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BY THE U.S. GENERAL ACCOUNTING OFFICE

Report To The Chairman, Subcommittee On Energy, Environment, And Safety Issues Affecting Small Business Committee On Small Business House Of Representatives

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The Federal Government Is Still Not Adequately Prepared To Respond To Major Electrical Emergencies

RELEASED

In a previous review GAO found Federal electrical emergency preparedness programs and plans to be deficient. After 1 year, very little substantive progress has been made at preparing the United States to respond to a national or regional disruption.

While the Department of Energy and the Federal Emergency Management Agency have taken a few positive steps, Federal electrical emergency preparedness programs and plans have not been developed. Without a strong Federal role in electrical emergency preparedness, it may be difficult to manage and restore electrical power if a major disruption occurred because States will not be able to deal with such an incident in an effective and timely manner. To be prepared, GAO believes the Department of Energy and the Federal Emergency Management Agency should implement its previous recommendations.



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UNITED STATES GENERAL ACCOUNTING OFFICE

WASHINGTON, D.C. 20548

ENERGY AND MINERALS
DIVISION

B-200596

The Honorable Berkley Bedell
Chairman, Subcommittee on Energy,
Environment, and Safety Issues
Affecting Small Business
Committee on Small Business
House of Representatives

Dear Mr. Chairman:

In a June 9, 1982, letter, you requested that we examine certain key issues concerning the Federal Government's ability to respond to a major electrical power emergency. In your letter and during a subsequent meeting with your staff, we were specifically asked to

- review the Department of Energy's (DOE's) and the Federal Emergency Management Agency's (FEMA's) electrical emergency preparedness plans and programs to determine whether they have acted on the recommendations made in our prior report, 1/ and what progress they have made in establishing a stockpile of spare electrical parts;
- evaluate a recent plan for reorganizing DOE, as it relates to electrical emergency preparedness, and analyze whether recent budget requests are adequate for the Department to perform functions relating to electrical emergencies;
- evaluate the status of the National Defense Executive Reserve (NDER);
- analyze recent trends by various States to enact legislation and develop electrical emergency action plans; and
- provide information about a recent potential electric emergency in Canada.

1/"Federal Electrical Emergency Preparedness Is Inadequate," EMD-81-50, May 12, 1981.

Overall, we found that since our last report, very little substantive progress has been made at the Federal or State level to prepare the United States to respond to a major electrical disruption having national consequence. Specifically, we found:

- Little progress has been made at improving Federal electrical emergency preparedness programs and plans.
- The effects of the proposed reorganization and of the reduced budget are uncertain.
- FEMA has made little progress in carrying out the objectives of the NDER program.
- States are not prepared to deal with major electrical emergencies.

We have found similar problems in previous work performed on the U.S. Government's total energy emergency preparedness. In September 1981, we reported 1/ the U.S. Government was almost totally unprepared to deal with disruptions in oil imports and such disruptions pose a significant threat to national security. We also stated the lack of effective contingency planning and program development required immediate attention. In a March 1982 report, 2/ we found that progress has been slow and there is still no comprehensive energy plan or even individual response plans in any contingency planning area which can be considered fully operational.

Detailed information about our analysis is found in the following appendixes. Appendix I contains our objectives, scope, and methodology. Appendix II contains our detailed analysis of DOE's and FEMA's programs and plans. Appendix III covers the potential impacts of the DOE reorganization proposal and of DOE's reduced emergency preparedness budget. Appendix IV evaluates the status of the NDER program. Appendix V analyzes how prepared States are to deal with major electrical emergencies.

BACKGROUND

Electric power is vital to our Nation's economic and social well being. Without electricity, industries could not function, communications would be greatly reduced, and the welfare of our

1/"The U.S. Remains Unprepared for Disruptions in Oil Imports," EMD-81-117, Sept. 29, 1981.

2/"The Effects of the Fiscal Year 1983 Budget, Energy Reorganization, and Program Changes on U.S. Energy Emergency Preparedness," EMD-82-45, Mar. 9, 1982.

citizens would be greatly threatened. While electric power systems are very dependable, they are also highly vulnerable to damage from acts of war, sabotage, and terrorism. Although the systems are designed and operated to provide for a reliable energy source, and under most conditions do, Government and industry officials recognize their vulnerability. The utility industry has demonstrated the capability to manage and restore service in most instances of power outages caused by accidents, weather, equipment failures, and human error. However, should the Nation or a region suffer a major, long-term power disruption caused by war, sabotage, or terrorism, the consequences would most likely have national impact. Neither utilities nor State/local governments can reasonably be expected to effectively manage such situations because such entities cannot and should not be expected to respond to national needs.

RECENT CANADIAN INCIDENT

The need for programs and plans to handle major electrical emergencies is highlighted by a recent sabotage of an electrical substation on Vancouver Island, Canada. Although the substation was still under construction, it was nearly complete and essential to providing additional power to meet expected residential and commercial demands. The damage to the substation may result in the utility having to ration or allocate existing power through 1983 since the substation is vital to transmitting power to the Island.

At the time of this incident and presently, the Canadian Government does not have a prepared plan for allocating, curtailing, and restoring existing power. The Canadian Department of Energy, Mines, and Resources is currently working to develop plans to respond to electrical emergencies, because a 1981 Canadian law requires such action.

