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# Potential Impact of Licensee Default on Cleanup of TMI-2

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## ABSTRACT

Financial repercussions of the accident at Three Mile Island Unit 2 on the ability of the Licensee, Metropolitan Edison Co., to complete cleanup of the facility are examined. Potential impacts of licensee default on cleanup and alternatives to minimize the potential of bankruptcy are discussed. Specific recommendations are made regarding steps the Nuclear Regulatory Commission might take in keeping with its regulatory functions and its mission to protect the public health and safety.

# POTENTIAL IMPACT OF LICENSEE DEFAULT ON CLEANUP OF TMI-2

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# POTENTIAL IMPACT OF LICENSEE DEFAULT ON CLEANUP OF TMI-2

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## 1.0 INTRODUCTION

### 1.1 Purpose and Scope of Study

The impact of the March 28, 1979 accident at Three Mile Island Unit 2 (TMI-2) on the financial capability of the Metropolitan Edison Company (Met-Ed) to meet its responsibility for the long-term protection of public health and safety has been a topic of concern. 's concern was specifically expressed in a report by the Special Task Force on Three Mile Island Cleanup (Ref. 1). As a result, the Nuclear Regulatory Commission (NRC) staff was asked to eva- uate the potential impact on NRC resources if Met-Ed should declare bankrupt y before TMI cleanup is completed (Ref. 2).

This study examines the impact, if any, of possible bankruptcy on NRC resources in terms of a number of scenarios and provides information bearing on the financial aspects of Met-Ed's cleanup of TMI. In performing the study, the staff attempted to place both possible bankruptcy and the response to it in a broad context. The study describes what responses to financial distress besides bankruptcy are available and the different organizations that might respond to such distress and financial failure. Consideration is given not only to how Federal agencies (including the NRC) might respond to the burden of continuing cleanup in the event of Met-Ed bankruptcy, but also whether---and through what means---it might be possible to avoid or mitigate having the responsibility for cleanup fall on some party other than Met-Ed. Consideration is given also to direct involvement by NRC in the management of TMI-2 cleanup as a "last resort" that should occur only if no other reasonable alternative is available.

Section 1 is based on material in Appendices A through E and discusses briefly (1) the current (August 1980) status of the cleanup activities at TMI-2; (2) the nancial status of the operator and 50-percent owner of TMI-2, Met-Ed; of the other two owners of TMI-2, Pennsylvania Electric Company (Penelec) and Jersey Central Power and Light Company (Jersey Central); and of their parent company, General Public Utilities (GPU)*; and (3) the institutional relationships

*GPU is a public utility holding company. It has three wholly owned subsidiaries involved in the generation, transmission, and distribution of electricity. These are Met-Ed and Penelec, both chartered under the laws of the Commonwealth of Pennsylvania, and Jersey Central, chartered under the laws of the State of New Jersey. GPU owns all common equity of the three subsidiaries. Its shares are publicly held. GPU provides overall management services for the three subsidiaries. Met-Ed owns 50 percent of the Three Mile Island Nuclear Generating Station; each of the other two subsidiaries owns 25 percent. Unless otherwise noted, GPU and its subsidiaries are referred to collectively as GPU in this report. In terms of response to financial distress, Met-Ed, the most severely impacted entity involved, and GPU are treated almost synonymously because in most cases default by Met-Ed could lead to a cascading effect on GPU. However, where calculations are made, or financial figures are used and the reference is to Met-Ed, numbers involving only Met-Ed are used.

pertaining to the financial ability of Met-Ed to decontaminate the TMI-2 facility. The subsection on institutional relationships (Section 1.7) summarizes the authority and possible actions of other Federal agencies, the GPU companies themselves, and state bodies, including state agencies having regulatory authority over electric utilities, as well as the NRC's existing statutory authority to ensure the public health and safety in this context. Bankruptcy and its potential effects on the licensees' ability to continue cleanup are also summarized in this section and described more fully in Appendix D. Finally, this section considers the impact of TMI on ratepayers and on the power supplies for the GPU utilities and the general region in which they operate.

Section 2 examines three possible combinations of events with respect to the financial ability of Met-Ed to continue the cleanup. One of these postulations would culminate in bankruptcy by the utility and direct involvement in the cleanup by the Federal government, a state agency, or another utility. The impacts on the NRC brought about by the management of cleanup by other non-GPU organizations---private or government---as well as by the NRC itself are examined. The study postulates a situation wherein the Congress directs the NRC, in an extension of its present statutory authority in controlling the licensee's cleanup activities, to manage the cleanup itself *

In a situation of financial distress for Met-Ed, public policy might suggest that solutions other than assumption of cleanup activities by a new entity be considered. Therefore, Section 3 identifies a number of alternatives that could reduce the potential for bankruptcy or independently ensure a source of funds for TMI cleanup. One alternative would be Federal loan guarantees, possibly with state participation. Another alternative would involve Federal legislation providing for an assessment on utilities for all nuclear power produced. The funds collected through this assessment could be used for TMI-2 cleanup and for cleanup of other nuclear facilities after any future accident that qualified for the use of such resources.**

Other alternatives include voluntary action programs by electric utilities, Federal research and development funding, and defraying of taxes by states. NRC approval to restart TMI-1 would also substantially reduce the chances of bankruptcy.

The appendices included with this report range from an analysis of bankruptcy law as it applies to electric utilities, particularly in the present case, to copies of recent legislation which provided Federal assistance to ailing companies, as well as a detailed account of the cleanup of the TMI-2 facility. The list of references includes some of the documents reviewed by the staff. Significant material used in preparing this report includes testimony prepared for, and orders rendered by, the Pennsylvania Public Utility Commission (PAPUC) and the New Jersey Board of Public Utilities (NJBPU); transcripts from hearings before the Congressional nuclear oversight committees; legislation for the

*See NRC Plan for Cleanup Operations at Three Mile Island Unit 2 (NUREG-0698), July 1980, for a description of the NRC's current role in cleanup operations.

**A proposal such as this is reported to be favored by GPU (Washington Post, August 10, 1980; Wall Street Journal, August 11, 1980).

Lockheed, Chrysler, and West Valley Demonstration Project Federal assistance programs; legislation to establish a "superfund" to clean up hazardous substances; and the General Accounting Office (GAO) report, "Three Mile Island: The Financial Fallout."

The staff had discussions, mostly by telephone, with the staffs of other Federal agencies such as the Federal Energy Regulatory Commission (FERC) and Economic Regulatory Administration (ERA) of the Department of Energy (DOE), Environmental Protection Agency (EPA), and Office of Management and Budget (OMB), as well as with the staffs of GPU, Edison Electric Institute (EEI), Electric Power Research Institute (EPRI), and the nuclear insurance pools.

## 1.2 Summary of Current Status of Cleanup

The TMI-2 reactor is in a stable shutdown condition and poses no immediate health and safety problems. However, cleanup of the TMI-2 facility must proceed and must eventually be completed, regardless of whether the facility is returned to operation or decommissioned. The facility cannot be abandoned or left indefinitely in its present condition. The TMI site is not satisfactory for long-term waste disposal. The radioactive material in the plant must be removed and properly disposed of; otherwise, over a long period of time, it could reach the environment (Ref. 3).

The key areas involved in the TMI-2 decontamination and defueling are (1) maintaining reactor core cooling, (2) decontamination of auxiliary and fuel handling buildings, (3) decontamination of containment and reactor coolant system, (4) reactor inspection and defueling, (5) radioactive-waste processing, (6) solid-radioactive-waste management, (7) support facilities, and (8) radiological controls. Work in most of these areas is in progress; work in areas 3 and 4, except for some preliminary planning, has not yet begun. A more complete description of the accident and plans for cleaning up the site can be found in Appendix A.

In regard to costs of cleanup, for this study, the staff assumed a cleanup cost of $900 million. Because the plant was insured for $300 million, the net cost to GPU would be $600 million. The $900 million figure was based on figures in a recent GAO report (Ref. 4), and August 1980 figures from GPU confirmed the reasonableness of this estimate. (The GPU estimates range from $690 million to $1150 million, depending on which components of cost are included. If GPU's estimated restoration cost of $260 million is subtracted from the $1150 figure, the remainder is $890. (See Appendix A, Section 3, for details.))

## 1.3 Summary of Present Financial Condition of Met-Ed/GPU

The accident at TMI-2 had severe financial consequences for the owners of TMI. GPU's present cash resources are dependent on two external constraints---availability of bank borrowing and revenues set through rate regulation---matters over which the utility has some influence but little control. Unlike many businesses that can immediately reflect production costs and a profit margin when the product is sold, electric utilities can increase rates only

upon approval by the appropriate utility commission. Such approvals are generally preceded by a regulatory time lag that delays recovery of current costs.

GPU incurred substantially higher fuel costs following the accident in order to meet the energy demands of its service areas. Because these costs were not immediately recovered through rates charged to customers, the companies made up the cash deficit by issuing bonds and borrowing from banks. On June 15, 1979, GPU officials negotiated a revolving credit agreement (RCA) with a consortium of banks to provide short-term borrowing for the GPU system. It was not until May 1980 that the companies received authorizations from the state utility commissions to bill customers for the bulk of these additional costs. Without this rate relief, Met-Ed and Jersey Central possibly would not have been able to meet cash obligations as they arose.

The rate relief granted in May allows the utilities to cover current fuel costs and to recover from customers, over an 18-month period, most of the earlier fuel costs. The net deferred energy balance*, as of July 1980, is about $240 million; by the end of 1980, the deferred energy balance will have been reduced to about $200 million; and by the end of 1981, to about $50 million.

These utilities have other financial problems. Substantial fixed costs are not recovered through revenues; thus they continue to be funded by shareholders for TMI-1 and -2 because neither unit is now in the rate base of any of the three utilities. Costs of servicing the debt and preferred stock, depreciation expense, and fixed operation and maintenance expenses related to these two units are about $150 million per year. In addition, the utilities are not allowed to earn a rate of return on their TMI investment. Therefore, GPU does not receive any return on its common equity investment in the TMI station. Funds generated by non-TMI property do not cover the Met-Ed's total fixed operation and maintenance costs. Prior to September 1980, it was projected that, in regard to Met-Ed's finances, the next critical time would come early in 1981 when Met-Ed's need for cash would exceed its borrowing limit. (See Table 5-1 of Appendix B for rate making assumptions and Figures 5-1 through 5-5 of the same Appendix for a forecast of short-term debt and deferred energy balance.)

