors.

Permanent Work

<u>Category C: Roads and Bridges</u>
<u>Category D: Water Control Facilities</u>

<u>Category E: Buildings and Equipment</u>
This category includes repair or replacement of buildings, including their contents and systems, heavy equipment, and vehicles.

<u>Category F: Utilities</u>
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.

<u>Category G: Parks, Recreational Facilities and Other Items</u>
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.

FEMA will NOT allow a cost-plus contract. 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. RDUP 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:

1. Apply to the repair work being performed.
2. Be appropriate to the pre-disaster use of the facility.
3. Be reasonable, formally adopted in writing, and implemented prior to the disaster declaration date.
4. Apply uniformly to all facilities of the type being repaired within the applicant's jurisdiction.
5. Be enforced during the time that it was in effect.
6.

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 re-imbursed. 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. FEMA will not pay for looking for damage or surveys.

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;
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 OMB Circular A-122 – "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 NON-interest 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 should be reported to OEM as soon as possible. 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 approval must be obtained during or shortly after the disaster, 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 identify these desired improvement projects to the FEMA Project Officer before a Category "F" PW is approved. Cost justification is not 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:**

1) **Pad mounted transformers – elevating above the base flood elevation, or lowering them or burying them in non-flood, high wind areas;**
2) **Using multiple poles to support transformers;**
3) **Burying lines;**
4) **Anchoring or otherwise protecting fuel tanks from movement in a disaster;**
5) **Replacing damaged poles with higher class pole, or with a different material pole such as replacing wood poles with spun concrete;**
6) **Adding guy wire or other additional support to power lines;**
7) **Removing large diameter communications lines from power poles;**
8) **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.

1. The Co-op describes the proposed project.
2. The Co-op costs out the proposed project.

3. Determine the cost of the completed repair of the damaged section to be improved.
4. Calculate the average cost per pole of the disaster (total cost / # poles broken).
5. If project cost is less than 15% of average repair cost of facility, project will be approved by local PAC.
6. If project cost is less than average repair cost of facility, project should be approved.
7. Dig out previous costs to repair same line section.
8. FEMA will apply costs in "present worth" spreadsheets to justify expenditure. This favors recent repair costs but does give some weight to previous costs.
9. When project is approved, PW will be revised to include mitigation repairs.

EXAMPLE
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.)

FEMA 9526.1 Hazard Mitigation Funding Under Section 406 (Stafford Act), Appendix (4/29/98)

The following potential mitigation measures (reference: See Paragraph 7.c. of the policy) are determined to be cost-effective if they:
do not exceed 100% of project cost,
are appropriate to the disaster damage,
will prevent future similar damage,
are directly related to the eligible damaged elements,
do not increase risks or cause adverse effects to the property or elsewhere,
meet standards of good professional judgment, and
otherwise meet requirements stipulated in the policy on Hazard Mitigation Funding Under Section 406 (Stafford Act), RR Policy Number: 9526.1 This list will continue to be evaluated and will evolve over time as new information becomes available.

1. Infrastructure Systems:

A. Drainage/crossings and bridges

1. Drainage structures - When drainage structures are destroyed, replacing the structure with multiple structures or a larger structure. However, structures need to be considered with regard to a total drainage system and should not be replaced without a watershed hydrology study.

2. Low span bridges - Demolish/replace damaged low span bridges or other crossings that act to collect debris, increase flooding, and/or can be severely damaged.

3. Low-water crossings - Where traffic counts are low, replacing bridges with carefully placed low-water crossings.

4. Debris traps - Installing traps upstream of a culvert to prevent culverts from becoming clogged by vegetation.

5. Gabion baskets, riprap, sheetpiling, and geotextile fabric installation - Installation to control erosion.

6. Headwalls and wing walls - Installation to control erosion.

7. Restraining cables on bridges - Installation of cables to restrain a bridge from being washed off piers or abutments.

B. Sanitary and storm sewer systems

1. Access covers - When feasible, access covers can be elevated to the hydraulic grade line. There are a number of devices that prevent infiltration into access holes.

2. Sewer lines -
Repair, lining or encasement of damaged sections to prevent infiltration or structural collapse.
Relocating sections of damaged sewer lines to avoid damage from slip-out on roads or to avoid damage to lines crossing a stream or drainage area.

3. Pump stations -
Equipment or controls in a pump station that are subject to damage from the 100-year flood can be elevated. Pump station buildings can be dry floodproofed.
Installation of camlocks, transfer switches, and electrical panels to ease the hook-up of portable emergency generators.

C. Wastewater treatment plants
Elevation of equipment and controls that can be elevated easily .
Dry or wet floodproofing of buildings.

D. Potable water
1. Well systems -
Reduction of infiltration and subsequent contamination of the aquifer. Methods include casing the well or raising the elevation of the well head.
Elevation of controls, mechanical equipment, or electrical service associated with use of the well to protect them from flood damage.

2. Raw water intakes - Strengthening to prevent damage from erosion, scour and flood debris.

3. Water treatment plants -
Elevation of equipment and controls that can be elevated easily.
Dry floodproofing.

E. <u>Electric power distribution</u>

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

2. Using multiple poles to support transformers.

3. Burying lines.

4. Anchoring or otherwise protecting fuel tanks from movement in a disaster.

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

5. Adding guy wire or other additional support to power lines.

7. Removing large diameter communication lines from power poles.

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

F. Above ground storage tanks - Strengthening or stiffening base connections.

Underground pipelines - Installation of shut-off valves (based on accepted practice) so that damaged sections of pipeline can be isolated.

2. <u>Buildings - General</u>

A. General effects of flood damage -
Buildings substantially damaged under NFIP regulations - Repair, dry floodproofing, or elevation so they are protected to meet minimum NFIP regulations. If the building is replaced, rather than repaired, no Section 406 hazard mitigation funding is appropriate.
Buildings not substantially damaged under NFIP regulations - If technically feasible, dry floodproofing. Electrical panels, machinery rooms, emergency generators can be elevated above the BFE or dry floodproofed. If dry floodproofing is not feasible, these buildings should be wet floodproofed.

B. Roofs - Because the failure of a roof covering can lead to extensive damage to contents and operation, damaged roofing should never be replaced with the same material unless the cause of failure has been identified and corrected.
Low slope roofs - Replacement of the entire roof with a roof covering with a secondary membrane and a fully adhered roof covering that is not subject to progressive failure, such as a modified bitumen. Mechanically fastened insulation or membranes are not acceptable.
Curbing and flashing - Single membrane and built up roofs can be susceptible to progressive failure from flashing and curbing failure. These items should be inspected and repaired or replaced. National Roofing Contractors can provide technical advice.

Ballasted roof systems - Roof systems with gravel or other small ballast should be replaced with ballast of sufficient weight that it does not become airborne causing increased damages.

Roof-mounted equipment should be attached to a foundation that will resist expected wind forces.

Hurricane clips - Hurricane clips may be recommended for use in high-wind areas.

C. Shutters - In areas subject to hurricane winds, shutters are appropriate in the following areas:

All windows on critical facilities such as hospitals.

The lower floors of buildings with windows most likely to be struck by debris.

Windows of buildings with very high value contents that can be damaged by water (such as libraries and document centers).

Windows of buildings subject to debris from nearby ballasted roofs, metal buildings, manufactured homes or other structures likely to fail and result in debris.

D. Anchoring - Anchoring of mechanical and electrical equipment in critical facilities.

E. Flexible piping - Installation of flexible piping at pipe/conduit connections to equipment to accommodate expected movement in an earthquake.

F. Bracing -

Bracing of overhead pipes and electrical lines to meet seismic loads.

Bracing interior walls and partitions that could collapse, preventing safe exit from the building.

Bracing parapets, anchoring veneer or cladding, and bracing other non-structural elements that could collapse and cause injury or block safe exit of a building during an earthquake.

Replacement of glass - Replacement of glass (with break resistant material) in mullions to prevent breakage and fallout in the event of building movement.

The quote is located in the October 31, 2000, issue of RDUP Bulletin 1724D-101B, System Planning Guide, Construction Work Plans. The cite is located on Page 4 in paragraph 2:1.2.1, and reads as follows:

2:1.2.1 RDUP 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;
  - Substation and Line Regulators – 100% of nameplate rating;
  - Oil Circuit Reclosers – 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.

August 2, 2002

Mr. Mel Schneider
FEMA – TAC

Dear Mr. Schneider:

SUMMARY:
All electric utilities in the United States are required to meet the minimum standards specified in the National Electrical Safety Code (NESC). The United States Bureau of Standards drafted this document in 1913. The Institute of Electrical and Electronic Engineers (IEEE) assumed duties of maintaining the NESC, revising it periodically, and reissuing it. The current version of the NESC is IEEE C2-2002. It applies to all firms or individuals transporting or distributing electrical energy. The Rural Utilities Service (RDUP, formerly the Rural Electrification Administration) requires all electric and telephone cooperatives, regardless of their source of financing, to be bound by the NESC. No exceptions are allowed.

NESC Specifics:
Article 013-B1 in recent editions of the NESC specifies that "When an existing installation meets, or is altered to meet these rules, such installation is considered to be in compliance with this edition and is not required to comply with any previous edition." Article 013-B3 states: "Where conductors or equipment are added, altered, or replaced **on an existing structure**, the structure or the facilities on the structure need not be modified or replaced if the resulting installation will be in compliance with… (a) the rules that were in effect at the time of the original installation…". This means that when the poles were broken by the ice storm and subsequently replaced, they were **no longer** the "original" or "existing" structures. Hence, no "grand-fathering" is possible; the current NESC edition applies. Additionally, the copper wire (mostly CWC copperweld or ammerductor) was permanently stretched beyond its designed tensile strength and is incapable of being re-tensioned to proper sag to meet loaded tension requirements of around 2,000 lbs.