LITTLE SUBSTANTIVE PROGRESS MADE AT IMPROVING FEDERAL ELECTRICAL EMERGENCY PREPAREDNESS PROGRAMS AND PLANS

In May 1981 we reported that, although the Federal Government is responsible for national electrical emergency planning, it was not prepared to deal with electrical emergencies affecting our national security. Federal programs and plans for managing electrical emergencies which may arise from war, sabotage, or terrorism were inadequate or nonexistent. Further, Federal guidance and coordination with respect to such electrical preparedness was lacking. To help resolve these problems, in our prior report, we recommended that DOE and FEMA take certain actions to improve electrical emergency preparedness. Specifically, in that report, we recommended that DOE carry out its responsibility for electrical emergency preparedness by developing a program to deal with major power disruptions. In this

effort, we recommended that DOE strengthen the effectiveness of its Emergency Electric Power Executive Reserve (EOPER) ^{1/} and, that DOE should in conjunction with the utility industry, other Federal agencies, and States, develop national/regional plans. We also recommended that FEMA review the progress of DOE's program and actively assist, support, and coordinate DOE's efforts, especially with respect to other agencies.

We found that, although some initial steps were taken, more still remains to be done to ensure that the Nation is prepared to handle electrical emergencies. DOE has undertaken an assessment to identify the deficiencies contributing to the program's ineffectiveness. Since the assessment in November 1981, DOE has taken a few steps to revitalize its program such as holding its first EOPER meeting in 2-1/2 years and recruiting former members. However, DOE has not reviewed and revised EOPER's multiyear program plan, revised the electric emergency handbook which presents the organizational and technical framework needed to respond to an emergency, or developed adequate training programs for EOPER members. More importantly, DOE has not developed the national/regional electrical emergency plans we believe are needed to respond to major disruptions. In addition, although FEMA appears to have made some attempts to assist and coordinate with DOE on electrical emergency preparedness activities, it continues to play a limited role in the electrical emergency preparedness area. Another area of concern is the lack of a specific legislative or executive branch definition as to what constitutes an emergency and under what circumstances EOPER can be activated. Consequently, opinions vary as to the Federal role.

EFFECTS OF THE PROPOSED REORGANIZATION
AND REDUCED BUDGET ARE UNCERTAIN

Presently, the Reagan administration proposes to reorganize DOE, and it also plans to cut DOE's emergency preparedness budget. The effect these actions may have on the effectiveness of the programs to properly prepare the Nation for major electrical disruptions is uncertain.

The administration's most recent reorganization proposal includes transferring electrical emergency preparedness functions including electricity from DOE to the Department of Commerce. DOE and Commerce officials stated that the effects of this action are uncertain because specific details of such a transfer have not been determined. Questions of how the functions will be carried out, whether adequate authority will be given to program managers, and what priority and emphasis will be given to the program have not been specified.

^{1/}During our prior report, EOPER was called the Emergency Electric Power Administration (EOPA).

Also, the administration's fiscal year 1983 budget proposes decreases in both money and staff to DOE's overall emergency preparedness program. Although the budget does not contain specific amounts for the electrical emergency program, some DOE officials say these proposals could erode the program's scope and, perhaps, its effectiveness. Such reductions also appear to place great reliance on the private sector to anticipate, prepare, and deal with electrical emergencies when they occur.

FEMA HAS MADE LITTLE PROGRESS
IN CARRYING OUT THE OBJECTIVES
OF THE NDER PROGRAM

FEMA is charged with setting policy and coordinating the NDER program under Executive Order 11179. The program is actually established and managed by the Federal agencies with emergency responsibilities. For example, EEPER is the electric part of DOE's NDER program. The NDER program is designed to recruit and train civilian executives and professionals to fill key positions that would be needed during national emergencies. Specific NDER units can be established by the various Federal agencies in order to maintain the agency's functions during an emergency. FEMA's specific role in NDER program includes: administering and coordinating the program, establishing recruitment and training standards, issuing rules and regulations; and submitting an annual report to the President on the status of the program.

FEMA has made little progress at accomplishing its objectives under the NDER program. Basically, the reasons for the lack of progress is that FEMA can not require that agencies follow its policy directives and that it does not have the staff to administer and coordinate a program of this nature and size. Specifically, FEMA's NDER program staff consists of only two people who are to coordinate a program involving 10 agencies with a goal of having a total of 10,000 members. Aside from issuing its Annual Report, during 1981 FEMA's most significant program accomplishments in this area included establishing a recruitment program and developing plans for interagency training programs.

STATES ARE NOT PREPARED TO DEAL
WITH MAJOR ELECTRICAL EMERGENCIES

States are not capable of managing major electrical power disruptions of national consequence. Although 27 States have enacted energy emergency legislation which empowers the Governor to intervene in cases of a major disruption to a State's electrical infrastructure, the 11 States we contacted have not established electrical emergency plans that specify how to respond to such incidents and to restore power to vital facilities quickly and effectively. Should a major electrical disruption occur in a region of the country, individual States would not be able

to effectively handle the situation. As indicated in our prior report, an action by one State may adversely affect another State because the electric power system is not tied to State jurisdictional boundaries. Further, as pointed out in our previous report, States acting individually cannot determine what is in the Nation's best interest.

CONCLUSIONS

We noted in our prior report, that the Federal Government, because of the severe consequences of electric power disruptions, should be concerned with the management and recovery of the Nation's electric power system during major emergencies resulting from war, sabotage, or terrorism. We still believe that to be prepared, DOE should develop a meaningful program and develop plans to deal with these emergencies. DOE seems to have taken some initial steps to revitalize its program as indicated by a recent EEPER meeting. However, we believe this is only a small start.