On July 29, 1980, Met-Ed filed a request with the PAPUC for an emergency rate increase of $35 million to go into effect on September 1, 1980 and a $76.5 million permanent increase in revenues. On August 20, 1980 the Administrative Law Judge issued his recommendations denying the interim increase (Ref. 5). On August 28, 1980 the PAPUC adopted this recommendation into its interim order (Ref. 6). In response to this action, the consortium of banks participating in the RCA reduced Met-Ed's credit limit from $105 million to $91 million. Met-Ed presently has $83 million of borrowings outstanding under the

*Deferred energy balance refers to the energy costs incurred by the utilities but not recovered when incurred.

RCA (Ref. 7). Because of its inability to finance, GPU announced expense cutbacks, including the layoff of 1000 personnel, some of whom are employees at TMI (Refs. 7, 8). On September 18, 1980 the PAPUC issued its Prehearing Statement and Order and reiterated: "These cleanup costs and expenditures not covered by insurance ultimately are the responsibility of the company's stockholders and/or Federal Government; however they are not the responsibility of the ratepayers." Discussions regarding the September 18th order were taking place among the parties involved at the time this report was being written. (See Section 6 of Appendix B for more details about Met-Ed's financial situation.)

Of particular concern to the NRC is the apparent lack of provision for obtaining funds to clean up unit 2. GPU will receive total insurance proceeds of up to $300 million. Of this, $150 million has already been received, and the remaining insurance money is expected to be used in the next 2 or 3 years. However, a portion of the costs attributable to TMI cleanup and safe-shutdown maintenance may not be covered by insurance. In addition, reimbursement of the insurance available is subject to delays in recovery caused by the need for documentation of expenses incurred and its audit and approval by the insurers. Met-Ed must first spend funds for cleanup before it can provide the documentation for reinbursement. Because insurance proceeds are not available as cleanup expenses accrue, other sources of funds are required. These sources have not been identified.

The consortium of banks providing the short-term credit under the RCA is monitoring the cash position of the three subsidiaries, as well as of GPU. The banks carefully weigh requests to increase borrowing, even for temporary increases within the contracted credit ceiling. They have expressed serious concern over removal of TMI-1 from the rate base and over any other modifications which adversely affect earnings and thus impede the capacity of the borrowers to raise funds in the public securities market (Ref. 8). The proceeds of the sales of long-term securities must eventually be used to repay the short-term RCA credit.

GPU is vulnerable to a number of external events including (1) increased costs, particularly increased fuel costs, not covered in customer charges; (2) an extended time period without TMI-1 in the rate base; (3) loss of confidence by the bank consortium; (4) delays in receiving rate increases; and (5) delays in receiving insurance payments. Thus, the GPU financial situation is uncertain and is not expected to improve unless TMI-1 is restarted and the financial repercussions from the TMI accident begin to subside.

Although the TMI accident had a great impact on GPU and its subsidiaries, its cost is only one of several major expenditures required over the next several years. The postulated $600 million cost of TMI-2 cleanup (net of insurance proceeds) is about 15 percent of GPU's total major capital investments through 1986. Table 5-2 of Appendix B shows these projects and cost. A more complete discussion of GPU's financial situation can be found in Appendix B and in the GAO Report (Ref. 4), as well as in a report of the Subcommittee on Nuclear Regulation of the Senate Committee on Environment and Public Works, "Nuclear Accident and Recovery at Three Mile Island --- a Special Investigation."

## 1.4 Impact of the TMI Accident on Ratepayers

This section assumes no bankruptcy. If bankruptcy occurs, the following analysis is not valid. The apportioning of cleanup costs between ratepayers and equity holders would depend on the decisions of the bankruptcy court, which cannot be predicted at this time.

Unless external assistance in the financing of cleanup costs is provided, the cost of the cleanup must eventually be passed on to either current or future ratepayers in one form or another (i.e., passed through to the current ratepayers as cleanup costs accrue, or to future ratepayers in the form of fixed charges on the debt incurred as a result of cleanup costs or in the form of higher cost for future capital).*

The average cost of electricity to ratepayers in 1979 ranged from 42 mills per kilowatt-hour (42 mills/kWh)** for Met-Ed to 52 mills/kWh for Jersey Central. If the cleanup costs are passed through as they accrue over a 5-year period, these unit costs for this period would increase by about 7.4 mills/kWh for Met-Ed and about 2.5 mills/kWh for Jersey Central and Penelec***. The higher unit cost for Met-Ed results from its bearing the larger portion of cleanup cost and its having lower electric sales. (See Appendix C, Table 2-1.)

For the scenario where cleanup costs plus interest are accumulated over the cleanup period, capitalized at the end of cleanup, and put in the rate base, the 1st-year unit cost is slightly less than the costs calculated in the example above, and the unit cost would decrease each succeeding year as sales of electricity grew. The 30th-year unit cost would be about 20 percent of the 1st-year cost. Different assumptions would, of course, produce different unit costs, but the relative order of magnitude would remain about the same. A more complete appreciation of the relative magnitude of the cleanup cost and the impact of this cost on ratepayers may be obtained by comparing the average cost of electricity for a number of utilities in the region. (See Appendix C, Table 2-2). In 1978, only 3 utilities had lower average costs than Penelec and Met-Ed; Jersey Central's costs were the 5th highest of 13 utilities. Following the accident, the cost of electricity to GPU system customers has remained in the range of other utilities in the region, even though the system purchased substantial amounts of power to replace the lost generating capacity of TMI-1 and -2. The cost has remained in this range primarily because the

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*Cf. PAPUC Order of June 19, 1979, which stated: "The Commission is of the view that none of the costs of responding to the [TMI] incident, including repairs, disposal of wastes, or decontamination are recoverable from ratepayers."

**1 mill/kWh = 1 $/MWh.

***These calculations are based on cleanup costs (net of insurance) of $600 million (see Section 1.2). If ultimate restart of TMI-2 is assumed to be ruled out, savings in cleanup costs in addition to the $260 million for restoration identified by GPU might also be possible. Such savings would affect these calculations.

utilities were not allowed to pass on to their customers immediately the full cost of replacement power. The rate increases granted by the state commissions prior to April 1, 1980 have largely reflected energy clause adjustments that were not TMI-related or that were offset by the removal of TMI-2 from the rate base. Figure 2-1 of Appendix C compares typical electric bills for a residential customer purchasing 500 kWh of electricity per month from various neighboring utilities in April 1, 1979 and June 1, 1980. The chart also shows what costs would be if rate increases filed by the utilities as of June 1, 1980 (and July 29, 1980 for Met-Ed) are approved. Although Jersey Central's rates are among the highest in the region, rates for Met-Ed and Penelec are still favorable when compared to most other utilities.

Another perspective can be gained from the comparison of the estimated cost of generating electricity at TMI-2 before the accident with the estimated cost after cleanup and restart. (This, of course, assumes restart of TMI-2 which is an issue to be resolved in the future.) The cost of cleanup plus the interest cost on capital invested in TMI-2 during the cleanup period will more than double the cost of generating electricity from TMI-2. The total cost, including cleanup, is about 72 mills/kWh (See Appendix C, Table 2-3), which is in the range of the estimated cost of generation (65 to 74 mills/kWh) from new coal-fired units coming on line in the late 1980s in the New Jersey/New York and Middle Atlantic region, and about 20 percent higher than the estimated cost of generation from new nuclear units (57 to 64 mills/kWh) coming on line in the same time period and region (Ref. 9). The above analysis assumes TMI-2 will be put back into service. For the situation where TMI-2 is not restarted, it is assumed that the total cost of about $1.9 billion---including initial investment in TMI-2, cleanup cost and interest, (see Section 2.0, Appendix C)---is passed through to the ratepayers in the proportion of the utilities' ownership of TMI-2. It is also assumed that this cost would be capitalized and amortized over 30 years at 12 percent per year. This would amount to an annual cost in millions of $57, $114, and $57 for Jersey Central, Met-Ed, and Penelec respectively. If these costs are divided by the 1979 electric sales, the unit cost would be 4.46 mills/kWh, 14.10 mills/kWh, and 5.16 mills/kWh respectively for the 1st year. The 30th-year cost would be about 20 percent of 1st-year cost. The Pennsylvania and New Jersey gross-revenue taxes would increase these amounts about 15 percent. A more complete discussion of the impact on ratepayers can be found in Appendix C.

## 1.5 Power Supply Considerations Associated with the Unavailability of the TMI Nuclear Station

The GPU subsidiary utilities are members of the Pennsylvania-New Jersey-Maryland Interconnection (PJM). Through its member companies, the PJM controls the generation, transmission, and interchange of electric power within its control area. Subject to flow constraints imposed by system reliability, the PJM system draws upon all the resources available to member companies and minimizes the incremental cost of electricity to all parties. Because of the high degree of coordination among member utilities and because electricity from the PJM system is centrally dispatched (i.e., from a single point), reliability is determined primarily at the regional level.

The nonavailability of the TMI units (with generation capacity totalling 1656 MWe) is not expected to create reliability problems for the PJM system for at least the next 2 years.* PJM's planned reserve margins during the summers of 1981 and 1982, without the TMI nuclear station, are estimated at 27.9 percent and 27.8 percent respectively. PJM has established 22 percent as adequate to maintain minimum acceptable reliability; therefore, the PJM system should have adequate capacity to meet peak demand during this period. (See Appendix C, Section 3, for a more complete discussion of this topic.)

## 1.6 Bankruptcy

Relevant bankruptcy law and the effect of its possible application to the affairs of GPU and the TMI-2 cleanup are examined in detail in Appendix D. As indicated in this Appendix, the problems which led to the licensee's financial distress---the need to buy power from outside sources and the costs of the TMI-2 cleanup---would continue. Bankruptcy experts who have considered the subject agree that although bankruptcy is an option available to a company that is undergoing financial difficulties, bankruptcy would not be a desirable solution to accomplish the cleanup of TMI-2. (See specifically Section 2.4 of Appendix D).