NESC Requirements:
The current NESC (Table 232-1) now requires the following minimum clearances under any design condition: (A) Multi-grounded Neutral = 15.5 ft. (B) Primary (750-22,000 volts) = 18.5 ft.

Oklahoma is required to design electric lines for a minimum of ½-inch radial ice, and a 4 lb. per square foot wind load (NESC Article 250, Heavy Loading Districts). Although other parameters may apply for larger conductors, the vast majority of conductors damaged in the January 29-30 ice storm are classified as "small conductors" and the ice-loading requirement causes the most sag. Most systems in the affected area experienced 2-inch to 2.5-inch radial ice from this storm. Spans of 300 feet or over had ice weight that exceeded the design breaking strength of their attached conductors. Most broke, and thousands of poles also broke from the combined effects of ice weight and wind load. Re-tensioning of old copper wire, even in warm weather, has caused repeated breaking, often resulting in energized conductor going to the ground. When colder weather approaches this winter, the older copper wire will draw up, exceed its reduced breaking strength, and break again or cause splices to pull apart, thus causing more power outages and increasing the possibility of personal injury and/or equipment damage. In short, the old cooper wire was ruined by this extreme ice loading, stretching it well-beyond its recovery.

Many Oklahoma utilities still have considerable copper wire, most installed in the early 1930's to the late 1950's. The industry switched to aluminum conductor, steel reinforced (ACSR) in the 1960's, and, primarily through lack of demand, hard drawn copper wire vanished from production a few years later. It remains in service in lightly loaded areas, and is operated at voltages from 7 KV to 15 KV. Predominately, the wire in service is #8A CWC (copperweld) or its equivalent, and this wire could carry up to 100 amps in new condition. The original design manuals for the copperweld wire show a 4 foot additional sag for the added ½-inch of ice in a 300-foot span. Existing sags that do not meet the 15.5 ft. + 4 ft. = 19.5 ft. (neutral) cannot meet NESC if the wire was new. Primary height requirement is 3 ft. more (18.5 ft. + 4 ft. = 22.5 ft.) under current code. A 400 ft. span requires an additional 5.5 ft. over the NESC minimums. Most of the severely damaged copper in the ice-damaged areas has only 13 – 14 feet of ground clearance. Replacement with ACSR wire at these long spans may not meet NESC, therefore larger ACSR wire OR shorter span lengths may be required to meet code, even on newly replaced poles that were placed in service during emergency power restoration efforts.
Wire weights, ampacities and breaking strengths:

Wire Type	**Wire Weight** (per 1000 ft.)	**Ampacity**	**Breaking Strength**
#8A CWC	74.3 lbs. / 1000 feet	100 amps	2233 lbs.
#6A CWC	102 lbs. / 1000 feet	140 amps	2585 lbs.
#4 (6/1) ACSR	57.4 lbs. / 1000 feet	140 amps	1830 lbs.
#4 (7/1) ACSR	67.1 lbs. / 1000 feet	140 amps	2288 lbs.
#2 (6/1) ACSR	91.3 lbs. / 1000 feet	190 amps	2790 lbs.
#2 (7/1) ACSR	107 lbs. / 1000 feet	190 amps	3525 lbs.
#1/0 (6/1) ACSR	145 lbs. / 1000 feet	250 amps	4280 lbs.

The NESC requires the electric utility to meet the above minimum standards; it does not specify how. Some utilities use taller poles with longer spans; some use shorter poles requiring shorter spans. Each utility develops their own minimum standard for wire size and pole height, each to be in accordance with NESC code. Poles can be 35 ft. in height, but 40 ft. is the more popular size. Terrain variations can easily force the use of 40 ft. or

taller poles. Minimum wire size can be from #4 ACSR to #2 ACSR, or even #1/0 ACSR, depending upon the following factors: (1) Anticipated amperage load; (2) Breaking strength needed to reduce sag; (3) Electrical impedance to reduce voltage drop and losses (bigger wire has less); (4) Price (wire is much cheaper when purchased in quantity; the industry is moving from the smaller #4 ACSR to #2 ACSR and #1/0); (5) Availability (when you need it, you have to use what is available from the market; industry determines what is produced and available); and (6) Ability to transport multiple wire reels to a construction site.

Cooperative Operating and Design Standards:
Most Oklahoma Electric Cooperatives have adopted a 40 ft., class 5 pole as a "standard." Some use a 35 ft., class 5 pole, with shorter span lengths. Most use #4 ACSR as the smallest wire size (as replacement for copper wire), but many have opted for #2 ACSR because of higher ampacity and higher breaking strength. Some high-growth Cooperatives use nothing smaller than #1/0 ACSR. Whatever the wire chosen, the span lengths must be adjusted to meet the NESC for whichever pole height is selected. Pole class (diameter) is adjusted as well to meet NESC breaking strength requirements for the wire and span lengths selected.

Existing 400 ft. or greater span lengths in western Oklahoma cannot meet NESC requirements on 35 ft. poles using #4 ACSR. Some Cooperatives opt to use taller poles (40 ft.) to help meet this requirement. Some Cooperatives opt to use larger conductor (#2 ACSR or #1/0 ACSR) that can be pulled tighter, thus creating less sag and greater clearance to ground. Most Cooperatives are shortening their design span lengths to around 300 feet. One specification cannot fit all, because of terrain variations, etc. Each mile of line in damaged areas may require adjustment of pole heights and span lengths to make the chosen wire size meet provisions of the NESC. It is common for a utility to move to a larger wire in a given location in order to attempt to use existing, non-damaged poles. However, little can be done with 450 ft. spans except make them shorter. Shortening span lengths to around 300 ft. results in Cooperatives meeting the "Grade B" NESC requirements and improving survivability of the next natural disaster.

Natural disasters and Cooperative design standards:
Natural disasters are, unfortunately, common in Oklahoma, be it tornadoes, ice storms, severe winds or floods. Standard operating procedure for Cooperatives is to enable all available manpower (including contractors) into an affected area for at least a 48-hour period to get as much power restored as possible. Broken poles are replaced in place, or temporarily re-used if possible. The NESC is relaxed during these "emergency conditions," but as soon as is practical, and as the law requires, the electric system is returned to NESC minimums. Power restoration begins at the supply substation, with 3-phase feeder circuits restored first, and priority given to residential and life-threatening situation loads. Work continues until all power is restored in a safe and efficient manner. When all customers have power restored, the work then shifts to making permanent repairs and meeting NESC minimums. The repairs are not finished until all lines in storm-damaged areas meet the NESC. This may take several days, weeks, months, or in the case of this most recent ice storm disaster, years.

NOTE: *The following is a copy of a document that was compiled by Mr. Mel Schneider, a FEMA Technical Assistance Contractor (TAC) from FEMA Region VI. It was drafted in response to an inquiry made by Ms. Brenda J. Black, Director, Response and Recovery Division, FEMA Region VI, regarding whether or not FEMA should allow reimbursement of*

*expenses to eligible applicants (such as rural electric cooperatives) when replacement costs involve Codes and Standards issues. In this particular instance, FEMA ultimately **did** allow reimbursement of several Oklahoma rural electric cooperatives' expenses for the replacement of old copper-clad conductor which was damaged as a result of severe ice storms in 2002. "Codes and Standards" dictated not only the replacement of the conductor, but also the establishment of new, shorter ruling spans (in the damaged areas ONLY) in order to meet current NESC overhead electric line clearance requirements. Cooperatives in Oklahoma were reimbursed for conductor replacement AND for additional poles which were required due to re-spanning. This was a major (and favorable) ruling issued by the FEMA TAC.*

1. Applicable Codes and Standards for Oklahoma Utilities.

All electric utilities in the United States are required to meet the minimum standards specified in the National Electrical Safety Code (NESC). The United States Bureau of Standards drafted this document in 1913. The Institute of Electrical and Electronic Engineers (IEEE) assumed duties of maintaining the NESC, revising it periodically and reissuing it. The current version of the NESC is IEEE C2-2002. It applies to all firms and individuals transporting or distributing electrical energy. The Rural Utilities Service (RDUP, formerly the Rural Electrification Administration) requires all electric and telephone cooperatives, regardless of their source of financing, to be bound by the NESC. No exceptions are allowed.

2. Codes and standards compliance related to Electrical Power Systems.

The poles, conductors, insulators, cross arms, and miscellaneous hardware are all integrally related and must all be designed and constructed to form an electric system[1] that conforms to the NESC and RDUP Regulations and Bulletins. It is important to note that the NESC only mandates the amount of clearance (sag) the conductors must have above a roadway and do not specifically address the type or size of the conductor material. Some utilities use taller poles with longer spans; some use shorter poles requiring shorter spans. Poles can be 35 ft. in height, but 40 ft. is the more popular size. Terrain variations can easily force the use of 40 ft. or taller poles. Each utility develops their standard for wire size and pole height, each to be in accordance with the NESC code. Wire size can be from #4 ACSR to #2 ACSR, or even #1/0 ACSR, depending on the following factors: (1) Anticipated amperage load; (2) Breaking strength needed to reduce sag; (3) Electrical impedance to reduce voltage drop and losses (bigger wire has less); (4) Price (wire is much cheaper purchased in quantity; the industry is moving from the smaller #4 ACSR to #2 ACSR and #1/0); (5) Availability (when you need it, you have to use what is available from the market; industry determines what is produced and available); (6) Ability to transport multiple wire reels to a construction site. Each utility may have a different standard based upon the listed factors but all claimed standards were reviewed, approved and enforced by RDUP.