Considering that more than 16 months have passed since our recommendation that DOE develop a program, we believe DOE could have done much more. The agency still has not revised its electric emergency handbook and developed or conducted any training programs. Further, several EEPER members stated to us that they do not believe DOE has made any progress.

With respect to planning nothing substantial has been accomplished. DOE is working on a vulnerability study which may lead to some positive developments. However, it is not a comprehensive planning effort or have they established specific goals and associated target dates.

In view of DOE's progress to date, we believe the Federal Government is still not adequately prepared for major electric emergencies. Since nothing has changed to lessen the importance of such efforts, we believe DOE should implement our prior recommendations to develop an electric emergency preparedness program and national/regional plans which give the utility industry guidance and assistance in setting priorities for power use and restoration.

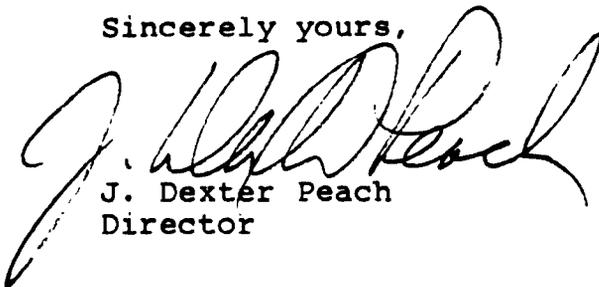
Previously, we reported that FEMA had not been active in emergency policy direction and coordination. Now FEMA seems to be playing a mixed role. For example, FEMA has been encouraging DOE to act in some areas such as civilian emergency preparedness. FEMA, however has not been as active in promoting the development of EEPER and has not actively monitored DOE's actions in this area. We believe FEMA, with respect to this matter, should adopt our prior recommendations to monitor DOE's efforts to revitalize EEPER; review DOE's progress; and actively assist, support, and coordinate DOE's efforts.

Presently, confusion exist over what constitutes an emergency and under what circumstances a program such as EEPER can be activated. We believe development of EEPER and the NDER program is important, and that their roles in an emergency need to be clarified. 1/

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As requested by your office, we did not obtain agency comments on the matters discussed in this letter. In addition, unless you announce its contents earlier, we plan no further distribution of this report until 30 days from the date of the report. At that time we will send copies to interested parties and make copies available to others upon request.

Sincerely yours,



J. Dexter Peach
Director

1/The Energy Emergency Preparedness Act of 1982, P.L. 97-229, requires the Attorney General, in consultation with the Secretary of Energy, to prepare a memorandum of law addressing, among other subjects, the reactivation of EEPER.



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ABBREVIATIONS

DOE	Department of Energy
EEPA	Emergency Electric Power Administration
EEPER	Emergency Electric Power Executive Reserve
FEMA	Federal Emergency Management Agency
GAO	General Accounting Office
NDER	National Defense Executive Reserve

OBJECTIVES, SCOPE, AND METHODOLOGY

The objectives of our review were to determine, for the first four issues outlined on p. 1, the status of Federal electrical emergency preparedness efforts and activities. Concerning the last issue, our objective was to obtain information regarding the potential electric emergency in Canada. Our review work was performed from July through August 1982 in accordance with GAO's current "Standards for Audit of Governmental Organizations, Programs, Activities, and Functions."

We accomplished our first objective--determining DOE's and FEMA's responsiveness to our prior report's recommendations--by identifying recent agency actions taken to develop electrical emergency preparedness plans and programs and to establish a national inventory or stockpile of critical parts. We did this by interviewing DOE and FEMA officials in Washington, D.C., and Portland, Oregon, and reviewing available records and correspondence at the agencies. To evaluate the status of DOE's EEPER, we reviewed the legislation authorizing it and discussed its development and status with representatives from DOE's Office of Emergency Operations and FEMA officials in Washington, D.C. In addition, we discussed the development and status of EEPER with utility officials in Illinois, Washington, Utah, California, and New Jersey, and reviewed available correspondence, files, and conference records on the subject at DOE and FEMA headquarters in Washington, D.C.

To accomplish our second objective--evaluating what impact the proposed DOE reorganization and fiscal year 1983 budget would have on electrical emergency preparedness--we reviewed available DOE documents and budget material to determine the status of its reorganization and to assess the potential consequences the reorganization and proposed budget might have on its emergency preparedness program. We also reviewed recent GAO audit work and reports dealing with DOE's fiscal year 1983 budget and proposed reorganization. ^{1/} To supplement this information, we interviewed DOE, FEMA, and Department of Commerce officials in Washington, D.C., familiar with the electrical emergency preparedness area to obtain their views on the advantages and disadvantages that could occur to DOE's program because of the proposed budget and reorganization.

The third objective on the status of the NDER program was accomplished through interviews with FEMA officials, and a review

^{1/}"Analysis of Energy Reorganization Savings Estimates and Plans," GAO/EMD-82-77, Aug. 2, 1982; and "The Effects of the Fiscal Year 1983 Budget, Energy Reorganization, and Program Changes on U.S. Energy Emergency Preparedness," EMD-82-45, Mar. 9, 1982.

of pertinent correspondence and files on the subject at FEMA's headquarters in Washington, D.C.

We accomplished the fourth objective--analyzing recent trends of States to enact electrical emergency preparedness legislation and plans--by meeting with officials of the National Governors Association in Washington, D.C., to obtain an overview of State government electrical emergency preparedness. Based on discussions with these officials, we contacted a number of States, representing a cross-section of the country, to obtain specific information on their electrical emergency plans, including California, Oregon, Washington, Florida, Georgia, Texas, Illinois, Virginia, Maryland, Maine, and Montana. We evaluated these States' emergency plans and discussed with State officials how adequately these States were prepared to cope with a major electrical power disruption.