Further, it is not possible to predict with certainty how much, if any, of the licensee's assets would be available for cleanup and how much would be distributed to the licensee's creditors. If sufficient funds were not available to finish cleanup, an entity other than the current licensee would have to assume the responsibility for cleaning up the site.

The potential for bankruptcy by GPU is affected by a number of organizations: principally, the Pennsylvania Public Utilities Commission (PAPUC) and the New Jersey Board of Public Utilities (NJBPU), which authorize rates and earnings; the consortium of banks, which decides on short-term credit limits for each company; and the NRC, which will decide if and when TMI-1 will be authorized to restart.

## 1.7 Institutional Considerations

The primary responsibility for the safe operation of a nuclear power plant rests with the utility that is licensed to operate the plant. This includes the responsibility to properly decontaminate, safely shutdown, or decommission the facility under a plan approved by the NRC. While the responsibilities of a licensee may be terminated only with NRC approval, as a practical matter, the ability of a bankrupt licensee to carry out these responsibilities is questionable.

Appendix E describes what statutory authority exists to enable government (Federal and/or state) to take actions necessary to protect public health and safety. The conclusions of this analysis are discussed in the following paragraphs.

*TMI-1 is currently scheduled to be back in operation by 1982. Thus, TMI's negative impact on power supply will be substantially reduced in subsequent years.

At this time, neither the Federal government nor the states have a general program for the government itself to clean up potentially hazardous substances involving a threat to the public health and safety. While the Federal government has made specific provisions for funds to assist states in cleanup in certain instances such as the West Valley Demonstration Project Act of 1980 and legislation with respect to abandoned uranium mills in Colorado, for the most part, existing authority at the Federal level is narrowly focused (on oil spills and certain hazardous substances), and, even in the areas covered, the funds available for governmental action are modest. At the state level, governmental action relies heavily on law suits and enforcement actions in the form of civil penalties or criminal prosecution or on injunctive action in the event certain statutes are violated. These remedies would not appear to be adequate, however, if the responsible party is bankrupt and funds are needed for steps to be taken by someone to protect the public health and safety. In view of the inadequacies in existing law on such matters, the Congress has been considering "superfund" legislation which would provide for Federal and state roles, with funds made available so that emergency measures could be taken to protect the public health and safety from certain hazardous materials which are spilled or which are located in inactive waste dumps. It is not known whether this legislation will be enacted during the 96th Congress, and, if it is, whether it would cover any cleanup expenses at a disabled nuclear power plant. From the information available, however, it would appear that the superfund legislation is not intended to cover a site-specific situation where a potential health and safety problem is presented by a disabled nuclear power plant licensed and regulated by the NRC. The studies associated with the superfund legislation do confirm the conclusion reached by the staff's independent research, i.e., that existing statutory authority does not provide a basis for governmental assistance to GPU (see Appendix E).

The NRC, under existing law, has the authority to act to ensure that the public health and safety will be protected should the utility be unable financially to carry out its responsibilities as a licensee Except in a situation of extreme importance to the health and safety of the public, direct NRC involvement in and assumption of cleanup activities --which would be without precedent in exercising regulatory functions---are not clearly authorized under existing law. Nonetheless, as discussed fully in Appendix E, the NRC has statutory authority to revoke licenses, take possession of special nuclear material, and operate a facility. In addition, the NRC does have the final say as to who may assume the responsibility of a license.

The state laws relating to the functions and authority of PAPUC and NJBPU provide a means, within reason (considering the economic burden on the consumers), for ensuring that the utility is not placed in a financially perilous position, so long as the utility is prudently managed. The PAPUC and NJBPU exercise the traditional state authority to fix the rates so that an electric generating utility is able to obtain the revenues needed to carry out its responsibilities.

## 2.0 POTENTIAL IMPACTS OF LICENSEE DEFAULT ON CLEANUP

As discussed below, several different organizations might possibly continue the cleanup of TMI-2 in the event of default by Met-Ed. This section examines events leading up to possible assumption of cleanup duties by another organization, the resource requirements of the organization assuming cleanup responsibilities, and the different possible impacts on the NRC, depending on the organization that assumes the cleanup responsibilities if Met-Ed (and its parent company, GPU) goes into bankruptcy or otherwise defaults on its obligations to decontaminate TMI-2. In order to determine the range of impacts, including those on the NRC's essential responsibilities to protect the public health and safety with respect to licensed nuclear activities, this section also examines a situation in which Congress directs NRC to complete the decontamination of the facility.

### 2.1 Possible Scenarios

Over the next few years, events relating to TMI-2 cleanup could follow any one of three scenarios. Each of these scenarios may occur by itself, or events may force one scenario to end and another to begin.

(1) The state public utility commissions provide rate relief to enable the licensee to meet all of its financial requirements. It is assumed in this scenario that GPU will demonstrate the initiative and ability to recover from the TMI accident and that PAPUC and NJBPU will set rates sufficient to allow GPU to remain solvent and to finance TMI-2 cleanup. Under this scenario, NRC's role would be essentially to monitor GPU's financial condition, as well as to exercise its present regulatory oversight responsibilities to ensure protection of public health and safety. This financial monitoring role should be comprehensive enough to provide advance notice of increased financial distress or default.

(2) GPU and/or the state public utility commissions request and receive Federal financial assistance. It is assumed in this scenario that the Federal government extends loan guarantees, establishes a system for assessment of other utilities, or provides grants or other forms of financial aid at the request of GPU or PAPUC and NJBPU. (See Section 3). As under scenario (1), the NRC would monitor both GPU's ability to finance TMI-2 cleanup and those activities related to obtaining financial assistance. Once financing were obtained, it is expected that periodic reports would be requested on the status of cleanup, including cost estimates, schedules, problem areas, standards, etc.

(3) Met-Ed defaults on cleanup. Default* could occur if, for example, the state public utility commissions deny rate increases adequate to cover cleanup, banks refuse to extend short-term credit, there is extended

*In this report, "default" is used to mean an inability of the utility to meet ongoing expenses.

uncertainty as to the eventual restart of TMI-1, or other relief is not forthcoming. One result of such default could be bankruptcy. If bankruptcy occurred, funds might not be available to clean up TMI-2. Default or bankruptcy would create a perplexing state of affairs that would probably evolve into one of the following alternatives:

(a) The utility in receivership, another utility, or a state agency that assumes from Met-Ed the responsibility to provide electric service would also take over the TMI facility and assume responsibility for cleaning up TMI-2. In this situation, NRC's role (aside from the licensing of the new entity as discussed below) would be to continue to monitor developments and to evaluate the ability of the new company or agency to finance the cleanup.

(b) The utility in receivership, another utility, or a state agency that assumes responsibility to provide electric service, but does not assume the responsibility for the cleanup of the TMI-2 facility, thus requiring governmental action (e.g., by state agencies, an agency of the Federal government, or both) to protect the public health and safety. If an organization that was not part of the Federal government assumed cleanup responsibility, NRC's role, in addition to licensing, would be to monitor cleanup. If Congress gave the responsibility and the funds for cleanup of TMI-2 to a Federal agency other than NRC (such as DOE or EPA), NRC's role would be unchanged. It is only in the event that the lead role for cleanup is given to NRC that the impact on NRC would be drastically different.

## 2.2 Options Available to Federal Agencies for Managing Cleanup

Two basic approaches are available with respect to cleaning up TMI-2. Conceivably, either could take place without any major interruption of the cleanup process. Alternatively, if necessary and possible, cleanup of the facility might be suspended for a short time. Even if the cleanup of TMI-2 were suspended, significant surveillance and maintenance activities would be required on a continuing basis to ensure continuation of the safe-shutdown status.

The first option assumes that a Federal agency would contract with some other party or parties, possibly (a) former employees of Met-Ed or GPU, their contractors, or other private contractors; (b) other Federal agencies (or national laboratories); or (c) state agencies. The second option assumes that an agency would do all of the work itself, with its own employees.

No matter which option were chosen, as indicated earlier, financial and manpower resources required to complete cleanup would be substantial. Currently, GPU and its contractors have approximately 1250 people at the TMI-2 site for cleanup operations. It is estimated that a maximum of 2500 people could be involved at any one time during cleanup. (Normal operation of the total TMI site required 250 people.) Keeping TMI-2 in a safe-shutdown mode pending cleanup would require an estimated 100 or 150 people to run the electrical, coolant, and other necessary systems, and to maintain proper radiological and security controls.

The resources needed for cleanup would be used over a period of several years. Although an agency might have to take over the cleanup process at any stage (depending on when, if ever, Met-Ed and GPU were to default), the more difficult and more costly cleanup operations are projected to come late in the cleanup process.*

This suggests that an agency could be responsible for large expenditures, even if it were to take over cleanup several years from now after cleanup had been proceeding.** If Congress authorized an agency to provide only for cleanup and not for possible future restart of the unit, different schedules and less expensive destructive, rather than nondestructive, cleanup techniques might be utilized.

The cleanup steps described in Appendix A have three major implications for any cleanup activities that might be assumed. First, because of uncertainties about the condition of some of the plant it is difficult to predict the total resources needed for cleanup until additional steps in the cleanup process have been completed. Second, the timing of each step of the cleanup process must be considered. If an agency were to take over management of cleanup in the middle of a particular step, it would be important for it to have adequate resources and staff in place to complete that step. (For certain steps, it will be particularly important to complete that step so that cleanup does not actually retrogress). Third, regardless of the organization that carries out the cleanup, neither the sequence of cleanup steps nor the total resources required for that sequence should be significantly affected.

### 2.2.1 Funding Considerations

Funding of the magnitude required for completing TMI cleanup would require special consideration. An agency probably would require Congressional approval for all funding activities initiating new programs. (It may be assumed that TMI-2 cleanup would be considered a new program and thus would be subject to Congressional approval from the first dollar.)

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*The report of the NRC special task force on Three Mile Island cleanup identified the procedure of first cleaning areas of lesser contamination and working toward cleaning areas of higher contamination. The staff report (Ref. 1) further indicated

> ...neither the precise decontamination sequence nor the precise radiological impact of any of these individual steps of the process can be predicted with certainty at this time. Generally each major step of the decontamination process will require the previous step to be completed before specific detailed plans for the next step can be made. This is because each major decontamination operation requires data that usually cannot be obtained until the previous step of the process [is] essentially completed and personnel access is possible.