When one component of this system is destroyed its replacement may affect the rest of the system and may result in the modification of other components of the system. A conductor can be considered destroyed when it is stretched beyond its designed tensile strength and becomes so brittle that it cannot be re-tensioned to create the proper code-required sag distances. In addition, the conductor replacement may require the installation of additional or longer poles to meet the NESC requirement for sag distances.

Meeting the safety code (NESC) on sag requirements for any new conductor is the primary issue. If the new conductor is allowed, the safety requirements are mandatory and sag requirements must be met. There are several ways to meet the sag requirements such as (a) Add new poles to raise the conductor where the sag is too low; (b) Add higher poles to raise the conductor to meet sag requirements; (c) Use new wire that can be stretched tighter to meet sag requirements. Additional poles or higher poles are not being added to meet a standard relative to poles, but to assist the new conductor in meeting the safety requirements for sag.

3. **Review of the FEMA criteria for Codes and Standards.**

- The code or standard must apply to the repair work being performed.

When a span of conductor is destroyed by the disaster event it is reasonable and proper to include any pole and cross arm modifications, within this span, necessary to meet the NESC. Other undamaged sections of the system are not eligible for repairs or modifications.

- **The code or standard must be appropriate to the pre-disaster use of the facility.**

The NESC applies to the damaged sections of the electrical system by State Law.

- **The code or standard must be reasonable, formally adopted in writing, and implemented prior to the disaster declaration.**

° All electrical utilities are required to conform to the NESC by State Law.

° RDUP 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 RDUP 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.

(a) National and other standards. RDUP 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 RDUP determines that the existing national standards are not adequate for rural electric systems, RDUP will prepare standards for material and equipment to be used on systems of electric borrowers. RDUP standards and specifications will be codified or listed in Sec. 1728.97, Incorporation by Reference of Electric Standards and Specifications. RDUP 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.

(b) Deviations from Standards. No member of the RDUP 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 RDUP.

(c) Category of Items. Items appearing in the List of Materials are listed by categories of generic terms, which are used in RDUP construction standards incorporated by reference in Sec. 1728.97. RDUP 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.**

Summary of Recommendations for Reuse and/or Disposal of Wood Utility Poles

Special Consideration – Wood Utility Poles:
Please note that burning damaged wood utility poles is **PROHIBITED**. If poles are to be chipped, they **SHOULD NOT** be used for mulch or bedding purposes. Chipped utility poles **MUST** be disposed of at a permitted Subtitle D landfill (list attached).

The following is a list of options for the reuse and/or disposal of damaged wood utility poles, beginning with the **PREFERRED** option:

REUSE:

1. The utility companies may choose to contact the landowner where the damaged utility poles are located and offer the poles to them. If this is the case and the landowner accepts the poles, they are not subject to DEQ regulation. (**NOTE:** It is recommended that, when possible, a Release Form be signed by the person who accepts the poles from the utility, and that the utility maintain a copy of such Release Form as part of its permanent records relating to disaster funds reimbursement activities.)
2. The utility company can transport the damaged poles to one of their facilities and offer the poles for reuse. Poles taken for reuse do not fall under DEQ jurisdiction or regulation. (**NOTE:** Again, a signed release form is recommended.)
3. The utility company can transport the damaged poles to a site approved by the "Emergency Disposal Site Evaluation Registry" procedure to stockpile and offer the poles for reuse from this site. The "Emergency Disposal Site Evaluation and Registry" form must be completed, submitted and approved by DEQ before a disposal site is used. The section, "Guidelines for Emergency Burning, Burial and/or Stockpiling of Solid Waste," outlines site criteria. (This is attached as a part of the "Emergency Disposal Site Evaluation and Registry" form.)

DISPOSAL:

1. The preferred method of disposal is to dispose of the poles at a permitted Subtitle D landfill Contact the landfill prior to transport for specific instructions. (**NOTE:** Permitted C and D landfills **cannot accept** the utility's wood poles for disposal.)
2. Damaged poles may be buried at an approved site using the "Emergency Disposal Site Evaluation and Registry" procedure. The "Emergency Disposal Site Evaluation and Registry" form must be completed, submitted and approved by DEQ before a disposal site is used. The section "Guidelines for Emergency Burning, Burial and/or Stockpiling of Solid Waste" outlines site criteria. Please review the criteria in this section when locating a potential disposal site. The bottom of the pit must be at least five feet (5 ft.) from known groundwater. It is preferred that the burial site be in clay or clay loam soils. The burial site **CANNOT** be in sandy soils. The local DEQ environmental specialist **MUST** visit and approve the site before it is used. Please **DO NOT** submit the form without the DEQ environmental specialist's signature. If a city or town does not own the site, the attached "Legal Access Agreement" must also be completed.

SITE SELECTION:
Local DEQ environmental specialists can assist you with finding a suitable site and complying with any state and federal environmental requirements. Staging areas and

disposal sites can be located on publicly-owned property or on private property. (A sample "Legal Access Agreement" is attached in the event that the Cooperative has to use private land for a staging area or a disposal site.) All sites used as staging areas or emergency disposal sites must be registered with FEMA using the attached "Emergency Disposal Site Evaluation and Registry" form.

Additional "Legal Access Agreement" forms and "Emergency Disposal Site Evaluation and Registry" forms may be obtained from local DEQ offices (see attached list).

NOTE: If wood utility poles are to be "chipped," they **MUST** be disposed of in a Subtitle D landfill.

SAMPLE RELEASE FORM #2

I hereby acknowledge receipt of and accept full ownership of _____ used electrical poles from _____ (the "Cooperative") upon the following terms and conditions:

1. The used poles delivered hereunder consist of the following number and size:

Number of Poles	Size	Class

2. The handling fee for said poles is $_____ in hand paid, receipt of which is hereby acknowledged by the Cooperative.

3. All poles obtained hereunder are "as is," without any warranties of merchantability or fitness for any general or particular use or purposes. I assume responsibility, at any expense, to have these poles inspected by an independent expert engaged in such testing to determine the suitability or fitness of the poles for any desired use.

4. I acknowledge that the Cooperative has advised me that the poles have been treated with preservatives and other chemicals that are subject to control by the EPA, and I have been advised that these poles may contain chemicals and materials that are potentially hazardous to me and any other person or thing coming in contact with these poles. I assume responsibility, at my expense, to have these poles tested to determine the existence of any such hazardous chemicals or materials. I acknowledge that the Cooperative has provided me with a copy of the EPA-approved Consumer Information Sheet relating to creosote, penta- chlorophenol and arsenic, attached as Exhibit I to this release. I further acknowledge that I have read and understand the information set forth in Exhibit I.

5. I specifically agree to hold the Cooperative harmless from any and all liability from any cause whatsoever arising out of the use of these poles subsequent to the removal thereof from the Cooperative premises, and agree to indemnify the Cooperative from any liability in any way arising from and after their removal from the Cooperative's premises. I further agree, that in the event any legal action is brought against the Cooperative arising out of the use of these pole(s) by me, any subsequent owner, or any person, claiming damages by virtue of or in any manner arising out of the use of the pole(s), or damages therefrom, that I agree to hold the Cooperative harmless from any and all costs, charges, expenses, attorney's fees and judgements which may be imposed upon or incurred by the Cooperative in any manner arising out of such claim or such litigation.

Signature:_____

Dated:_____

Acknowledged: _____
(The Cooperative)

By: _____

Environmental Considerations and Contacts
FEMA and DEQ

The Federal Emergency Management Agency (FEMA) assists communities in responding to and recovering from disasters. Part of FEMA's responsibility is ensuring that the requirements of numerous environmental and historical preservation laws and Executive Orders are met. **It is necessary for any applicant receiving FEMA assistance to obtain and comply with all applicable local, State and Federal laws, requirements and permits.** Please be aware that failure to comply might jeopardize a Cooperative's eligibility to receive Federal funding.

General Debris Management:
The DEQ's principal role is to offer advice to local officials relative to the various choices available for debris management. Municipal officials are free to determine which collection and disposal option best fits their situation. In an effort to expedite the debris removal and disposal process, the DEQ has issued a document entitled "Guidelines for Debris Management." This document identifies the advantages and disadvantages of the various disposal options and provides advice concerning interim measures. Once that decision has been made, the DEQ will assist local officials in carrying out that decision.

Communities considering disposal options that include stockpiling, burying or burning are encouraged to contact the DEQ for assistance in documenting compliance with applicable Federal laws and State guidelines. In some instances, local DEQ Environmental Specialists may have already contacted local officials

Once local officials and DEQ Environmental Specialists have made contact, DEQ employees are prepared to provide technical assistance to local officials by completing the state guidelines portion of the "Emergency Disposal Site Evaluation and Registry" form. Because compliance with Federal requirements associated with historic preservation and cultural resources is outside the scope of the DEQ, you will be asked to transmit the completed "Emergency Disposal Site Evaluation and Registry" form to the OAS. The OAS will examine its maps and records, complete its certification, forward the form to the SHPO for approval and then return the form to the local official. When the "Emergency Disposal Site Evaluation and Registry" form has been returned from the OAS, local officials must maintain this form as a part of their permanent files. Upon application for reimbursement, local officials must provide this form along with all other required documentation.