Finally, to obtain a realistic perspective on the electrical emergency preparedness issues you requested, we met with officials of the British Columbia Hydro utility in Vancouver, Canada, and the Canadian Government in Ottawa. We discussed with these officials the consequences of the recent sabotage of a Canadian electrical substation and determined how prepared they were to mitigate the impacts of this or similar incidents.

Because of the limited time we had to complete our review, we were not able to address every issue as comprehensively as we would have preferred. Although some issues may be lacking minor details, we are confident that we have captured the overall status and major problems of each issue because we have found similar problems in previous work performed on the U.S. Government's total energy emergency preparedness. In September 1981, we reported 1/ the U.S. Government was almost totally unprepared to deal with disruptions in oil imports and such disruptions pose a significant threat to national security. We also stated the lack of effective contingency planning and program development required immediate attention. In a March 1982 report, 2/ we found that progress has been slow and there is still no comprehensive plan or even individual response plan in any contingency energy planning area which can be considered fully operational.

1/"The U.S. Remains Unprepared for Disruptions in Oil Imports," EMD-81-117, Sept. 29, 1981.

2/"The Effects of the Fiscal Year 1983 Budget, Energy Reorganization, and Program Changes on U.S. Energy Emergency Preparedness," EMD-82-45, Mar. 9, 1982.

LITTLE SUBSTANTIVE PROGRESS MADE AT
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In May 1981 we reported ^{1/} that, although the Federal Government is responsible for national electrical emergency planning, it is not prepared to deal with electrical emergencies affecting our national security. Federal programs and plans for managing electrical emergencies which may arise from war, sabotage, or terrorism are inadequate or nonexistent. Further, Federal guidance and coordination with respect to such electrical preparedness is lacking. To help resolve these problems, we recommended in our prior report that DOE and FEMA take certain actions to improve electrical emergency preparedness. This review found that after more than 16 months some initial steps are being taken, but more still remains to be done to ensure that the Nation is prepared to handle electrical emergencies. Specifically, Federal plans need to be developed to provide the utility industry with guidance in setting priorities for power use and restoration in a national emergency. To date

--DOE is just beginning to revitalize its program and

--FEMA continues to play a mixed role in the electrical emergency preparedness program.

DOE IS JUST BEGINNING TO
REVITALIZE ITS PROGRAM

In our prior report, we recommended that DOE carry out its responsibility for electrical emergency preparedness by developing a program to deal with major power disruptions. In this effort, we recommended that DOE take certain actions to strengthen the effectiveness of its EEPER and that DOE should in conjunction with the utility industry, other Federal agencies, and States, develop national/regional plans. In response to these recommendations, DOE has begun to develop a Federal electrical emergency preparedness program. As a first step, DOE has improved the organizational structure and makeup of EEPER and is making a more concerted effort to organize and coordinate the group's activities. However, DOE still has not developed comprehensive electrical emergency plans to respond to long-term electrical disruptions.

^{1/}"Federal Electrical Emergency Preparedness Is Inadequate,"
 EMD-81-50, May 12, 1981.

DOE has made some
improvements in EEPER

Our May 1981 report pointed out that EEPER, which is to be the Federal resource manager and has responsibility for electric power preparedness planning, allocation, priorities for distribution, and restoration in a declared national emergency, was barely alive. In the event of a declared national emergency, EEPER through utility representatives was to manage the electric power system. At that time, annual meetings were not being held and EEPER representatives were unsure of their status, roles, and responsibilities and of whether the organization could operate in an emergency. In addition, planning, training, and testing of the electrical emergency system were not conducted. Accordingly, we recommended that the EEPER begin conducting regular meetings, offering training seminars, and testing and revising emergency plans.

Since our prior report, DOE assessed the EEPER program to identify deficiencies contributing to the program's ineffectiveness. The assessment, which was completed in November 1981, was primarily based on interviews with 24 former EEPER members. The results of the assessment pointed out deficiencies and limitations that existed in the prior program and identified a number of tasks that needed to be completed to improve the effectiveness of the new EEPER program.

First, the study recommended that DOE prove to the electric power industry that it is committed to managing the EEPER program. In response to this point, DOE has held an EEPER meeting and has coordinated its activities with other organizations, such as FEMA and utility associations. The EEPER conference, the first in 2-1/2 years, provided an opportunity for utilities and DOE to discuss their respective roles in emergency situations. DOE used this conference and subsequent letters to respond to utility concerns and gather utility advice. One EEPER member has commented that it is too early to judge DOE's progress in organizing EEPER, but that he has a better understanding of DOE's objectives after DOE's recent efforts. Similar statements have been voiced by FEMA officials. However, three previous EEPER members who attended the annual meeting said that they do not feel much progress has been made.

Second, the assessment recommended that DOE review and revise the EEPER's multiyear program plan, which would establish program goals, objectives, and strategies. DOE had not acted upon this recommendation during our review; however, it is currently drafting a plan which lists objectives, such as training EEPER members, and specific strategies or actions which need to be taken, such as holding a training conference or preparing a program to be presented at the conference.