**Note cashflow projections prepared by Bechtel (Ref. 10) and Theodore Barry & Associates (Ref. 11). Both estimates indicate that cleanup costs would probably begin to slacken after the second year after entry into containment. However, if cleanup is delayed or unforeseen problems are encountered, the requirement for funds would be extended to later years.

Part of the cleanup costs to be assumed by the Federal government might be offset by the remainder of the proceeds from the $300 million in property insurance held by Met-Ed for TMI-2. However, if these funds were available, they would not be credited to the particular agency but would be paid directly to the Federal treasury. Because of the complex relationships entailed in most bankruptcy proceedings or defaults, such remuneration to the government is uncertain. Moreover, Met-Ed has already collected over $150 million in property insurance proceeds and would probably collect considerably more before a Federal agency were to take over cleanup.

It is also possible for the Executive branch to request, well in advance, a contingency authorization and appropriation from Congress to begin to fund cleanup in case of Met-Ed/GPU default. This approach would give the Executive branch increased flexibility to obtain necessary funding on an interim basis until Congress could consider and enact full-funding requirements. But any funding enacted prior to actual need could be difficult to justify, unless the financial collapse of the licensee were viewed as inevitable. Moreover, its very passage could be interpreted as a desire and encouragement for the Federal government to assume more responsibility and become more actively involved in TMI cleanup, rather than as a contingent response to a potential problem.

Once an agency received authorization from Congress for expenditures for cleanup, either it would have to hire additional staff to continue cleanup or it would have to contract to have the work performed. As noted above, it could contract with other Federal agencies or national laboratories; state agencies; or private contractors, including GPU's present contractors and trustees for GPU.

### 2.2.2 Option A: A Federal Agency Is Responsible for Cleanup but Contracts for Some or All Work

Even if a Federal agency were to contract for some or all work, the impact on it would be substantial. If the agency were to monitor cleanup through a contractor, 50 to 75 managers would be required to oversee contractor cleanup at the site for the duration of cleanup. These people would have to be reassigned from current programs. If it became necessary to delay cleanup, maintaining the reactor in a stable condition would still require immediate action when the agency took over cleanup. If overall contractor assistance were not immediately available, an interim requirement of at least 100 to 150 contractor employees (or even agency staff members) would appear to be needed to manage the maintenance of the reactor in a stable condition for a short time until contracting for cleanup could be completed. Neither contracts with private parties nor letters of agreement with national laboratories or other government agencies would be likely to cause any significant delay in, or present an administrative impediment to, assuming TMI-2 cleanup operations. However, as previously discussed, the availability of adequate funding authority is a major concern.

### 2.2.3 Option B: A Federal Agency Is Responsible for Cleanup and Performs the Work Itself

It is difficult to visualize how even a large Federal agency could assign from its own staff the approximately 1250 to 2500 persons estimated to be required to perform cleanup. Undoubtedly other essential work of the agency would have to be curtailed, even if the agency had people with necessary operational or cleanup skills and experience.

One way an agency could handle the cleanup would be to hire directly the personnel necessary to do the job. Because of the need for continuity both in terms of safety and cost, it might hire GPU licensee personnel or employees of GPU contractors who were already involved in cleanup. This, of course, assumes that these persons would be willing to join the agency and that adequate funding were made available.

Such hiring in itself would be a massive undertaking. If the lead time were sufficient, the agency could assimilate the requisite number of employees relatively smoothly. Otherwise, problems with standard personnel procedures and organizational structure could result. For an agency to exceed its personnel ceiling on short notice, either prior granting of emergency authority by the President or prior specific Congressional permission (since it is not clear that the President presently has the power to grant such emergency authority) would be required. Temporary positions could be established for all cleanup personnel under a few broad functional statements; these temporary appointments could be renewed indefinitely until cleanup was completed.

Two other complications of this approach should be mentioned. It would be necessary to grant special waivers of security clearances where these were required by the agency. Also, in many cases it might be necessary to waive the conflict of interest provisions (e.g., stock ownership) of the agency's regulations.

Another theoretically possible approach would be to hire cleanup employees as "personal service consultants." However, while this method may be appropriate to obtain certain skilled workers needed for the cleanup, it was not intended to be used for the mass hiring envisioned here. Rather, the personal service consultant program is designed to allow the hiring of a limited number of special experts for limited periods of time who do not work under the normal supervisory hierarchy.

## 2.3 Impact on NRC

In a letter to Ms. Susan Shanaman, Chairman of the PAPUC, NRC Chairman John Ahearne stated:

> ...In the event of bankruptcy, we would expect that a receiver or trustee would be appointed immediately to continue the essential services being provided by Metropolitan Edison. We would expect the receiver or trustee to assume Metropolitan Edison's responsibilities as licensee for Three Mile Island, including continuation of cleanup operations at the site. The NRC would then exercise supervisory control through the receiver.*

*See Appendix F for the full text of letters to Ms. Shanaman, from Chairman Ahearne and Stuart E. Eisenstat, Assistant to the President for Domestic Affairs and Policy. See also Section 1.7.

2.3.1 NRC Licensing Requirements

The preceding sections have considered two options available to a Federal agency that would be directed by Congress to undertake the cleanup of TMI-2. A state agency, GPU receiver, a trustee for GPU under bankruptcy reorganization, or another utility undertaking this responsibility would face much the same requirements as those outlined above for Federal agencies, in terms of funding and personnel resources. Options similar to those suggested for Federal agencies---namely, contracting and direct hire---also suggest themselves as possible alternatives for non-Federal agency entities. Regardless of the non-Federal organization which would undertake to continue the cleanup, the Atomic Energy Act requires that such an organization be licensed.*

Financial failure of a licensee would provide grounds for immediate revocation of the license to operate under Section 186a of the Atomic Energy Act, 42 U.S.C. 2236a. Subsection 186c would then empower, but not require, the Commission to

> ... immediately retake possession of all special nuclear material held by the licensee. In cases found by the Commission to be of extreme importance to the national defense and security or to the health and safety of the public, the Commission may recapture any special nuclear material held by the licensee or may enter upon and operate the facility....Just compensation shall be paid for the use of the facility.

Under the circumstances being considered, Section 184 of the Atomic Energy Act, 42 U.S.C 2234 is also relevant. This section provides that no license granted under the Atomic Energy Act "shall be transferred, assigned or in any manner disposed of, either voluntarily or involuntarily, directly, or indirectly, through transfer of control of any license to any person, unless the Commission shall, after securing full information, find that the transfer is in accordance with the provisions of this Act, and shall give its consent in writing...."

This section simply means that no licensee may terminate its responsibility under an NRC license without the prior approval of NRC and that no other person may assume the responsibility of an NRC licensee without prior NRC approval. This authority is applicable even though the impetus for such a transfer is under another law, such as the Federal Bankruptcy Law (P.L. 95-598, 11 U.S.C. S.101 et seq.) or an action by the state public utility commission which could affect the role of the licensee as a public utility (see, for example, 66 Pa. C.S. Chapter 15).

*Neither the Atomic Energy Act of 1954 nor the Energy Reorganization Act gives the NRC general licensing jurisdiction over DOE's activities in the nuclear field. Section 202 of the Energy Reorganization Act does provide, however, specifically for the NRC licensing of certain categories of DOE nuclear facilities. Any direct DOE involvement in TMI-2 operation would not appear to fall under any of the categories listed in Section 202 for which NRC licensing is required. Therefore, any legislation which would assign DOE a direct role in the TMI-2 cleanup should also provide for NRC licensing, or the equivalent, of such DOE activities.

If Met-Ed or GPU were to default on its obligations for TMI cleanup, the NRC is likely to have some warning between the time when default became inevitable and when it actually occurred. Conceivably, the NRC could begin the process of license revocation and transfer before actual default, at the time when it first receives warning of imminent bankruptcy. To protect public health and safety, the NRC would want to avoid the regulatory limbo---even if only for a few days---of having the license in the name of a defunct licensee. If necessary, appropriate Commission orders could be prepared for issuance in the event the licensee becomes financially unable to carry out its responsibility to protect the public health and safety.

The impact on NRC on handling relicensing of a new entity---private, state, or Federal---to assume GPU's cleanup responsibilities would appear to be manageable and within its present manpower and funding resources.

2.3.2 Impact on the NRC Where It Is Required To Manage Cleanup

The NRC has discretionary authority to operate a nuclear facility under Section 188 of the Atomic Energy Act, 42 U.S.C. 2238. This section provides

> Whenever the Commission finds that the public convenience and necessity ...requires continued operation of a...facility the license for which has been revoked pursuant to section 186, the Commission may, after consultation with the appropriate regulatory agency, State or Federal, having jurisdiction, order that possession be taken of and such facility be operated for such period of time as the public convenience and necessity or the production program of the Commission may, in the judgement of the Commission, require, or until a license for operation of the facility shall become effective. Just compensation shall be paid for the use of the facility.

The "take-over" sections (Sections 186 and 188 of the Atomic Energy Act) have never been invoked for a nuclear power plant. Further, no regulations, guides, or policy statements specify how this authority is to be exercised. The legislative history of these sections is similarly unenlightening. Nevertheless, on their face, these statutory provisions clearly give the Commission the authority to act if, in its judgment, action on its part is needed to protect the public health and safety. Moreover, it would be reasonable to interpret this authority as being available for such actions as the Commission deems necessary to repair or decontaminate a damaged nuclear power plant for which the licensee is financially unable to carry out its license responsibility.

In general, the options, resources, and procedures available to Federal agencies described in Sections 2.2.1 though 2.2.3 are applicable to a certain degree to the NRC if Congress were to direct NRC to undertake the management of the cleanup itself under the take-over section or under separate direction provided through new legislation.

Neither the Atomic Energy Act nor current authorizations for the NRC include any funds for the NRC to use to ensure---either by direct government action or

by indirect financial support to the licensee---that necessary actions other than the traditional regulatory actions are taken to protect the public health and safety. This is true even though it has been stated repeatedly that public safety considerations are paramount in licensing activities under the Atomic Energy Act (Ref. 12). Although this statement may be correct in the context of the licensing process and a licensee's responsibilities, it does not mean that the NRC itself has the resources to take whatever steps are necessary to ensure public health and safety should a licensee be unable to carry out its responsibilities under the license.