Local officials who have chosen to transport debris directly to an approved landfill or other approved disposal facility (dependent on waste type) are not required to have a completed "Emergency Disposal Site Evaluation and Registry" form in their application for reimbursement.

In summary, local officials who have chosen disposal options that include burning, burying or stockpiling must document compliance with applicable Federal laws in order to be eligible for Federal reimbursement. Completion of the "Emergency Disposal Site Evaluation and Registry" form is the most direct way to accomplish this documentation. The DEQ is ready to assist you with this documentation.

Asbestos: Demolition and renovation of any commercial or public structures, regardless of asbestos content, must be coordinated with theTexas DEQ, Air Emissions Division, to

obtain a “National Emission Standards for Hazardous Air Pollutants” (NESHAP) permit. The applicant is responsible for obtaining and complying with all required permits.

Ground Water/Surface Water: The Ground Water Division of the Department of Environmental Quality (DEQ) protects ground water quality and minimizes existing and potential ground water contamination from other than hazardous wastes and chemical spills. Notification of any spill or breakage to existing systems or facilities for which discharge permits currently exist is required.

The Surface Water Quality Division of the DEQ performs all state certifications under Section 401 of Section 402 National Pollution Discharge and Elimination System (NPDES) permits issued by EPA and Section 404 permits issued by the U.S. Army Corps of Engineers.

Section 10 and 404 Permits
Sec. 404 of the Clean Water Act, and Sec. 10 of the Rivers and Harbors Act, apply to actions affecting waters of the United States. Both laws are administered by the U.S. Army Corps of Engineers. Examples of actions requiring permits include construction, demolition, and any dredging or filling in any part of surface water tributaries, including small streams, lakes, ponds, stock tanks, construction and mining pits, and wetlands. Obtaining permits is the responsibility of the applicant. Unless it is an emergency action, i.e., immediate threat to life or property, obtaining permits must be done prior to executing any physical disturbance action.

Historic Preservation and Cultural Resources
There are numerous historic structures or sites within the disaster area. They might be buildings, bridges, other structures or specific sites. Many of these structures or sites are not on the National Register of Historic Places, but might be eligible for the National Register, which is the trigger for concern under Section 106 of the National Historic Preservation Act. This law requires FEMA to coordinate projects with the State Historic Preservation Officer (SHPO). Any project receiving federal assistance that affects a structure 45 years old or older must have prior approval from the State Historic Preservation Office.

EMERGENCY DISPOSAL SITE EVALUATION AND REGISTRY

This form is to be used as a checklist for DEQ employees to assist those local officials who want to meet federal environmental requirements for reimbursement by FEMA. DEQ Environmental Specialists can assist local officials by completing the State guidelines portion. Local officials are responsible to send or fax this form to the State Historic Preservation Officer (SHPO)

City/Town to be served:
_____

Address:
_____City:_____ZipCode:_____

Telephone # _____Fax # _____County:
_____

Legal description/Lat-Long of site:
_____

Finding
Directions:_____
_____
_____
_____
_____

Name of site owner*:_____

** The City or Town must control the site, either through ownership or legal access agreement.*

GUIDELINES for EMERGENCY BURNING, BURIAL and/or STOCKPILING of SOLID WASTE

Located above the 100-year floodplain and Outside of known wetlands. (The floodplain map used for locating the site shall be an original Flood Insurance Rate Map prepared by the Federal Emergency Management Agency, a copy, of the Flood Prone Area Map prepared by the US Geological Survey or an equivalent constructed map that depicts the limits and elevations of any 100 year floodplain on or adjacent to the proposed site.)
Located at least ¼ mile from a public or private water supply (surface or ground). **If the site will be used only for the stockpiling, burning or disposal of tree limbs and bRDUPh the distance may be reduced from ¼ mile to 300 feet.**
If the site will receive any putrescible waste that may attract birds, is it located at least 5,000 feet (1,524 meters) from any airport runway used only by piston-engine aircraft, or within 10,000 feet (3,048 meters of any airport runway used by turbojet aircraft, except as may be approved by tile US Federal Aviation Administration.
Provisions are in place to ensure that hazardous waste, radioactive waste, regulated polychlorinated biphenyls (PCB waste, or regulated infectious wastes are excluded.
Public official understands that the burial site must be properly closed and covered with 3 feet of soil within 45 days.
All burning of solid waste will be located at least 500 feet (preferably ½ mile) from an occupied residence.
Provisions are in place to exclude the burning of rubber, plastics, asbestos, and other similar materials that produce unreasonable amounts of air contaminants.
Public official understands that burning must be controlled so that the smoke does not create a traffic hazard

LEGAL ACCESS AGREEMENT

THIS AGREEMENT is made on this _____ day of _____, 200___, by and between _____ ("Grantee") and _____("Grantor").

WHEREAS, Grantee desires to obtain the right and authority to conduct various activities including _____
DESCRIBE ACTIVITIES
_____

_____ on the property of the Grantor;

NOW, THEREFORE, in consideration of the mutual promises and agreements contained herein, and other valuable consideration, the receipt and adequacy of which is hereby acknowledged, the parties hereto agree as follows:

1. **Use of Property.** Subject to the terms hereof, Grantor does hereby grant to Grantee the right to go upon and use the premises owned by Grantor and described as

_____
_____
_____
_____
LEGAL DESCRIPTION OF PROPERTY

to
_____
_____
_____
_____.
DESCRIBE ACTIVITES

2. **Term.** The rights granted to Grantee herein shall extend until _____
DATE

or until the Grantor terminates such rights in writing to:

_____

NAME AND ADDRESS

_____

_____

3. **Location of Activities.** Grantee shall conduct the activities at such locations on the Property as may be determined by Grantee with an intent of lessening damages to structures and other improvements thereon, as well as inconvenience to the Grantor.

4. **Contractors of Grantee.** Grantee may contract for the performance of the activities described herein with third parties. Any such party contracting with Grantee for the performance of such activities shall have the same rights and privileges as Grantee for the purpose of performing the contracted services.

5. **Ownership of Property.** The Grantor represents and warrants that it is the owner of the Property and has the right, power and authority to grant to Grantee the rights described herein.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the date set forth above.

_____	_____
GRANTOR	GRANTEE
Owner of Property	Title
[Code of Federal Regulations]	

[Title 7, Volume 11]
[Revised as of January 1, 2004]
From the U.S. Government Printing Office via GPO Access
[CITE: 7CFR1773]

[Page 989-990]

TITLE 7--AGRICULTURE
CHAPTER XVII--RURAL UTILITIES SERVICE, DEPARTMENT OF AGRICULTURE
PART 1773_POLICY ON AUDITS OF RDUP BORROWERS--Table of Contents

Subpart B_RDUP Audit Requirements

(a) Each borrower must have its financial statements audited annually by a CPA selected by the borrower and approved by RDUP as set forth in Sec. 1773.4.

(b) Each borrower must establish an annual as of audit date within twelve months of the date of receipt of the first advance of funds from grants and insured and guaranteed loans approved by RDUP and RTB and must prepare financial statements as of the date established.

(c) Until all loans made or guaranteed by RDUP have been repaid, the borrower must furnish three copies of the auditor's report, report on compliance and on internal control over financial reporting, and management letter to RDUP within 120 days of the as of audit date.

(d) A borrower that qualifies as a unit of state or local government or Indian tribe as such terms are defined in the Single Audit Act of 1984 (31 U.S.C. 7501 et seq.), the Single Audit Act Amendments of 1996 (31 U.S.C. 7505 et seq.) and OMB Circular A-133, Audits of States, Local Governments, and Non-Profit Organizations (copy available from the Executive Office of the President, Publication Services, 725 17th St., NW., Suite 2200, Washington, DC 20502; 202-395-7332), must comply with this part as follows:

(1) A borrower that expends $300,000 or more in a year in Federal awards must have an audit performed and submit an auditor's report meeting the requirements of the Single Audit Act of 1984 and the Single Audit Act Amendments of 1996.

(2) A borrower that expends less than $300,000 in Federal awards during the year must have an audit performed in accordance with the requirements of this part.

(3) A borrower must notify RDUP, in writing, within 30 days of the as of audit date, of the total Federal awards expended during the year and must state whether it will have an audit performed in accordance with the Single Audit Act of 1984 and the Single Audit Act Amendments of 1996, or this part.

(i) A borrower that elects to comply with this part must select a CPA that meets the qualifications set forth in Sec. 1773.5.

(ii) If an audit is performed in accordance with the Single Audit Act of 1984 and the Single Audit Act Amendments of 1996, an auditor's report that meets the requirements of the Single Audit Act of 1984, and the Single Audit Act Amendments of 1996, will be sufficient to satisfy that borrower's obligations under this part.

(e) OMB Circular A-133, Audits of States, Local Governments, and Non-Profit Organizations **does not apply** to audits of RDUP electric and telecommunications cooperatives and commercial telecommunications borrowers.