Third, the assessment recommended reviewing, revising, and publishing the electric emergency handbook, which is an activity we suggested in our prior report. The handbook is important because it presents an organizational and technical framework for responding to emergency situations. DOE has yet to make any substantial progress in its development. At the time of our review, DOE officials said they planned to revise the handbook to reflect changes in EEPER. The handbook will still not reflect specific and firm detailed requirements regarding national priorities for electric power curtailment, allocation, and restoration as noted in our prior report.

Fourth, the assessment recommended that DOE develop programs to train EEPER members to handle electrical emergencies of a national security nature. DOE has made little progress at implementing these training programs. Aside from scheduling a training meeting, DOE has not yet prepared the training curriculum needed for this and other training programs.

Fifth, the assessment recommended that DOE expand the recruiting program to bring highly qualified people into EEPER. In our prior report, we made a similar recommendation stressing the need for DOE to work with appropriate national and regional groups and responsible utility officials. In response to these recommendations, DOE plans to initially recruit about 100 EEPER members and has recruited 50 to 60 previous EEPER participants. DOE also plans to reorganize the EEPER, but not to do so until after discussing the structure with the recruited EEPER members. DOE anticipates the new EEPER will draw upon the expertise of utility associations, major industrial consumers, States, and others. As part of this effort, a DOE official informed us that the Department is trying to attract high ranking utility representatives into the EEPER.

Finally, the assessment recommended that DOE resolve key legal issues surrounding conflict of interest and financial disclosure requirements. This is important because DOE anticipates difficulties recruiting EEPER members because of cumbersome financial requirements and possible conflict of interest suits. While DOE's energy emergency office has solicited an opinion from its General Counsel's office on these legal issues, a final decision has still not been made.

DOE still lacks plans to respond
to long-term power disruptions

In our May 1981 report, we also found that DOE had no plans to respond to long-term power disruptions from acts of war, sabotage, and terrorism even though electric power systems are highly vulnerable. To resolve this matter, we recommended that DOE take the lead in developing national/regional plans for such electrical emergencies which would

- enable power disruptions to be managed by the utility industry through established priorities for curtailing power by use and type of customer, and
- assist the utility industry in restoring power in the event of severe damage to the electric power system.

In conjunction with this effort, we suggested that DOE (1) consider the need to stockpile or to make other provisions for replacing key equipment and supplies in the event of a major electrical emergency and (2) identify electric facilities which are important to the national defense. DOE has made little progress in implementing our recommended actions.

DOE has not developed nor has plans to develop national/regional electric power contingency plans as we recommended above. Instead, as part of its emergency preparedness efforts, DOE is currently undertaking an energy supply vulnerability study which is considering measures for mitigating electrical disruptions caused by war, sabotage, or terrorism. This project is focusing on (1) initially evaluating the dependence of certain defense-related facilities and industries upon electric power (2) analyzing what could be done to the facilities' power supplies, and (3) considering what could be done to reduce any vulnerabilities. We were, however, told by DOE officials that they have no progress or status reports nor official goals or target dates for the project. Although the results of this study could be useful, it seems to focus only on the vulnerability of military activities to electrical disruptions and will not develop the type of contingency plans we believe are needed to respond to a major electrical disruption.

Concerning the feasibility of establishing a national stockpile of spare critical parts, DOE has yet to study the issue. Despite any analysis, some officials believe the stockpiling concept economically and technically infeasible. DOE officials told us that national stockpiling of key component parts was not practical because the program would be too expensive to establish and maintain. The officials also stated that maintaining a national inventory makes little sense because the Nation's electric infrastructure is dynamic, meaning the system can be quickly modified to work around any damaged areas.

In our prior work, utility representatives indicated to us that cost is a barrier to stockpiling critical spare parts. They also said that because of financial constraints, they should not be expected to store critical components to meet the threats of sabotage, terrorism, or war. Still, utility representatives recognize the vulnerability of the system to significant and long-term damage, as the recent sabotage to a B.C. Hydro substation points out. Although DOE officials say they will be studying the issue as part of their vulnerability work, what provisions can be taken to respond to or mitigate this vulnerability has not been studied.

We were advised by one DOE official that answers to these questions concerning stockpiling are still needed:

- What parts are critical?
- Who would underwrite the cost to purchase the critical spare components?
- Is enactment of legislation required to have the utility industry participate in such a program?
- Where would the spare components be stored and how would they be guarded so they are not sabotaged?
- Who would ensure that transportation equipment exists to transport components where needed?
- Who would determine the priority use of the stockpiled components?
- Who would identify the critical components which need to be stockpiled?

Because of the importance of restoring the power system as quickly as possible, the issue of stockpiling critical electric parts or other alternatives needs to be studied.

Finally, in accordance with our prior recommendation, we were told DOE did attempt to identify key electric facilities which are important to the national defense. However, utility industry officials were reluctant to participate in this endeavor because they were concerned about developing a "hit list." DOE officials told us that they didn't think the list would be useful and have not pursued it. While we recognize the utility industry has a legitimate concern, we continue to believe such information is needed by DOE if it is expected to effectively respond to a major disruption, particularly if the disruption results from an act of war. Without such information it will be difficult to evaluate the need for stockpiling or make decisions on restoration priorities and actions. Consequently, we believe DOE should emphasize this need and work with utility officials to develop information on key utility facilities in the United States. It seems DOE needs to assure the industry that it will exercise as much discretion and caution as necessary to ensure the information developed is properly safeguarded and not misused.

FEMA IS PLAYING A MIXED
ROLE IN THE ELECTRICAL EMERGENCY
PREPAREDNESS PROGRAM

In our prior report, we recommended that FEMA actively monitor DOE's efforts to revitalize its electric emergency

program; review DOE's progress; and actively assist, support, and coordinate DOE's efforts especially with respect to other Federal agencies. At that time, policy direction and coordination were not taking place.