The NRC is a relatively small agency (a staff of slightly more than 3000 persons) which is charged with protecting the health and safety of the public with respect to all operating licenses, as well as construction permit and license applications. Any significant reassignment of personnel from these tasks would seriously impair NRC's ability to continue these responsibilities.

Further, a survey conducted within the NRC by the Office of Inspection and Enforcement in May 1980, albeit limited in scope, determined that there are approximately 50 staff members with managerial experience at commercial or military reactor facilities, 40 members with commercial operator experience, 125 members with military operator experience, and 50 members with health physics/chemistry experience. Cleanup or decontamination experience was not explicitly identified in the survey. It is doubtful that, even given these personnel with their identified experience, the NRC would be able to assume the burden of cleanup. Consequently, NRC could not consider taking over cleanup responsibility without additional staffing or financial assistance.

In terms of relative size, staff experience, and impact on other necessary duties to protect the health and safety of the public, the impact on the NRC---in comparison with, for example, DOE and its civilian national laboratories---would appear to be especially severe. Consideration of the public interest and the cleanup of TMI-2 in relation to the NRC's other important health and safety regulatory responsibilities should be weighed carefully before the NRC is given cleanup responsibilities.

# 3.0 ALTERNATIVES TO MINIMIZE THE POTENTIAL OF BANKRUPTCY

The potential impact of bankruptcy on TMI cleanup leads to the conclusion that other alternatives should be examined to reduce the potential of bankruptcy or to independently ensure cleanup funds. It may be that Federal and state agencies and interested members of the financial community---while desiring to foster the cleanup of TMI, continued electric service to customers, and repayment of outstanding loans---do not want to give the appearance of assisting or "bailing out" the licensee. The danger is that in attempting to be indifferent to the health or survival of the entity known as Metropolitan Edison Co.---through taking official actions or avoiding certain actions---the necessary wherewithal to accomplish specific goals such as cleanup may be withheld.

Actions in protecting the public health and safety are more likely to be successful if they are carried out by a financially healthy organization rather than by one facing continuous financial uncertainty. Further, ending the company's existence or keeping it financially unsound would not appear to be an objective of the agencies or organizations that affect the financial viability of Met-Ed. Yet, a policy of official indifference to the overall financial health or existence of the company could have a punitive result. That result, in addition to harming management, stockholders, and creditors of the company, would ultimately fall on the ratepayers and taxpayers.

Just as the state utility commissions do not wish to write a blank check on the ratepayers, Federal agencies are reluctant, and indeed have no authority, to write a blank check on the U.S. Treasury, nor do the banks want to exceed their fiduciary duties. Hearing orders, testimony, and the exchange of letters between agencies demonstrate that each party is sensitive to the limits of what it might do, as well as to what the other parties could do.

This section briefly discusses some alternatives to bankruptcy; others are also possible. (For example, any funds that GPU might obtain from its law suit against Babcock & Wilcox have not been considered here.) All of the alternatives discussed are directed toward improving Met-Ed's cash flow or making additional funds available to clean up TMI-2. Some of the alternatives would provide only limited assistance, while others could provide a substantial part of the cleanup cost. All of the alternatives would require many months to be put into operation.

## 3.1 Availability of Federal Assistance

As described in Section 1.7, there are no established procedures or existing Federal laws which could provide funds or other assistance to clean up TMI-2 in the event that the utility is unable to finance the cleanup cost.

New legislation would be required to make Federal funds or assistance available to the utility, to a state agency, or to a Federal agency to clean up the site. Legislation in recent years with respect to the Lockhead and Chrysler loan guarantees and the high-level-liquid-waste demonstration program at West Valley, New York, as well as the proposed "superfund" legislation, are examples of approaches of Federal assistance, if such assistance were considered appropriate.

The prospect of obtaining Federal assistance for the TMI accident was addressed in GPU testimony before the PAPUC in March 1980 in response to the question of whether Met-Ed, Penelec, or GPU contacted any governmental agencies to obtain financial help for the TMI accident and what the results or status of each contact was. GPU officials stated that Federal or state assistance would require the enactment of new legislation, but they were not optimistic that support for such legislation could be obtained at that time. Among the reasons they cited for this view were:

- The ratepayers of the GPU companies are not currently bearing an inordinately heavy burden in the form of high electric rates. (See Section 1.4 for a discussion of the impacts of TMI-2 cleanup cost on ratepayers.)

- It is unlikely that legislation could be enacted which would have the customers of other electric utilities or taxpayers in general directly share the cost of the TMI-2 accident, while the GPU ratepayers retained all the past and anticipated future benefits of nuclear generation.

- It has not been national policy to equalize the electric rates of customers.

- The average family income of the areas served by the GPU companies is well above that of many other areas. Legislation which would shift part of the burden of the TMI-2 accident from higher income families to lower income families is unlikely.

It is significant to note that on August 8, 1980, GPU announced that it would attempt to persuade other utilities and the Federal government to extend financial aid for the cleanup. While letters from the White House and the NRC to the PAPUC Chairman (Appendix F) indicate that there is no statutory authority for any form of direct financial aid to assist in the cleanup, the letters also state that the financial well-being of Met-Ed and the needs of the state and the affected community will be monitored closely. If the PAPUC and NJBPU continue their present policy of not permitting TMI costs to be passed through to the ratepayers, this could adversely affect Met-Ed's earnings---including stockholder dividends, available funds from cash flow, and bank lines of credit---and could lead to further financial distress for the companies. Conversely, one may envision a situation wherein the PAPUC and NJBPU put TMI-1 and -2 into the rate base and pass all cleanup costs on to the ratepayers, and the ratepayers might be considered to be bearing inordinately and inequitably high costs (see Section 1.4). In either case, Federal legislation to provide public funds or other financial help might be sought.

The GAO (Ref. 4) has suggested that the Secretary of Energy take the lead in conducting a detailed study of the GPU system as to its future role as a provider of electric power, the financial considerations it will need to fill such a role, how these finances can best be obtained, and the appropriate roles of the regulatory agencies. In its report on the finarcial fallout from TMI, the GAO lists several questions which the DOE study should address and

suggests that a report (including any proposed legislation) be presented to Congress no later than February 1, 1981.*

In recent years two corporations under financial stress---Lockheed and Chrysler---have received Federal financial assistance, and this year the Congress authorized DOE to carry out a high-level liquid nuclear waste management demonstration project at a nuclear fuel reprocessing plant in West Valley, New York which had been shut down since 1972. The Emergency Loan Guarantee Act (Public Law 92-70), enacted in 1971, authorized government guarantees of up to $250 million of private bank debt to private corporations which satisfied certain specified requirements. Although the loan guarantees hypothetically were available to any qualified applicant, the guarantee program in effect was authorized to assure Lockheed Corporation adequate credit to survive a financial liquidity crisis then being experienced and to give Lockheed the opportunity to restore itself to a position in which it would have access to the normal credit markets. (See Appendix G for the text of this Act.)

The second example of Federal financial assistance is the Federal Aid to Chrysler Corporation Act (Public Law 96-185), approved January 7, 1980. Appendix H provides a copy of the text of this Act, while Appendix I gives a chronology of events which led up to the signing. Note that the Chrysler financing plan includes assistance from state, local, and other governments and from dealers and suppliers, as well as deferred pension contributions. By analogy, if new legislation provided for a loan guarantee for Met-Ed or GPU, the affected states, local governments, nuclear suppliers, and other utilities might provide assistance in addition to that provided by the Federal government. While a loan guarantee to accomplish TMI-2 cleanup may be successful in obtaining funds for ensuring cash flow for this purpose, the cost would eventually be borne by ratepayers (as discussed in Section 1.4). The loan guarantee would primarily open up a source of additional credit not presently available through usual sources. If the motivation is to relieve the ratepayer of some of the cleanup costs, loan guarantees are not the full answer.

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*During consideration of the NRC FY 81 budget authorization on July 31, 1980, the Senate unanimously accepted an amendment which calls for the Comptroller General, in cooperation with the NRC, to conduct a detailed study of the financial viability of GPU. This study, which would be a direct result of the GAO report, would examine whether or not GPU will be able to provide system reliability to its customers at reasonable rates, and, if not, what actions may be necessary to rectify this situation.

It should be noted, however, that Sections 209 or 311 of the Federal Power Act might provide the mechanism for initiating Federal action in the Executive Branch (see Appendix E). Section 209 authorizes the Federal Energy Regulatory Commission (FERC) to refer any matter arising in the administration of the Federal Power Act to a joint board of FERC and affected state entities for further action. Section 311 authorizes DOE to conduct investigations to secure information necessary or appropriate as a basis for recommending legislation regarding any aspect of electric energy.

The Western New York Nuclear Services Center in West Valley was a commercial reprocessing plant located on land owned by the State of New York. First operated in 1966, the facility had been closed since 1972 because it could not be operated profitably in compliance with strengthened Federal standards regarding the storage of liquid nuclear waste. However, 580,000 gallons of high-level radioactive liquids remained at the site. The liquids were in two carbon-steel tanks which could leak. The West Valley Demonstration Project Act of 1980 (P.L. 96-368) obligates the Federal government to pay 90 percent of the costs of waste removal, with the State of New York paying the remaining 10 percent. (It is estimated that the project could cost a total of $300 million and it is expected to take 10 years or longer.) The full text of this act appears as Appendix J.

## 3.2 Federal Assessment of Utilities To Provide a Cleanup Fund

Congress is considering several "superfund" bills which would provide a system of response, liability, compensation, and cleanup for hazardous substances released into the environment and for inactive hazardous waste disposal sites. While none of the versions of the superfund now proposed is likely to impact the cleanup of TMI-2, they suggest a possible solution for the TMI post-accident situation to cover remaining expenses. If the funding concept underlying a superfund had been in effect when the TMI accident occurred and if it covered nuclear accidents, some additional funds would have been available to cover the cleanup cost. Thus, the utility might not have had to be so dependent on banks for short-term credit and on state commissions for rate increases to improve cash flow to cover the cleanup cost.