[56 FR 63360, Dec. 3, 1991, as amended at 59 FR 659, Jan. 6, 1994; 63 FR 38722, July 17, 1998; 66 FR 27835, May 21, 2001]

*(**NOTE:** Words in **bold** means emphasis added by TEC Loss Control Advisory Committee.)*

Code of Federal Regulations]

[Title 44, Volume 1]
[Revised as of October 1, 2000]
From the U.S. Government Printing Office via GPO Access
[**CITE**: **44CFR13**]
[Page 151-172]

TITLE 44--EMERGENCY MANAGEMENT AND ASSISTANCE

CHAPTER I--FEDERAL EMERGENCY MANAGEMENT AGENCY AND COOP AGREEMENTS TO STATE AND LOCAL GOVERNMENTS--Table of Contents
PART 13--UNIFORM ADMINISTRATIVE REQUIREMENTS FOR GRANTS

Subpart C--Post-Award Requirements

Financial Administration

Sec. 13.20 Standards for financial management systems.

(a) A State must expand and account for grant funds in accordance with State laws and procedures for expending and accounting for its own funds. Fiscal control and accounting procedures of the State, as well as its subgrantees and cost-type contractors, must be sufficient to--

(1) Permit preparation of reports required by this part and the statutes authorizing the grant, and

(2) Permit the tracing of funds to a level of expenditures adequate to establish that such funds have not been used in violation of the restrictions and prohibitions of applicable statutes.

(b) The financial management systems of other grantees and subgrantees must meet the following standards:

(1) Financial reporting. Accurate, current, and complete disclosure of the financial results of financially assisted activities must be made in accordance with the financial reporting requirements of the grant or subgrant.

(2) Accounting records. Grantees and subgrantees must maintain records which adequately identify the source and application of funds provided for financially-assisted activities. These records must contain information pertaining to grant or subgrant awards and authorizations, obligations, unobligated balances, assets, liabilities, outlays or expenditures, and income.

(3) Internal control. Effective control and accountability must be maintained for all grant and subgrant cash, real and personal property, and other assets. Grantees and subgrantees must adequately safeguard all such property and must assure that it is used solely for authorized purposes.

(4) Budget control. Actual expenditures or outlays must be compared with budgeted

amounts for each grant or subgrant. Financial information must be related to performance or productivity data, including the development of unit cost information whenever appropriate or specifically required in the grant or subgrant agreement. If unit cost data are required, estimates based on available documentation will be accepted whenever possible.

(5) Allowable cost. Applicable OMB cost principles, agency program regulations, and the terms of grant and subgrant agreements will be followed in determining the reasonableness, allowability, and allocability of costs.

(6) Source documentation. Accounting records must be supported by such source documentation as cancelled checks, paid bills, payrolls, time and attendance records, contract and subgrant award documents, etc.

(7) Cash management. Procedures for minimizing the time elapsing between the transfer of funds from the U.S. Treasury and disbursement by grantees and subgrantees must be followed whenever advance payment procedures are used. Grantees must establish reasonable procedures to ensure the receipt of reports on subgrantees' cash balances and cash disbursements in sufficient time to enable them to prepare complete and accurate cash transactions reports to the awarding agency. When advances are made by letter-of-credit or electronic transfer of funds methods, the grantee must make drawdowns as close as possible to the time of making disbursements. Grantees must monitor cash drawdowns by their subgrantees to assure that they conform substantially to the same standards of timing and amount as apply to advances to the grantees.

(**c**) An awarding agency may review the adequacy of the financial management system of any applicant for financial assistance as part of a preaward review or at any time subsequent to award.

Sec. 13.21 Payment.

(a) Scope. This section prescribes the basic standard and the methods under which a Federal agency will make payments to grantees, and grantees will make payments to subgrantees and contractors.

(b) Basic standard. Methods and procedures for payment shall minimize the time elapsing between the transfer of funds and disbursement by the grantee or subgrantee, in accordance with Treasury regulations at 31 CFR part 205.

(**c**) Advances. Grantees and subgrantees shall be paid in advance, provided they maintain or demonstrate the willingness and ability to maintain procedures to minimize the time elapsing between the transfer of the funds and their disbursement by the grantee or subgrantee.

(d) Reimbursement. Reimbursement shall be the preferred method when the requirements in paragraph (**c**) of this section are not met. Grantees and subgrantees may also be paid by reimbursement for any construction grant. Except as otherwise specified in regulation, Federal agencies shall not use the percentage of completion method to pay construction grants. The grantee or subgrantee may use that method to pay its construction contractor, and if it does, the awarding agency's payments to the grantee or subgrantee will be based on the grantee's or subgrantee's actual rate of disbursement.

(e) Working capital advances. If a grantee cannot meet the criteria for advance payments described in paragraph (**c**) of this section, and the Federal agency has determined that reimbursement is not feasible because the grantee lacks sufficient working capital, the awarding agency may provide cash or a working capital advance basis. Under this procedure the awarding agency shall advance cash to the grantee to cover its estimated disbursement needs for an initial period generally geared to the grantee's disbursing cycle. Thereafter, the awarding agency shall reimburse the grantee for its actual cash disbursements. The working capital advance method of payment shall not be used by grantees or subgrantees if the reason for using such method is the unwillingness or inability

of the grantee to provide timely advances to the subgrantee to meet the subgrantee's actual cash disbursements.

(f) Effect of program income, refunds, and audit recoveries on payment. (1) Grantees and subgrantees shall disburse repayments to and interest earned on a revolving fund before requesting additional cash payments for the same activity.

(2) Except as provided in paragraph (f)(1) of this section, grantees and subgrantees shall disburse program income, rebates, refunds, contract settlements, audit recoveries and interest earned on such funds before requesting additional cash payments.

(g) Withholding payments. (1) Unless otherwise required by Federal statute, awarding agencies shall not withhold payments for proper charges incurred by grantees or subgrantees unless--

(i) The grantee or subgrantee has failed to comply with grant award conditions or (ii) The grantee or subgrantee is indebted to the United States.

(2) Cash withheld for failure to comply with grant award condition, but without suspension of the grant, shall be released to the grantee upon subsequent compliance. When a grant is suspended, payment adjustments will be made in accordance with Sec. 13.43(**c**).

(3) A Federal agency shall not make payment to grantees for amounts that are withheld by grantees or subgrantees from payment to contractors to assure satisfactory completion of work. Payments shall be made by the Federal agency when the grantees or subgrantees actually disburse the withheld funds to the contractors or to escrow accounts established to assure satisfactory completion of work.

(h) Cash depositories. (1) Consistent with the national goal of expanding the opportunities for minority business enterprises, grantees and subgrantees are encouraged to use minority banks (a bank which is owned at least 50 percent by minority group members). A list of minority owned banks can be obtained from the Minority Business Development Agency, Department of Commerce, Washington, DC 20230.

(2) A grantee or subgrantee shall maintain a separate bank account only when required by Federal-State agreement. (i) Interest earned on advances. Except for interest earned on advances of funds exempt under the Intergovernmental Cooperation Act (31 U.S.**C**. 6501 et seq.) and the Indian Self-Determination Act (23 U.S.**C**. 450), grantees and subgrantees shall promptly, but at least quarterly, remit interest earned on advances to the Federal agency. The grantee or subgrantee may keep interest amounts up to $100 per year for administrative expenses.

Sec. 13.22 Allowable costs.

(a) Limitation on use of funds. Grant funds may be used only for:

(1) The allowable costs of the grantees, subgrantees and cost-type contractors, including allowable costs in the form of payments to fixed-price contractors; and

(2) Reasonable fees or profit to cost-type contractors but not any fee or profit (or other increment above allowable costs) to the grantee or subgrantee.

(b) Applicable cost principles. For each kind of organization, there is a set of Federal principles for determining allowable costs. Allowable costs will be determined in accordance with the cost principles applicable to the organization incurring the costs. The following chart lists the kinds of organizations and the applicable cost principles.

Sec. 13.23 Period of availability of funds.

(a) General. Where a funding period is specified, a grantee may charge to the award only costs resulting from obligations of the funding period unless carryover of unobligated balances is permitted, in which case the carryover balances may be charged for costs resulting from obligations of the subsequent funding period.

(b) Liquidation of obligations. A grantee must liquidate all obligations incurred under the

award not later than 90 days after the end of the funding period (or as specified in a program regulation) to coincide with the submission of the annual Financial Status Report (SF-
269). The Federal agency may extend this deadline at the request of the grantee.
Sec. 13.24 Matching or cost sharing.

(a) Basic rule: Costs and contributions acceptable. With the qualifications and exceptions listed in paragraph (b) of this section, a matching or cost sharing requirement may be satisfied by either or both of the following:

(1) Allowable costs incurred by the grantee, subgrantee or a cost-type contractor under the assistance agreement. This includes allowable costs borne by non-Federal grants or by others cash donations from non-Federal third parties.

(2) The value of third party in-kind contributions applicable to the period to which the cost sharing or matching requirements applies.

(b) Qualifications and exceptions--(1) Costs borne by other Federal grant agreements. Except as provided by Federal statute, a cost sharing or matching requirement may not be met by costs borne by another Federal grant. This prohibition does not apply to income earned by a grantee or subgrantee from a contract awarded under another Federal grant.

(2) General revenue sharing. For the purpose of this section, general revenue sharing funds distributed under 31 U.S.**C**. 6702 are not considered Federal grant funds.

(3) Cost or contributions counted towards other Federal costs-sharing requirements. Neither costs nor the values of third party in-kind contributions may count towards satisfying a cost sharing or matching requirement of a grant agreement if they have been or will be counted towards satisfying a cost sharing or matching requirement of another Federal grant agreement, a Federal procurement contract, or any other award of Federal funds.