Overall, FEMA is now playing a mixed role in electrical emergency preparedness. It has two separate groups working with DOE in this area. One group interacts with DOE's EEPER and the other with DOE's risk assessment staff which is responsible for the remainder of DOE's electrical emergency preparedness efforts.

Concerning FEMA's group which monitors EEPER, we found that FEMA's role is passive relying on DOE to revitalize EEPER. While FEMA has encouraged DOE to renew the program, FEMA has not taken any actions in this regard such as actively monitoring DOE's activities and requiring detailed progress reports on preparedness. FEMA's monitoring of EEPER has primarily been confined to collecting information on EEPER's status for incorporation into quarterly and annual reports to the President. No detailed analysis or audit is made of the information.

The other group has responsibility for coordinating DOE's electrical emergency preparedness efforts with other agencies. Since our prior report, it appears that FEMA is attempting to take a more active role at assisting and coordinating DOE's efforts. For example, FEMA officials told us that, basically, they have been meeting with DOE on an as needed basis, and since our prior report, they have met with DOE officials several times. During these meetings, FEMA had requested a copy of DOE's energy vulnerability work plan and milestones. Subsequently, FEMA provided guidance on specific measures DOE could take to improve the plan. Although FEMA generally was pleased with the plan, they suggested that DOE develop a more detailed plan, listing specific milestones and staff resources. In addition, FEMA raised concerns over certain aspects of DOE's work plan including the need to (1) emphasize civilian energy emergency preparedness (2) develop generic emergency plans (3) establish supply priorities, and (4) emphasize prevention and mitigation measures. FEMA officials also said that they have coordinated other agencies' efforts with DOE by telling DOE which agencies are involved in a particular area and what DOE might expect from them.

In addition, we noted Federal emergency preparedness policy is unclear. Confusion exists as to what constitutes an emergency and under what circumstances EEPER could be activated. In our prior report, we pointed out that guidance as to what constitutes an emergency does not exist, the statute only refers to periods of emergency. 1/ We found that a lack of specific

1/50 U.S.C. Appendix 2160(e).

legislative guidance with respect to this area has resulted in different interpretations as to the circumstances which could permit EEPER to be implemented. Some officials seem to believe implementation can only occur if there is a military or defense type emergency, while other officials have taken a broader interpretation to include emergencies which affect national security. Consequently, there is no consistent position on this matter. FEMA, as part of an ongoing study on emergency preparedness, is addressing this question. 1/

1/The Energy Emergency Preparedness Act of 1982, P.L. 97-229, requires the Attorney General, in consultation with the Secretary of Energy, to prepare a memorandum of law addressing, among other subjects, the reactivation of EEPER.

EFFECTS OF THE PROPOSED REORGANIZATIONAND REDUCED BUDGET ARE UNCERTAIN

The administration proposes reorganizing DOE, and it also plans to drastically cut DOE's emergency preparedness budget. The effect these actions may have on the ability to properly prepare the Nation for major electrical disruptions is uncertain.

IMPACT OF PROPOSED
REORGANIZATION IS UNCERTAIN

The impact of transferring electrical emergency preparedness functions from DOE to Commerce, as proposed by the administration's most recent reorganization proposal, is uncertain because specific details of such a transfer have not been determined. Questions of how the functions will be carried out, whether adequate authority will be given to program managers, and what priority and emphasis will be given to the program have not been specified.

In the administration's reorganization proposal, DOE's emergency preparedness functions would be transferred to Commerce with most other energy programs. According to the August 1982 reorganization chart, energy emergency planning, including that for electric power, will be handled by an Assistant Secretary (one of four) who would be four levels below the Secretary of Commerce. The administration's rationale for the reorganization is to improve the Government's ability to (1) perform contingency planning (2) develop energy emergency preparedness policies, and (3) maintain the strategic petroleum reserve.

DOE and FEMA officials are uncertain about the status of the reorganization or the impact it would have on electrical emergency preparedness activities. Some of these officials believe the reorganization may benefit these activities by centralizing emergency planning functions. Other officials believe it may harm these activities because of intra-departmental disagreements which might give energy issues lower priority. Until more details are known about where these activities will be located, who will be in charge of them, how much priority they will receive, and what resources they will be allocated, the potential impact of the proposed reorganization on electrical emergency preparedness functions can only be speculative.

EMERGENCY PREPAREDNESS BUDGET
HAS BEEN SHARPLY REDUCED

The administration's fiscal year 1983 budget proposes decreases in both money and staff to DOE's overall emergency preparedness program. We were told these decreases, coupled with the decreases experienced by the program in the fiscal year 1982 budget, could seriously erode the scope and, perhaps, the

effectiveness, of the program. Such reductions also place great reliance on the private sector to anticipate, prepare, and deal with electrical emergencies when they occur.

Although the fiscal year 1983 budget request does not contain detailed funding information for DOE's electrical emergency preparedness activities, available information indicates that the overall emergency preparedness program budget may be cut nearly in half--from \$10.2 million appropriated in fiscal year 1982 to \$5.4 million proposed for fiscal year 1983. At the same time, significant reductions in staff resources are also being made. For example, in fiscal year 1982, a staff of 94 people was authorized for the emergency preparedness program area. However, the fiscal year 1983 budget proposal would reduce this staff to 72. Such reductions in funds and staff are expected to terminate or reduce their efforts and activities.