Because a superfund is not now in existence and, moreover, is not likely to cover a situation involving an accident at a licensed nuclear power plant when and if currently proposed legislation is enacted, a separate arrangement for a nuclear "cleanup fund" might be considered. The fund could be administered by the Federal government (with possibly some coordinating role played by affected states) or by the private insurance market; it could be financed by fees collected from utilities or other segments of the nuclear industry. The cleanup fund could provide immediate funds for cleanup or decommissioning of abandoned facilities when the licensee is financially unable to do so.

The TMI accident could be the point of departure for initiating the necessary Federal legislation and/or state agreements to establish a fund for both the TMI accident and any future accident. Both the PAPUC and the NJBPU contend that the GPU ratepayers and investors should not have to bear the entire burden of the TMI accident. They further state that this burden properly belongs to all those who have benefited in the past and who will benefit in the future from the lower cost nuclear energy. Because the Federal government has been a keystone in the development of commercial uses of nuclear energy, it is argued that the Federal government has a parallel responsibility to act in the event of an accident.

As of April 1, 1980, there was 49,000-MWe (net) installed capacity in operating reactors. Assuming a 65-percent capacity factor, this nuclear capacity produces about 280 million MWh per year. Therefore, if, for example, a tax of 1.0 mill/kWh (1$/MWh) were levied on all electricity generated by nuclear power,

this tax would yield about $280 million per year. This revenue could provide funds for TMI cleanup.

### 3.3 Voluntary Contributions from Other Utilities

At present, there are no known plans to provide a mechanism for contributions to be made by other utilities to the TMI owners to help clean up TMI-2. Moreover, it is not clear that such assistance (if not part of some pre-established mutually developed scheme like NEIL*) could be justified to the state utility commissions involved as allowable expenses to ratepayers.

Possibly the charter for the insurance programs, once the programs become fully established, could be expanded to include assistance for cleanup operations after an accident. On the other hand, a voluntary program of funding assistance among utilities with nuclear power plants may face some of the problems outlined in Section 3.1 above with respect to an involuntary, Federally mandated program.

Utilities presently contribute voluntarily to the Electric Power Research Institute (EPRI), which conducts a broad program of research and development in technologies for electric power, including funds being provided for TMI-2 post-accident examinations (see Section 3.5 on the four-party agreement, NRC/DOE/EPRI/GPU). However, EPRI funds, by its charter, are not meant for use in situations like TMI cleanup.

Also, personnel could be made available from other utilities or from nuclear suppliers to assist in cleanup; this would give them valuable experience, not otherwise obtainable, which might be useful in future decommissioning efforts (even for undamaged reactors) or in the design of future reactors. However, such assistance probably would not substantially reduce the cost of cleanup.

### 3.4 Indirect Tax Assistance

Pennsylvania imposes a 4.5-percent tax on the gross receipts of Pennsylvania utilities and a 6-percent tax on the utilities' sales to commercial and industrial customers. As a result of the TMI-2 accident, GPU revenues rose unexpectedly (because of more expensive replacement power), and state tax revenues also increased. State legislation could be enacted that would remove sales and gross-receipts taxes from such increased utility revenues during extraordinary periods of this type. In the present instance the staff estimates** that if oil is used to generate replacement power for TMI-1 and -2, this

*The nuclear industry's insurance pool (Nuclear Electric Insurance Limited - "NEIL") is being established to help cover the cost of replacement power required as a result of a nuclear accident. As reported in Energy Daily (August 26, 1980), the American Public Power Association (APPA) is developing a second insurance program of a similar nature.

**Based on a split of 10 percent, 40 percent and 50 percent for Penelec, Met-Ed, and Jersey Central, respectively; 1700 MWe, capacity factor of 0.65, differential between replacement fuel cost and nuclear fuel cost of 40 mills/kWh for oil and 10 mills/kWh for coal. This split (10/40/50) represents the need for replacement power among the three companies, rather than their ownership shares of TMI.

incremental tax would amount to about $17 million per year. If coal is the replacement energy, the incremental tax would be about $4 million for Met-Ed and Penelec.

In New Jersey, all revenues (including energy-adjustment-charge revenues) from the sale to ultimate customers are subject to a 14.5-percent gross-receipts tax. This amounts to about $27 million per year if oil is the replacement fuel for TMI-1 and -2, and about $7 million if coal is the replacement fuel. The state could enact legislation to eliminate this tax on TMI replacement energy.

While these amounts could obviously not contribute significanctly to cleanup funds, reduction of this tax would, in effect, give the state utility commissions more flexibility in setting rates (i.e., the state utility commissions could let the utility retain part or all of the tax savings by not permitting the savings to be passed through to the ratepayers, thus improving the utility's cash flow). Alternately, state utility commissions could remove revenue requirements on the utilities to cover these taxes and thereby ease some of the burden on the ratepayers.

### 3.5 Research and Development Funding

To achieve common goals in TMI-2 data gathering, a four-party (NRC, DOE, EPRI, and GPU) coordination agreement, signed on March 26, 1980, has been implemented. Although not an "alternative" to portions of funds for GPU cleanup activities (no funds are provided under this agreement for cleanup operations), the agreement does enable funding for critical data gathering operations during cleanup, which otherwise would likely be lost to the nuclear community.

Principal funding for the effort will be provided by DOE; as of the end of FY 80, DOE had spent about $3.5 million in staffing up the site office and in initial data gathering. EPRI is considering expenditures of $6.5 million for its sponsored efforts, scheduled to take several years, and the NRC had expended about $150,000 in data gathering efforts as of the end of FY 80.

A completely different kind of research and development program could evolve. DOE could take over TMI-2 (through purchase or lease) and use it as a long-term research facility. Several areas could be investigated, such as the performance of materials, instruments, and controls under accident and post-accident conditions; cleanup methods; and the effects of the accident on the fuel, to name some major ones. The financing of the cleanup would be part of the funding for the research and development effort. The present owners would, of course, have to adjust their future generation capacity to replace the power that had been planned to be available from TMI-2.

### 3.6 Restart of TMI-1

Probably the most significant step toward financial rehabilitation of the utility companies would be the restart of TMI-1 and the inclusion of the unit in the rate base. Restart of TMI-1 is the subject of an adjudicatory hearing, which is just now getting under way. The restart of TMI-1 would reduce the amount of replacement power needed, thereby reducing directly the cost of

electricity to the ratepayers and improving the utility's cashflow position and its ability to obtain long-term financing for the cleanup of TMI-2. The savings to the ratepayers in fuel cost would be on the order of $200 million per year if oil is the replacement fuel, and $50 million per year if coal is the replacement fuel. The inclusion of the unit in the rate base would permit the utilities to recover fixed operation and maintenance costs and interest charges on the nuclear fuel of about $26 million and fixed cost on investment in TMI-1 of about $70 million per year.

## 4.0 RECOMMENDATIONS

(1) The NRC should encourage the Executive branch to initiate discussions among state and Federal agencies and representatives of the financial community with regard to the financial ability of Met-Ed to continue cleanup. Direct and frank consultations among these parties would seem far preferable to indirect communications in hearing orders or in the exchange of correspondence. Such discussions would undoubtedly disclose common goals in the public interest and would suggest methods for working together toward these goals. These discussions should also be helpful in defining what each organization is trying to accomplish, what it is indifferent to, and what it is willing to accept as a result of a desired action. The public's interest is not served if each party considers only its specific interests to the exclusion of any other duties or concerns.

(2) NRC should participate actively with whatever organizations are given the authority to conduct further analyses of financing alternatives for TMI cleanup.

(3) The NRC staff should continue, utilizing the Federal Energy Regulatory Commission, to monitor GPU closely for its overall financial health and its cashflow position throughout the cleanup process. GPU, Met-Ed, and other TMI licensees should be required to submit to the NRC staff a quarterly status report of their financial condition, including their assessment of situations and pending rate hearings that could have an impact on the companies' ability to continue cleanup. The Commission should be apprised by the staff at least quarterly of the overall financial condition of GPU and should be informed immediately if it appears likely that GPU will not be able to meet its cleanup obligations. This would provide as early a warning as possible so that NRC could alert the Executive branch and Congress of situations that might call for another party to be prepared to take over cleanup if necessary. The Federal Energy Regulatory Commission (and possibly the Securities and Exchange Commission) should be requested to periodically advise the NRC on the financial ability of GPU to continue cleanup.

(4) Information on all discrete stages of the cleanup process, including required manpower, timing, and cost, should be updated periodically by the licensee so that the NRC will be able to determine whether a particular cleanup step can be suspended or must continue if it becomes necessary to revoke the current licenses and transfer the responsibility of the license to another party.

(5) Procedures for transferring license responsibilities should be identified. The Commission should consider rulemaking to develop more detailed procedures for carrying out its responsibilities under Section 184, 186a, and 188 of the Act. In addition, a standby Commission order might be prepared providing for transfer of license responsibility, to take effect immediately if the licensee were to go bankrupt.

(6) A more comprehensive review should be made of technical and management skills available within the NRC staff to develop an inventory of NRC personnel that could possibly be used, if it became necessary for the NRC,

as an interim caretaking measure, to manage the cleanup in the event of default. Individuals with necessary skills in health physics; chemical processing; chemistry; radioactive-waste treatment, handling, and storage systems; reactor operations; and reactor management should be identified. Such review should include a statement of the staff members' present duties and an appraisal of the health and safety impact of their being diverted from their present duties to manage cleanup activities at TMI-2. In addition, the Commission should consider recommending that DOE conduct a similar review of the skills of its staff and the staffs of its operating contractors at its civilian national laboratories.

(7) NRC should consider recommending to the Executive branch that an appropriate Federal agency---preferably an agency such as DOE, that has a broad resource capability---seek a contingency authorization from Congress to be used in the event of unexpectedly rapid Met-Ed/GPU default.

## 5.0 REFERENCES


(1) U.S. Nuclear Regulatory Commission, "Evaluation of the Cleanup Activities at Three Mile Island," report of a special task force formed by NRC's Acting Director for Operations, February 28, 1980.

(2) Memorandum from Samuel J. Chilk, NRC, to William J. Dircks, NRC, Subject "Staff Requirements---Briefing on Assessment of Cleanup at TMI, 10:05 a.m., Wednesday, March 5, 1980, Commissioners Conference Room, D.C. Office," March 7, 1980.