(4) Costs financed by program income. Costs financed by program income, as defined in Sec. 13.25, shall not count towards satisfying a cost sharing or matching requirement unless they are expressly permitted in the terms of the assistance agreement. (This use of general program
income is described in Sec. 13.25(g).)

(5) Services or property financed by income earned by contractors. Contractors under a grant may earn income from the activities carried out under the contract in addition to the amounts earned from the party awarding the contract. No costs of services or property supported by this income may count toward satisfying a cost sharing or matching requirement unless other provisions of the grant agreement expressly permit this kind of income to be used to meet the requirement.

(6) Records. Costs and third party in-kind contributions counting towards satisfying a cost sharing or matching requirement must be verifiable from the records of grantees and subgrantee or cost-type contractors. These records must show how the value placed on third party in-kind contributions was derived. To the extent feasible, volunteer services will be supported by the same methods that the organization uses to support the allocability of regular personnel costs.

(7) Special standards for third party in-kind contributions. (i)
Third party in-kind contributions count towards satisfying a cost sharing or matching requirement only where, if the party receiving the contributions were to pay for them, the payments would be allowable costs.

(ii) Some third party in-kind contributions are goods and services that, if the grantee, subgrantee, or contractor receiving the contribution had to pay for them, the payments would have been an indirect costs. Costs sharing or matching credit for such contributions shall be given only if the grantee, subgrantee, or contractor has established, along with its

regular indirect cost rate, a special rate for allocating to individual projects or programs the value of the contributions.

(iii) A third party in-kind contribution to a fixed-price contract may count towards satisfying a cost sharing or matching requirement only if it results in:

(A) An increase in the services or property provided under the contract (without additional cost to the grantee or subgrantee) or

(B) A cost savings to the grantee or subgrantee.

(iv) The values placed on third party in-kind contributions for cost sharing or matching purposes will conform to the rules in the succeeding sections of this part. If a third party in-kind contribution is a type not treated in those sections, the value placed upon it shall be fair and reasonable.

(**c**) Valuation of donated services--(1) Volunteer services. Unpaid services provided to a grantee or subgrantee by individuals will be valued at rates consistent with those ordinarily paid for similar work in the grantee's or subgrantee's organization. If the grantee or subgrantee does not have employees performing similar work, the rates will be consistent with those ordinarily paid by other employers for similar work in the same labor market. In either case, a reasonable amount for fringe benefits may be included in the valuation.

(2) Employees of other organizations. When an employer other than a grantee, subgrantee, or cost-type contractor furnishes free of charge the services of an employee in the employee's normal line of work, the services will be valued at the employee's regular rate of pay exclusive of the employee's fringe benefits and overhead costs. If the services are in a different line of work, paragraph (**c**)(1) of this section applies.

(d) Valuation of third party donated supplies and loaned equipment or space. (1) If a third party donates supplies, the contribution will be valued at the market value of the supplies at the time of donation. (2) If a third party donates the use of equipment or space in a building but retains title, the contribution will be valued at the fair rental rate of the equipment or space.

(e) Valuation of third party donated equipment, buildings, and land. If a third party donates equipment, buildings, or land, and title passes to a grantee or subgrantee, the treatment of the donated property will depend upon the purpose of the grant or subgrant, as follows:

(1) Awards for capital expenditures. If the purpose of the grant or subgrant is to assist the grantee or subgrantee in the acquisition of property, the market value of that property at the time of donation may be counted as cost sharing or matching,

(2) Other awards. If assisting in the acquisition of property is not the purpose of the grant or subgrant, paragraphs (e)(2) (i) and (ii) of this section apply:

(i) If approval is obtained from the awarding agency, the market value at the time of donation of the donated equipment or buildings and the fair rental rate of the donated land may be counted as cost sharing or matching. In the case of a subgrant, the terms of the grant agreement may require that the approval be obtained from the Federal agency as well as the grantee. In all cases, the approval may be given only if a purchase of the equipment or rental of the land would be approved as an allowable direct cost. If any part of the donated property was acquired with Federal funds, only the non-Federal share of the property may be counted as cost-sharing or matching.

(ii) If approval is not obtained under paragraph (e)(2)(i) of this section, no amount may be counted for donated land, and only depreciation or use allowances may be counted for donated equipment and buildings. The depreciation or use allowances for this property are not treated as third party in-kind contributions. Instead, they are treated as costs incurred by the grantee or subgrantee. They are computed and allocated (usually as indirect costs) in accordance with the cost principles specified in Sec. 13.22, in the same way as

depreciation or use allowances for purchased equipment and buildings. The amount of depreciation or use allowances for donated equipment and buildings is based on the property's market value at the time it was donated.

(f) Valuation of grantee or subgrantee donated real property for construction/acquisition. If a grantee or subgrantee donates real property for a construction or facilities acquisition project, the current market value of that property may be counted as cost sharing or matching. If any part of the donated property was acquired with Federal funds, only the non-Federal share of the property may be counted as cost sharing or matching.

(g) Appraisal of real property. In some cases under paragraphs (d), (e) and (f) of this section, it will be necessary to establish the market value of land or a building or the fair rental rate of land or of space in a building. In these cases, the Federal agency may require the market value or fair rental value be set by an independent appraiser, and that the value or rate be certified by the grantee. This requirement will also be imposed by the grantee on subgrantees.

Sec. 13.25 Program income.

(a) General. Grantees are encouraged to earn income to defray program costs. Program income includes income from fees for services performed, from the use or rental of real or personal property acquired with grant funds, from the sale of commodities or items fabricated under a grant agreement, and from payments of principal and interest on loans made with grant funds. Except as otherwise provided in regulations of the Federal agency, program income does not include interest on grant funds, rebates, credits, discounts, refunds, etc. and interest earned on any of them.

(b) Definition of program income. Program income means gross income received by the grantee or subgrantee directly generated by a grant supported activity, or earned only as a result of the grant agreement during the grant period. During the grant period is the time between the effective date of the award and the ending date of the award reflected in the final financial report.

(**c**) Cost of generating program income. If authorized by Federal regulations or the grant agreement, costs incident to the generation of program income may be deducted from gross income to determine program income.

(d) Governmental revenues. Taxes, special assessments, levies, fines, and other such revenues raised by a grantee or subgrantee are not program income unless the revenues are specifically identified in the grant agreement or Federal agency regulations as program income.

(e) Royalties. Income from royalties and license fees for copyrighted material, patents, and inventions developed by a grantee or subgrantee is program income only if the revenues are specifically identified in the grant agreement or Federal agency regulations as program income. (See Sec. 13.34.)

(f) Property. Proceeds from the sale of real property or equipment will be handled in accordance with the requirements of Secs. 13.31 and 13.32.

(g) Use of program income. Program income shall be deducted from outlays which may be both Federal and non-Federal as described below, unless the Federal agency regulations or the grant agreement specify another alternative (or a combination of the alternatives). In specifying alternatives, the Federal agency may distinguish between income earned by the grantee and income earned by subgrantees and between the sources, kinds, or amounts of income. When Federal agencies authorize the alternatives in paragraphs (g) (2) and (3) of this section, program income in excess of any limits stipulated shall also be deducted from outlays.

(1) Deduction. Ordinarily program income shall be deducted from total allowable costs to determine the net allowable costs. Program income shall be used for current costs unless

the Federal agency authorizes otherwise. Program income which the grantee did not anticipate at the time of the award shall be used to reduce the Federal agency and grantee contributions rather than to increase the funds committed to the project.

(2) Addition. When authorized, program income may be added to the funds committed to the grant agreement by the Federal agency and the grantee. The program income shall be used for the purposes and under the conditions of the grant agreement.

(3) Cost sharing or matching. When authorized, program income may be used to meet the cost sharing or matching requirement of the grant agreement. The amount of the Federal grant award remains the same. (h) Income after the award period. There are no Federal requirements governing the disposition of program income earned after the end of the award period (i.e., until the ending date of the final financial report, see paragraph (a) of this section), unless the terms of the agreement or the Federal agency regulations provide otherwise.Sec. 13.26 Non-Federal audit.

(a) Basic rule. Grantees and subgrantees are responsible for obtaining audits in accordance with the Single Audit Act Amendments of 1996 (31 U.S.**C**. 7501-7507) and revised OMB Circular A-133, ``Audits of States, Local Governments, and Non-Profit Organizations.'' The audits shall be made by an independent auditor in accordance with generally accepted government auditing standards covering financial audits.

(b) Subgrantees. State or local governments, as those terms are defined for purposes of the Single Audit Act Amendments of 1996, that provide Federal awards to a subgrantee, which expends $300,000 or more (or other amount as specified by OMB) in Federal awards in a fiscal year, shall:

(1) Determine whether State or local subgrantees have met the audit requirements of the Act and whether subgrantees covered by OMB Circular A-110, ``Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations,'' have met the audit requirements of the Act. Commercial contractors (private for-profit and private and governmental organizations) providing goods and services to State and local governments are not required to have a single audit performed. State and local governments should use their own procedures to ensure that the contractor has complied with laws and regulations affecting the expenditure of Federal funds;

(2) Determine whether the subgrantee spent Federal assistance funds provided in accordance with applicable laws and regulations. This may be accomplished by reviewing an audit of the subgrantee made in accordance with the Act, Circular A-110, or through other means (e.g., program reviews) if the subgrantee has not had such an audit;

(3) Ensure that appropriate corrective action is taken within six months after receipt of the audit report in instance of noncompliance with Federal laws and regulations;

(4) Consider whether subgrantee audits necessitate adjustment of the grantee's own records; and

(5) Require each subgrantee to permit independent auditors to have access to the records and financial statements.