In the emergency planning area, the 1983 budget is being reduced to \$840,000 from about \$2.9 million in fiscal year 1982. Activities mostly involved with national security are expected to be continued. About 30 staff years (6 less than 1982) will be spent mainly in this area. According to the budget submission, emergency planning and operating readiness activities for events such as utility system power outages will only continue on an as needed basis.

In the emergency operations area, the budget has been reduced by about 60 percent--from \$3.4 million in fiscal year 1982 to \$1.3 million in fiscal year 1983. DOE has only allocated 10 staff years in fiscal year 1983--half of the amount allocated for fiscal year 1982--to energy supply system network activities. These activities include doing periodic studies of the effects of electric utility network disruptions, preparing a reliability report required by law, and issuing international electric transmission export permits and licenses required by the Federal Power Act. Six staff years are allocated to three emergency reserve programs, one of which is EEPER, down from eight staff years in fiscal year 1982. Petroleum oriented data analysis activities will be maintained with 10 staff years. However, risk assessment and electric power supply and reliability activities will be reduced.

The reductions in money and staff may further affect DOE's ability to effectively perform some of its emergency preparedness activities. For example, lack of staff is already slowing progress in completing studies in the energy supply vulnerability area. Currently, only three or four staff members are working in the area, and some of these people are involved on a part time basis. DOE and FEMA officials told us that, if any further reductions in staff occur in the area, it will have a difficult time completing the work in an effective and timely manner.

FEMA HAS MADE LITTLE PROGRESS IN CARPYING
OUT THE OBJECTIVES OF THE NDER PROGRAM

FEMA, established under reorganization plan number 3 of 1978 and assigned functions by Executive Order 12148, July 20, 1979, replaced several agencies. ^{1/} It is responsible for establishing Federal policies for, and coordinating all civil defense and civil emergency planning, mitigation, and assistance function of executive agencies. FEMA also oversees NDER as described below.

FEMA is charged with setting policy and coordinating the NDER program under Executive Order 11179. The program is actually established and managed by the Federal agencies with emergency responsibilities. For example, EEPER is the electric part of DOE's NDER program. The NDER program is designed to recruit and train civilian executives and professionals to fill key positions that would be needed to handle national emergencies. Specific NDER units can be established by the various Federal agencies in order to maintain the agency's functions during an emergency. FEMA's specific role in NDER program includes: administering and coordinating the program, establishing recruitment and training standards, issuing rules and regulations; and submitting an annual report to the President on the status of the program.

FEMA has made little progress towards accomplishing its objectives under the NDER program. Basically, the reasons for the lack of progress is that FEMA can not require that agencies follow its policy directives and that it does not have the staff to administer and coordinate a program of this nature and size. For example, FEMA's NDER program staff consists of only 2 people to coordinate a program involving 10 agencies with a goal of having 10,000 members.

Aside from issuing its Annual Report, during 1981 FEMA's most significant program accomplishments in this area included establishing a recruitment program and developing plans for interagency training programs. Regarding the recruitment program, FEMA officials told us that they had set a permanent goal of recruiting 10,000 executives for the NDER program, but that they had no date by which this goal should be reached. They said they had not set a date because they could not hire executives, the agencies must do that. Further, they said that they cannot require that agencies establish an organization, or recruit and train executives. The program now has only 2,000 executives, which is far below the program goal and even substantially less than the 4,400 members it had in 1970. Because of a lack of concern for emergency preparedness, the program declined in the 1970s.

^{1/}The Federal Preparedness Agency, the Defense Civil Preparedness Agency, and the Federal Disaster Assistance Administration.

STATES ARE NOT PREPARED TO DEAL
WITH MAJOR ELECTRICAL EMERGENCIES

States are not capable of managing major electrical power disruptions of national consequence. Although States have generally enacted legislation which empowers the Governor to intervene in cases of a major disruption to a State's electrical infrastructure, most States we looked at have not established electrical emergency plans that specify how to respond to such incidents nor how to restore power to vital facilities quickly and effectively. The problem becomes even more acute when an electrical disruption crosses State boundaries. Should a major regional disruption occur, individual States would not be able to effectively handle the situation. As indicated in our prior report, an action by one State may adversely affect another State because the electric power is not tied to State jurisdictional boundaries. ^{1/} Further, as pointed out in our prior report, long-term power disruptions would most likely have National impact and States acting individually cannot determine what is in the Nation's best interest.

In general, States have enacted laws which give Governors broad statutory authority to deal with an electrical disruption within that State. For example, in Florida, the Disaster Preparedness Act of 1974 states that because of the possibility of disasters or emergencies of unprecedented size and destructiveness resulting from enemy attack, sabotage, or other hostile action or from natural or manmade causes, the Governor has the responsibility to deal with the dangers presented to the State and its people caused by disaster. Similar type legislation was enacted by the other States we visited during the review.