(3) U.S. Nuclear Regulatory Commission, "Draft Programmatic Environmental Impact Statement," USNRC Report NUREG-0683, July 1980.*

(4) U.S. General Accounting Office, "Three Mile Island: The Financial Fallout," July 1980 (available from GPO, Washington, D.C. 20402).

(5) Recommended Decision, Metropolitan Edison Company v. PAPUC, PAPUC Docket Nos. R-80051196 and P-80070235, August 20, 1980.

(6) Order, Metropolitan Edison Company v. PAPUC, PAPUC Docket Nos. R-80051196 and P-80070235, Initial Decision, August 28, 1980.

(7) Memorandum from Citibank, N.A. and Chemical Bank to William G. Kuhns, Chairman, General Public Utilities, September 5, 1980.

(8) General Public Utilities Press Release No. 80-060 B, August 28, 1980.

(9) U.S. Nuclear Regulatory Commission, "Coal and Nuclear: A Comparison of the Cost of Generating Baseload Electricity by Region," USNRC Report NUREG-0480, December 1978.**

(10) General Public Utilities, "TMI-2 Recovery Program Estimate," August 1980.

(11) Testimony of Theodore Barry & Associates, PAPUC Docket No. I-79040308, p. II-10, March, 4, 1980.

(12) Power Reactor Development Co. v. Electrical Workers Union, 367 U.S. 396, 402 (1961).


These references are available for inspection and copying for a fee in the NRC Public Document Room, 1717 H Street, N.W., Washington, D.C. 20555.

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# APPENDIX A

# TMI-2 CLEANUP PLANS AND COST ESTIMATE

CONTENTS

# APPENDIX A

## TMI CLEANUP PLANS AND COST ESTIMATE

### 1.0 ACCIDENT BACKGROUND AND PRESENT STATE OF CLEANUP

On March 28, 1979, Three Mile Island Unit 2, a 177-fuel-assembly, pressurized-water reactor, designed by Babcock and Wilcox and operated by Metropolitan Edison, experienced a loss-of-main-feedwater transient which led to a loss-of-coolant accident, uncovering of the core, and subsequent core damage. (Detailed descriptions of the accident sequence can be found in a number of reports. See references 1, 2, and 3.) The accident left the plant with a heavily damaged reactor core; extensive radioactive contamination in the reactor coolant system and containment building; large amounts of liquid, solid, and gaseous radioactive waste to be either processed or disposed of; and radioactive contamination in the fuel handling and auxiliary buildings.

Soon after the initial phases of the accident, attention turned to the cleanup of the significant amount of water which had been radioactively contaminated. It was realized during the early planning stages after the accident that additional liquid-storage capacity would be required. Space was available in the unit 2 fuel pool for 6 storage tanks with a combined volume of 110,000 gallons. A system called EPICOR-II was designed and constructed to decontaminate the water accumulated in the tanks in the unit 2 fuel handling and auxiliary buildings.

An environmental assessment (EA) was prepared by the staff and issued for public comment on August 20, 1979 regarding the use of EPICOR-II for the processing of contaminated auxiliary-building water. A revised EA was issued on October 3, 1979, and the Commission subsequently approved the use of EPICOR-II. Disposition of the processed water is addressed in the draft Programmatic Environmental Impact Statement (PEIS) prepared by the staff, and a decision will be made following public comment on and completion of the final PEIS.

As of the date of this report, cleanup and decontamination of the auxiliary building is nearly complete, including processing of the contaminated water. The purge of the containment-building atmosphere was completed July 11, 1980, but actual containment-building cleanup and fuel removal have not been started. Personnel have made two brief entries into the containment building to collect data and conduct radiation surveys in preparation for containment cleanup and fuel removal. Engineering and planning for facilities necessary for cleanup have been in progress for the past year.

### 2.0 CLEANUP MILESTONES AND SCHEDULE

The recently released General Public Utilities (GPU) TMI-2 Recovery Program Estimate (Ref. 4) describes the critical path sequence for current cleanup planning as follows:

(1) processing and removal of contaminated water in the basement of the containment building

(2) gross decontamination of the upper levels of containment to allow removal of the reactor upper head

(3) planning for and subsequently removing the reactor-vessel head

(4) detailed examination of the reactor core and its ultimate removal

(5) chemical cleaning of the reactor pressure vessel and primary system

(6) completion of containment-building decontamination

Key cleanup milestones from this sequence are:

| | | |
|---|---|---|
| (1) | initiation of processing of containment sump water | March 1981 |
| (2) | completion of containment sump-water processing | October 1981 |
| (3) | completion of cleanup of the auxiliary and fuel handling buildings | December 1981 |
| (4) | initiation of containment decontamination | January 1982 |
| (5) | removal of the reactor-vessel head | June 1982 |
| (6) | removal of the reactor fuel | April 1983 |
| (7) | completion of containment decontamination | December 1983 |

References 4 and 5 contain a more detailed cleanup schedule and description of the various phases of the cleanup. It should be noted, however, that these scheduling estimates will be revised as cleanup progresses.

## 3.0 COST OF CLEANUP

The cost estimates in this Appendix were taken from reference 4 and depend on certain assumptions and qualifications. Most important among these are the assumptions that the schedule milestones are met, that the current technical understanding of the situation inside containment and the reactor primary system is minimal, and that uncertainties associated with waste disposal exist.

| Summary of Cleanup Costs ($ millions)* | |
|---|---|
| 1979 costs not charged to expense | $ 95 |
| Cleanup and restoration | |
| 1980 to 1985 without escalation | 690** |
| 1-yr extension in schedule | 50 |
| Escalation (~ 8%/yr) | 140 |
| Replacement fuel core | 70** |
| Allowance for construction on fuel core | 13 |
| Operation and maintenance costs charged to expense | |
| 1979 and 1980 | 17 |
| 1981 to 1985 | 75 |
| Total | $1150 |

*TMI-2 cleanup and restoration costs used in GPU presentation to NRC (8/14/80).

**These components make up the $760 million figure that has appeared in the press.

The above costs include about $500 million for cleanup and $260 million for restoration to a "pre-accident operating condition," including a new fuel core. Estimates for schedule extension, escalation, operation and maintenance costs, and allowance for construction on the fuel core raise the total cost to $1150 million. The increases of $400 million over preliminary estimates (made about 1 year ago) are attributed to higher estimates for many of the original tasks, as well as the increased costs associated with a longer time schedule. A decision by the licensee to propose restoration to operation or decommissioning must await detailed inspection of the major plant components.

## REFERENCES


(1) U.S. Nuclear Regulatory Commission, "Investigation into the March 28, 1979 Three Mile Island Accident by Office of Inspection and Enforcement," USNRC Report NUREG 0600, August 1979.*

(2) U.S. Nuclear Regulatory Commission, "Three Mile Island, A Report to the Commissioners and to the Public," NUREG/CR-1250, Vols. I and II, January 1980 (Vol. I) and May 1980 (Vol. II).*

(3) J. G. Kemeny, Chairman, "Report of the President's Commission on the Accident at Three Mile Island," GPO Stock Number: 052-003-00718-51, October 1979 (available from U.S. Government Printing Office).

(4) General Public Utilities, "TMI-2 Recovery Program Estimate," August 1980.

(5) Metropolitan Edison Company, "Summary Technical Plan for TMI-2 Decontamination and Defueling," December 1979.


These references are available for inspection and copying for a fee in the NRC Public Document Room, 1717 H Street, N.W., Washington, D.C. 20555.

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# APPENDIX B

# FINANCIAL IMPLICATIONS OF THE ACCIDENT AT TMI-2

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FIGURES



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# APPENDIX B

## FINANCIAL IMPLICATIONS OF THE ACCIDENT AT TMI-2

### 1.0 INTRODUCTION

General Public Utilities (GPU) is a holding company for Metropolitan Edison Co. (Met-Ed), Pennsylvania Electric Co. (Penelec), and Jersey Central Power and Light Co. (Jersey Central). GPU owns all the common stock of the subsidiaries. The costs of cleanup following the accident at Three Mile Island Unit 2 impact all three subsidiaries because they are joint owners of TMI-2, as well as TMI-1.

The accident at TMI-2 had severe financial consequences for each of the three subsidiaries and for GPU because of the additional cost of replacement power (not recovered by rate increases until June 1, 1980), together with the removal of TMI-1 from the rate base in May 1980.

Purchase of replacement power was a major factor in creating the utilities' need to borrow heavily. This borrowing was principally short-term. GPU and each of the three subsidiaries jointly entered into a revolving credit agreement (RCA) with a consortium of 43 banks, 2 of which (Chemical Bank and Citibank) are acting as agent and co-agent for the consortium. The RCA was finalized June 15, 1979, and its terms essentially preclude any other source of financing, including the sale of property by any of the four borrowers. Among other conditions, no new debt created by the borrowers can have a security pledge that takes priority over the RCA. Limits are placed on the maximum amount each may borrow.

The PAPUC order of May 23, 1980 allowed Met-Ed and Penelec to recover the costs of replacement power for the period June 1 to the end of 1980. In addition, the May 23rd order allowed Met-Ed to collect deferred energy costs of $84.6 million and Penelec to collect deferred energy costs of $7.8 million over the next 18 months. (Deferred energy costs refer to energy costs incurred by these companies but not charged to their customers before the May 23rd order. By the same order, TMI-1 was removed from the rate base because the Commission found it was not "used and useful" at this time.) With regard to energy costs, these two companies now appear to be in a more stable cashflow position. On May 15, 1980, the New Jersey Board of Public Utilities (NJBPU) allowed Jersey Central an interim rate increase of $60 million. This increase countered a then-imminent threat to Jersey Central's financial stability. Whether this increase will allow Jersey Central sufficient stability to continue supplying service is subject to further investigation by the NJBPU.

Each of the arrangements for generating cash flow is conditional. It was specifically noted by the PAPUC that an allowance for fuel-cost recovery is not a "blank check on customers," but rather that the companies must demonstrate prudent management in incurring energy costs. The rate approval by the NJBPU is interim and is subject to refund depending on final Board findings. At the same time, the RCA calls for immediate review and possible cancellation

of the agreement, including an immediate demand for full payment of the balance, if current conditions worsen for the borrowers.

GPU and each of the subsidiaries are, therefore, essentially completely dependent on the continued financial stability of each of the other three. The financial failure of one would almost certainly place the RCA in jeopardy. This, in turn, would end short-term financing---the only type of financing currently available from outside sources---for each borrower.