(**c**) Auditor selection. In arranging for audit services, Sec. 13.36 shall be followed. [53 FR 8079, 887, Mar. 11, 1988, as amended at 62 FR 45939, 45945, Aug. 29, 1997]

Changes, Property, and Subawards

Sec. 13.30 Changes.

(a) General. Grantees and subgrantees are permitted to rebudget within the approved direct cost budget to meet unanticipated requirements and may make limited program

changes to the approved project. However, unless waived by the awarding agency, certain types of post-award changes in budgets and projects shall require the prior written approval of the awarding agency.

(b) Relation to cost principles. The applicable cost principles (see Sec. 13.22) contain requirements for prior approval of certain types of costs. Except where waived, those requirements apply to all grants and subgrants even if paragraphs (**c**) through (f) of this section do not.

(**c**) Budget changes--(1) Nonconstruction projects. Except as stated in other regulations or an award document, grantees or subgrantees shall obtain the prior approval of the awarding agency whenever any of the following changes is anticipated under a nonconstruction award:

(i) Any revision which would result in the need for additional funding.

(ii) Unless waived by the awarding agency, cumulative transfers among direct cost categories, or, if applicable, among separately budgeted programs, projects, functions, or activities which exceed or are expected to exceed ten percent of the current total approved budget, whenever the awarding agency's share exceeds $100,000.

(iii) Transfer of funds allotted for training allowances (i.e., from direct payments to trainees to other expense categories).

(2) Construction projects. Grantees and subgrantees shall obtain prior written approval for any budget revision which would result in the need for additional funds.

(3) Combined construction and nonconstruction projects. When a grant or subgrant provides funding for both construction and nonconstruction activities, the grantee or subgrantee must obtain prior written approval from the awarding agency before making any fund or budget transfer from nonconstruction to construction or vice versa.

(d) Programmatic changes. Grantees or subgrantees must obtain the prior approval of the awarding agency whenever any of the following actions is anticipated:

(1) Any revision of the scope or objectives of the project (regardless of whether there is an associated budget revision requiring prior approval).

(2) Need to extend the period of availability of funds.

(3) Changes in key persons in cases where specified in an application or a grant award. In research projects, a change in the project director or principal investigator shall always require approval unless waived by the awarding agency.

(4) Under nonconstruction projects, contracting out, subgranting (if authorized by law) or otherwise obtaining the services of a third party to perform activities which are central to the purposes of the award. This approval requirement is in addition to the approval requirements of Sec. 13.36 but does not apply to the procurement of equipment, supplies, and general support services.

(e) Additional prior approval requirements. The awarding agency may not require prior approval for any budget revision which is not described in paragraph (**c**) of this section.

(f) Requesting prior approval. (1) A request for prior approval of any budget revision will be in the same budget formal the grantee used in its application and shall be accompanied by a narrative justification for the proposed revision.

(2) A request for a prior approval under the applicable Federal cost principles (see Sec. 13.22) may be made by letter.

(3) A request by a subgrantee for prior approval will be addressed in writing to the grantee. The grantee will promptly review such request and shall approve or disapprove the request in writing. A grantee will not approve any budget or project revision which is inconsistent with the purpose or terms and conditions of the Federal grant to the grantee. If the revision, requested by the subgrantee would result in a change to the grantee's approved project which requires Federal prior approval, the grantee will obtain the Federal

agency's approval before approving the subgrantee's request.

Sec. 13.31 Real property.

(a) Title. Subject to the obligations and conditions set forth in this section, title to real property acquired under a grant or subgrant will vest upon acquisition in the grantee or subgrantee respectively.

(b) Use. Except as otherwise provided by Federal statutes, real property will be used for the originally authorized purposes as long as needed for that purposes, and the grantee or subgrantee shall not dispose of or encumber its title or other interests.

(**c**) Disposition. When real property is no longer needed for the originally authorized purpose, the grantee or subgrantee will request disposition instructions from the awarding agency. The instructions will provide for one of the following alternatives:

(1) Retention of title. Retain title after compensating the awarding agency. The amount paid to the awarding agency will be computed by applying the awarding agency's percentage of participation in the cost of the original purchase to the fair market value of the property. However, in those situations where a grantee or subgrantee is disposing of real property acquired with grant funds and acquiring replacement real property under the same program, the net proceeds from the disposition may be used as an offset to the cost of the replacement property.

(2) Sale of property. Sell the property and compensate the awarding agency. The amount due to the awarding agency will be calculated by applying the awarding agency's percentage of participation in the cost of the original purchase to the proceeds of the sale after deduction of any actual and reasonable selling and fixing-up expenses. If the grant is still active, the net proceeds from sale may be offset against the original cost of the property. When a grantee or subgrantee is directed to sell property, sales procedures shall be followed that provide for competition to the extent practicable and result in the highest possible return.

(3) Transfer of title. Transfer title to the awarding agency or to a third-party designated/approved by the awarding agency. The grantee or subgrantee shall be paid an amount calculated by applying the grantee or subgrantee's percentage of participation in the purchase of the real property to the current fair market value of the property.

Sec. 13.32 Equipment.

(a) Title. Subject to the obligations and conditions set forth in this section, title to equipment acquired under a grant or subgrant will vest upon acquisition in the grantee or subgrantee respectively.

(b) States. A State will use, manage, and dispose of equipment acquired under a grant by the State in accordance with State laws and procedures. Other grantees and subgrantees will follow paragraphs (**c**) through (e) of this section.

(**c**) Use. (1) Equipment shall be used by the grantee or subgrantee in the program or project for which it was acquired as long as needed, whether or not the project or program continues to be supported by Federal funds. When no longer needed for the original program or project, the equipment may be used in other activities currently or previously supported by a Federal agency.

(2) The grantee or subgrantee shall also make equipment available for use on other projects or programs currently or previously supported by the Federal Government, providing such use will not interfere with the work on the projects or program for which it was originally acquired. First preference for other use shall be given to other programs or projects supported by the awarding agency. User fees should be considered if appropriate.

(3) Notwithstanding the encouragement in Sec. 13.25(a) to earn program income, the grantee or subgrantee must not use equipment acquired with grant funds to provide services for a fee to compete unfairly with private companies that provide equivalent

services, unless specifically permitted or contemplated by Federal statute.

(4) When acquiring replacement equipment, the grantee or subgrantee may use the equipment to be replaced as a trade-in or sell the property and use the proceeds to offset the cost of the replacement property, subject to the approval of the awarding agency.

(d) Management requirements. Procedures for managing equipment (including replacement equipment), whether acquired in whole or in part with grant funds, until disposition takes place will, as a minimum, meet the following requirements:

(1) Property records must be maintained that include a description of the property, a serial number or other identification number, the source of property, who holds title, the acquisition date, and cost of the property, percentage of Federal participation in the cost of the property, the location, use and condition of the property, and any ultimate disposition data including the date of disposal and sale price of the property.

(2) A physical inventory of the property must be taken and the results reconciled with the property records at least once every two years.

(3) A control system must be developed to ensure adequate safeguards to prevent loss, damage, or theft of the property. Any loss, damage, or theft shall be investigated.

(4) Adequate maintenance procedures must be developed to keep the property in good condition.

(5) If the grantee or subgrantee is authorized or required to sell the property, proper sales procedures must be established to ensure the highest possible return.

(e) Disposition. When original or replacement equipment acquired under a grant or subgrant is no longer needed for the original project or program or for other activities currently or previously supported by a Federal agency, disposition of the equipment will be made as follows:

(1) Items of equipment with a current per-unit fair market value of less than $5,000 may be retained, sold or otherwise disposed of with no further obligation to the awarding agency.

(2) Items of equipment with a current per unit fair market value in excess of $5,000 may be retained or sold and the awarding agency shall have a right to an amount calculated by multiplyingthe current market value or proceeds from sale by the awarding agency's share of the equipment.

(3) In cases where a grantee or subgrantee fails to take appropriate disposition actions, the awarding agency may direct the grantee or subgrantee to take excess and disposition actions.

(f) Federal equipment. In the event a grantee or subgrantee is provided federally-owned equipment:

(1) Title will remain vested in the Federal Government.

(2) Grantees or subgrantees will manage the equipment in accordance with Federal agency rules and procedures, and submit an annual inventory listing.

(3) When the equipment is no longer needed, the grantee or subgrantee will request disposition instructions from the Federal agency.

(g) Right to transfer title. The Federal awarding agency may reserve the right to transfer title to the Federal Government or a third part named by the awarding agency when such a third party is otherwise eligible under existing statutes. Such transfers shall be subject to the following standards:

(1) The property shall be identified in the grant or otherwise made known to the grantee in writing.

(2) The Federal awarding agency shall issue disposition instruction within 120 calendar days after the end of the Federal support of the project for which it was acquired. If the Federal awarding agency fails to issue disposition instructions within the 120 calendar-day

period the grantee shall follow Sec. 13.32(e).

(3) When title to equipment is transferred, the grantee shall be paid an amount calculated by applying the percentage of participation in the purchase to the current fair market value of the property.