Although the Governor may have the authority needed to respond to an electrical emergency, the 11 States we contacted have not developed electrical plans to react to a major electrical disruption. We found that existing State electric emergency plans deal with State problems. Further, the degree of State involvement in planning varies. For example, Florida has developed an action plan to deal with statewide electrical emergencies. Although these plans have been developed in large part by the Florida Coordinating Group, which is a utility industry group, the State had input in preparing the plans. In contrast, the States of California, Georgia, Texas, and Illinois have not developed any action plans to handle a statewide electric emergency. They rely on the utilities. In fact, Georgia and California officials

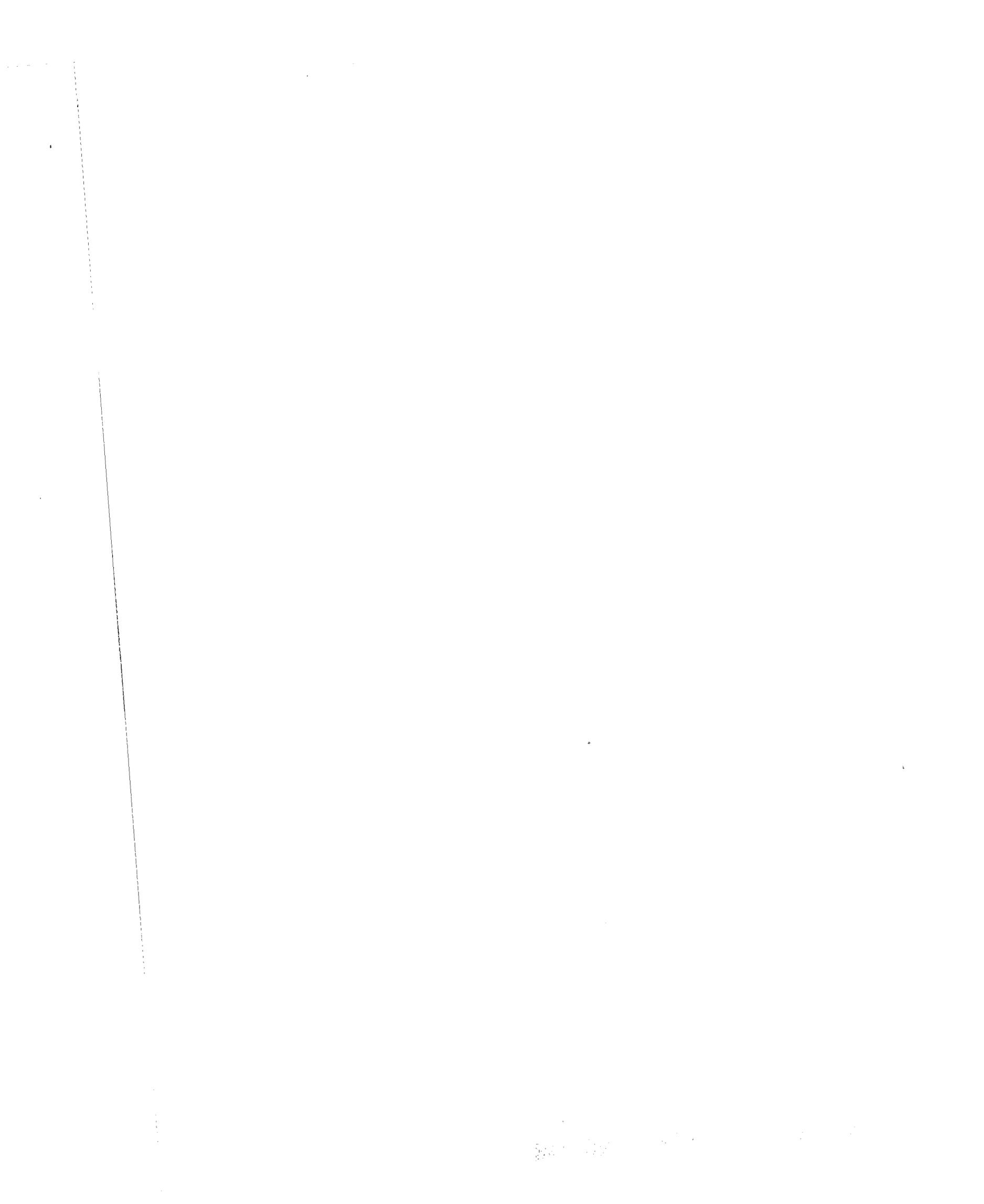
^{1/}It is possible that such an action may be viewed as an impermissible burden on interstate commerce. See, e.g., Public Utilities Commission v. Attleboro Steam & Electric Co., 273 U.S. 83 (1927).

told us their States rely on the large power companies to handle any electrical emergency.

Preparedness for responding to major electrical disruption which crosses State boundaries is inadequate. In discussions with State officials, we found that little coordination exists among States and between the States and the Federal Government as to how to react to a major electrical disruption which would affect several States or a region. For example, none of the State officials we spoke with about electrical emergency preparedness were aware of any coordination which has taken place in their regions. We did find, however, that regions have taken some steps to plan for electric power shortages. These efforts deal with allocating available electricity during certain types of shortages such as dry water years in hydroelectric generation, but do not deal with major power curtailments resulting from war, sabotage, or terrorism.

The most recent regional emergency planning initiative occurred on June 22, 1982, when six New England Governors adopted a resolution providing for a common approach among the States to deal with electric power shortage. The resolution is intended to be linked with operating procedures which would be used by the New England Power Pool if it were unable to provide enough electricity to meet the region's needs. Under the resolution, if voluntary conservation measures prove inadequate, the New England Governors could order a uniform reduction in consumption to be implemented by all customers. Such orders would be issued under the Governors' emergency powers.

The other initiative occurred in 1977. Four States in the Pacific Northwest--Washington, Oregon, Montana, and Idaho--agreed to provisions for a regionwide curtailment plan in case of a power shortage. Although these regional initiatives deal with electrical power shortages and not specifically with a major electrical disruption, it's the type of regional coordination which we believe is vital if a national electrical emergency preparedness program is to be effective.



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