Sec. 13.33 Supplies.

(a) Title. Title to supplies acquired under a grant or subgrant will vest, upon acquisition, in the grantee or subgrantee respectively.

(b) Disposition. If there is a residual inventory of unused supplies exceeding $5,000 in total aggregate fair market value upon termination or completion of the award, and if the supplies are not needed for any other federally sponsored programs or projects, the grantee or subgrantee shall compensate the awarding agency for its share.

Sec. 13.34 Copyrights.

The Federal awarding agency reserves a royalty-free, nonexclusive, and irrevocable license to reproduce, publish or otherwise use, and to authorize others to use, for Federal Government purposes:

(a) The copyright in any work developed under a grant, subgrant, or contract under a grant or subgrant; and

(b) Any rights of copyright to which a grantee, subgrantee or a contractor purchases ownership with grant support.

Sec. 13.35 Subawards to debarred and suspended parties.

Grantees and subgrantees must not make any award or permit any award (subgrant or contract) at any tier to any party which is debarred or suspended or is otherwise excluded from or ineligible for participation in Federal assistance programs under Executive Order 12549, ``Debarment and Suspension.''

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 anaylsis 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 proceduresare 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 firm-fixed-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 resonableness 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 pre-award 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 self-certification 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]

Sec. 13.37 Subgrants.

(a) States. States shall follow state law and procedures when awarding and administering subgrants (whether on a cost reimbursement or fixed amount basis) of financial assistance to local and Indian tribal governments. States shall:

(1) Ensure that every subgrant includes any clauses required by Federal statute and executive orders and their implementing regulations;

(2) Ensure that subgrantees are aware of requirements imposed upon them by Federal statute and regulation;

(3) Ensure that a provision for compliance with Sec. 13.42 is placed in every cost reimbursement subgrant; and

(4) Conform any advances of grant funds to subgrantees substantially to the same standards of timing and amount that apply to cash advances by Federal agencies.

(b) All other grantees. All other grantees shall follow the provisions of this part which are applicable to awarding agencies when awarding and administering subgrants (whether on a cost reimbursement or fixed amount basis) of financial assistance to local and Indian tribal governments. Grantees shall:

(1) Ensure that every subgrant includes a provision for compliance with this part;

(2) Ensure that every subgrant includes any clauses required by Federal statute and executive orders and their implementing regulations; and

(3) Ensure that subgrantees are aware of requirements imposed upon them by Federal statutes and regulations.

(**c**) Exceptions. By their own terms, certain provisions of this part do not apply to the award and administration of subgrants:

(1) Section 13.10;

(2) Section 13.11;

(3) The letter-of-credit procedures specified in Treasury Regulations at 31 CFR part 205, cited in Sec. 13.21; and

(4) Section 13.50.

Reports, Records Retention, and Enforcement

Sec. 13.40 Monitoring and reporting program performance.

(a) Monitoring by grantees. Grantees are responsible for managing the day-to-day operations of grant and subgrant supported activities. Grantees must monitor grant and subgrant supported activities to assure compliance with applicable Federal requirements and that performance goals are being achieved. Grantee monitoring must cover each program, function or activity.

(b) Nonconstruction performance reports. The Federal agency may, if it decides that performance information available from subsequent applications contains sufficient information to meet its programmatic needs, require the grantee to submit a performance report only upon expiration or termination of grant support. Unless waived by the Federal agency this report will be due on the same date as the final Financial Status Report.

(1) Grantees shall submit annual performance reports unless the awarding agency requires quarterly or semi-annual reports. However, performance reports will not be required more frequently than quarterly. Annual reports shall be due 90 days after the grant year, quarterly or semi-annual reports shall be due 30 days after the reporting period. The

final performance report will be due 90 days after the expiration or termination of grant support. If a justified request is submitted by a grantee, the Federal agency may extend the due date for any performance report. Additionally, requirements for unnecessary performance reports may be waived by the Federal agency.

(2) Performance reports will contain, for each grant, brief information on the following:

(i) A comparison of actual accomplishments to the objectives established for the period. Where the output of the project can be quantified, a computation of the cost per unit of output may be required if that information will be useful.

(ii) The reasons for slippage if established objectives were not met.

(iii) Additional pertinent information including, when appropriate, analysis and explanation of cost overruns or high unit costs.

(3) Grantees will not be required to submit more than the original and two copies of performance reports.

(4) Grantees will adhere to the standards in this section in prescribing performance reporting requirements for subgrantees.

(**c**) Construction performance reports. For the most part, on-site technical inspections and certified percentage-of-completion data are relied on heavily by Federal agencies to monitor progress under construction grants and subgrants. The Federal agency will require additional formal performance reports only when considered necessary, and never more frequently than quarterly.

(d) Significant developments. Events may occur between the scheduled performance reporting dates which have significant impact upon the grant or subgrant supported activity. In such cases, the grantee must inform the Federal agency as soon as the following types of conditions become known:

(1) Problems, delays, or adverse conditions which will materially impair the ability to meet the objective of the award. This disclosure must include a statement of the action taken, or contemplated, and any assistance needed to resolve the situation.

(2) Favorable developments which enable meeting time schedules and objectives sooner or at less cost than anticipated or producing more beneficial results than originally planned.

(e) Federal agencies may make site visits as warranted by program needs.

(f) Waivers, extensions. (1) Federal agencies may waive any performance report required by this part if not needed.

(2) The grantee may waive any performance report from a subgrantee when not needed. The grantee may extend the due date for any performance report from a subgrantee if the grantee will still be able to meet its performance reporting obligations to the Federal agency.

Sec. 13.41 Financial reporting.

(a) General. (1) Except as provided in paragraphs (a) (2) and (5) of this section, grantees will use only the forms specified in paragraphs (a) through (e) of this section, and such supplementary or other forms as may from time to time be authorized by OMB, for:

(i) Submitting financial reports to Federal agencies, or

(ii) Requesting advances or reimbursements when letters of credit are not used.

(2) Grantees need not apply the forms prescribed in this section in dealing with their subgrantees. However, grantees shall not impose more burdensome requirements on subgrantees.

(3) Grantees shall follow all applicable standard and supplemental Federal agency instructions approved by OMB to the extend required under the Paperwork Reduction Act of 1980 for use in connection with forms specified in paragraphs (b) through (e) of this section. Federal agencies may issue substantive supplementary instructions only with the approval of OMB. Federal agencies may shade out or instruct the grantee to disregard any

line item that the Federal agency finds unnecessary for its decisionmaking purposes.

(4) Grantees will not be required to submit more than the original and two copies of forms required under this part.

(5) Federal agencies may provide computer outputs to grantees to expedite or contribute to the accuracy of reporting. Federal agencies may accept the required information from grantees in machine usable format or computer printouts instead of prescribed forms.

(6) Federal agencies may waive any report required by this section if not needed.

(7) Federal agencies may extend the due date of any financial report upon receiving a justified request from a grantee.

(b) Financial Status Report--(1) Form. Grantees will use Standard Form 269 or 269A, Financial Status Report, to report the status of funds for all nonconstruction grants and for construction grants when required in accordance with paragraph (e)(2)(iii) of this section.

(2) Accounting basis. Each grantee will report program outlays and program income on a cash or accrual basis as prescribed by the awarding agency. If the Federal agency requires accrual information and the grantee's accounting records are not normally kept on the accural basis, the grantee shall not be required to convert its accounting system but shall develop such accrual information through and analysis of the documentation on hand.

(3) Frequency. The Federal agency may prescribe the frequency of the report for each project or program. However, the report will not be required more frequently than quarterly. If the Federal agency does not specify the frequency of the report, it will be submitted annually. A final report will be required upon expiration or termination of grant support.

(4) Due date. When reports are required on a quarterly or semiannual basis, they will be due 30 days after the reporting period. When required on an annual basis, they will be due 90 days after the grant year. Final reports will be due 90 days after the expiration or termination of grant support.

(**c**) Federal Cash Transactions Report--(1) Form. (i) For grants paid by letter or credit, Treasury check advances or electronic transfer of funds, the grantee will submit the Standard Form 272, Federal Cash Transactions Report, and when necessary, its continuation sheet, Standard Form 272a, unless the terms of the award exempt the grantee from this requirement.

(ii) These reports will be used by the Federal agency to monitor cash advanced to grantees and to obtain disbursement or outlay information for each grant from grantees. The format of the report may be adapted as appropriate when reporting is to be accomplished with the assistance of automatic data processing equipment provided that the information to be submitted is not changed in substance.

(2) Forecasts of Federal cash requirements. Forecasts of Federal cash requirements may be required in the ``Remarks'' section of the report.

(3) Cash in hands of subgrantees. When considered necessary and feasible by the Federal agency, grantees may be required to report the amount of cash advances in excess of three days' needs in the hands of their subgrantees or contractors and to provide short narrative explanations of actions taken by the grantee to reduce the excess balances.

(4) Frequency and due date. Grantees must submit the report no later than 15 working days following the end of each quarter. However, where an advance either by letter of credit or electronic transfer of funds is authorized at an annualized rate of one million dollars or more, the Federal agency may require the report to be submitted within 15 working days following the end of each month.

(d) Request for advance or reimbursement--(1) Advance payments. Requests for Treasury check advance payments will be submitted on Standard Form 270, Request for Advance or Reimbursement. (This form will not be used for drawdowns under a letter of credit, electronic funds transfer or when Treasury check advance payments are made to