## 2.0 FINANCIAL EFFECT OF THE TMI-2 ACCIDENT ON GPU AND ITS SUBSIDIARIES

The consolidated preaccident financial condition of the GPU system was sound, although the financial soundness of each of the three companies differed. An official of the Securities and Exchange Commission (SEC) testified before Senate subcommittee hearings (Ref. 1) and before the NJBPU that, prior to the TMI-2 accident, the GPU companies were soundly capitalized. During recent PAPUC hearings, witnesses from a management consulting firm engaged by the PAPUC to conduct a management audit of the GPU companies stated that, prior to the accident, GPU was prudently capitalized and its financial position was strong and improving.

GPU's financial statements show that a steadily improving earnings picture existed, and increases in the GPU common stock dividend were paid in 1977 and 1978 (Ref. 2). In spite of slightly reduced earnings in 1978, GPU increased dividends somewhat to improve its attractiveness to investors. GPU's common stock was selling for $18-7/8 per share on the New York Stock Exchange, and its bond and preferred stock ratings were within industry norms. The $750 million investment in TMI-2 was completed, and the unit was placed into commercial service on December 30, 1978. State utility commission approvals to allow the TMI-2 costs in the companies' base rates were expected soon and would further improve the earnings picture.

However, rate adjustments lagged costs in one instance. The cashflow reduction which resulted in a deferred energy balance began with the coal strike of 1977-1978. Met-Ed and Penelec had $46 million in their deferred energy account on December 31, 1978. In its order of June 19, 1979, the PAPUC allowed Met-Ed and Penelec to collect about $11 million of these costs per year (which would require more than 4 years for recovering the $46 million). In 1979, the NJBPU was allowing Jersey Central to collect $2.3 million per year to recover a deferred energy balance of $52 million (Ref. 2). (This rate would require a far greater period for cost recovery.)

The TMI-2 accident and subsequent regulatory actions worsened the companies' financial position. The commercial phase-in of TMI-2 on December 30, 1978 offset the loss of generating capacity expected from the refueling shutdown of TMI-1 in early January 1979. This not only left GPU's generating capacity relatively unchanged during the first quarter of 1979, but also portended increased earnings as the NJBPU and PAPUC took steps to include the TMI-2 costs in the companies' base rates. However, the March 28, 1979 accident at TMI-2 and the continued regulatory shutdown of TMI-1 resulted in serious adverse changes to GPU's financial condition. Primarily, these changes lowered cash flow, earnings posture, and interest coverage, which, in turn, limited the financing ability of the companies. The actions of the various regulatory

agencies following the accident also influenced the financial status of the companies.

The substantial reduction in GPU's cash flow and the increase in its short-term debt have come principally from the need to buy the large quantities of higher cost replacement power required as a result of the loss of the TMI units. Immediately after the accident, GPU maintained continuous and reliable service to its customers by purchasing replacement power through GPU's ties to the Pennsylvania-New Jersey-Maryland (PJM) Interconnection. Subsequently, supplies were also obtained from other utility companies under long- or short-term contracts. This incremental replacement power cost far more than the incremental revenue the companies were recovering through their rates. The basic cause for the cost increase was the differential between the cost of nuclear fuel and the cost of coal and oil. The cost of nuclear fuel for the TMI units in 1979 was expected to be about 4 mills per kWh. In contrast, coal costs are about 15 mills per kWh, and oil costs about 46 mills per kWh.

Within a few months after the accident, the companies arranged to purchase power from coal-based generation outside the PJM power pool; as a result replacement power cost $45 million less in 1979 than it would have if all replacement power had been purchased through PJM. Even with this savings, the companies' net power purchases and power-pool interchanges for 1979 increased to about $258 million, or more than double the amount for 1978. Recovery of fuel costs for 1980 is expected to be about $100 million (Ref. 3). These costs are based on the cost of replacement power coming primarily from coal-fired plants. The large quantity of power purchased, in combination with the substantially higher amounts of costs that were not recovered, resulted in a severe strain on the cash flow position of the companies.

Although the cost of replacement power has been the single largest cashflow effect of the accident on GPU finances, other unanticipated cash demands were triggered by the accident. Extensive cleanup costs at TMI-2 have already been incurred by the companies. As of the date this report was written, about $165 million had been spent for cleanup. Significant portions of the cleanup expenses have not been covered by insurance. Further, because of insurance claim procedures there is a delay in recovering costs from the insurers. This means that such amounts must be borrowed until the insurance funds are received. Safety-related changes for TMI-1 have also required cash resources which are not covered by insurance proceeds and are not recovered in current rate schedules. This, too, means more borrowing.

GPU's present cash resources are dependent on two external constraints---availability of bank borrowing and revenues set through rate regulation---matters over which the utility has little control. Unlike many businesses that can immediately reflect production costs and a profit margin when the product is sold, electric utilities can increase their rates only upon approval by the appropriate utility commission. Utility-rate-increase allowances are generally preceded by a regulatory time lag that delays recovery of current costs. Because GPU was not able to recoup the higher costs of purchased power immediately through higher rates, the companies made up this cash deficit by first borrowing from banks, then issuing bonds, and later by more bank borrowing.

## 3.0 POST-ACCIDENT FINANCING

### 3.1 The Revolving Credit Agreement

On June 15, 1979, GPU officials negotiated the revolving credit agreement (RCA) with a consortium of banks to provide a maximum of $412 million of short-term borrowing for the GPU system. These funds were to finance the unrecovered cost of purchased replacement power and other current cash obligations not met through revenues. These short-term RCA borrowings allowed the companies to pay for the power necessary to continue providing service to customers and to avoid insolvency.

The banks have set an interim credit limit of $292 million. As of May 31, 1980, the outstanding borrowing under the RCA for each of the companies and their respective sublimits were: GPU - $50 million borrowed, $75 million limit; Jersey Central - $133 million borrowed, $139 million limit; Met-Ed -$99* million borrowed, $105 million limit; and Penelec - no borrowing, $116 million limit. This totals $282 million of borrowing (Ref. 3).

### 3.2 Other Financing

To reduce the rapidly increasing amount of borrowing outstanding under the RCA during the initial months after the accident and to provide needed working capital, on June 28, 1979, Jersey Central and Penelec each privately placed $50 million of long-term (20-year) first-mortgage bonds. To meet the impending required redemption of maturing bonds and further reduce borrowings under the RCA, Jersey Central privately placed an additional $47.5 million of first-mortgage bonds on October 22, 1979. Under the RCA and the bond-purchase agreements, the amounts outstanding may be called by the lenders if any material and adverse change in circumstances occurs. (A summary of the rate increases authorized to date may be found in the GPU System Cash and Earnings Report.)

## 4.0 ACTIONS TO RELIEVE PRESSURE ON CASH DEMAND

In addition to efforts to minimize the costs of purchased power, GPU and its operating companies have taken a number of actions since the accident which are designed to reduce expenditures, conserve their available financial resources, and minimize the impact of the accident on consumers. Some of the major actions taken include

- GPU suspended work on two of its major construction programs, an 1120-MW nuclear plant at Forked River, New Jersey and a 625-MW coal-fired plant at the Seward Station near Johnstown, Pennsylvania.
- GPU's formerly projected construction budget for 1979 was $455 million, but it was reduced to $351 million in actual expenditures, a savings of $104 million.
- Capital expenditures for 1980 are now estimated to be about $200 million.
- Some routine maintenance work has also been delayed, principally to help alleviate current cash shortages. However, some of these delays, such as

*Includes $13 million of first-mortgage bonds issued and outstanding.

tree trimming and other power-line maintenance, are only stop-gap measures because these functions must be done to maintain reliable service.

- Pursuant to State utility commission orders, the companies recently initiated a load-conservation program in an effort to reduce projected demand and sales of power.

## 5.0 PROJECTED FINANCIAL CONDITIONS

Figures 5-1 through 5-5 show the RCA limit for each company, as well as the GPU system total in relation to the projected short-term debt through the end of 1981. These figures are based on assumptions regarding actions by the two utility commissions, as shown in Table 5-1. The combination of the assumed restart of TMI-1 with the estimated rate relief will allow Jersey Central to work down its short-term credit over this period. These combined actions will also increase earnings to the extent that Jersey Central expects to be able to issue $50 million in bonds in July 1981. Because of its better cash flow, Penelec will be substantially below its short-term borrowing ceiling during this period. Based on a mid-1981 restart of TMI-1, Penelec also contemplates a sale of $50 million in bonds early in 1981. Met-Ed, on the other hand, will have a continuing problem of short-term borrowing, even with a substantial reduction in the deferred energy balance. Other costs (primarily fixed costs of TMI-1, which cannot be covered by customer charges unless it is restarted) will be a major factor in the short-term debt going above the currently authorized RCA limit by March 1981. The specific immediate cause of the rise in Met-Ed's short-term debt in March 1981 is the annual payment of state and local taxes which are due in the spring (see Figure 5-4). Met-Ed cannot issue bonds during the forecast period because its interest coverage is projected to be below its mortgage-bond indenture requirements.

Note from Table 5-1 that Met-Ed has forecast that it will receive $52 million in rate increases of the total of $73 million it requested. Met-Ed also has forecast that TMI-1 will restart July 1, 1981. For Met-Ed to avoid financial difficulties in the first half of 1981, events more favorable than those being forecast by GPU will have to occur. Three such favorable events would be a higher rate adjustment, an earlier approval of TMI-1 restart (and earlier placement into the rate base), and the allowing of an increase in its line of credit.

By the same token, the situation for Met-Ed could be worse than forecast (see Section 6.0 below on recent developments). It is not likely that additional short-term credit will be made available to Met-Ed by the bank consortium. In a letter to GPU dated May 15, 1980, Chemical Bank and Citibank urged that PAPUC take favorable regulatory action and other steps which would bring the utilities' earnings to a level to support long-term financing. Quoting from this letter:

> It is the expectation of the Banks that ME's Indebtedness under the Credit Agreement will not exceed the levels outlined in our prior letter. In addition, the Banks will carefully review the final order of the PAPUC and, if still confronted with a reduction of base rate revenues, may consider further limiting availability to ME on a basis related to the reduction of ME's deferred energy costs account.

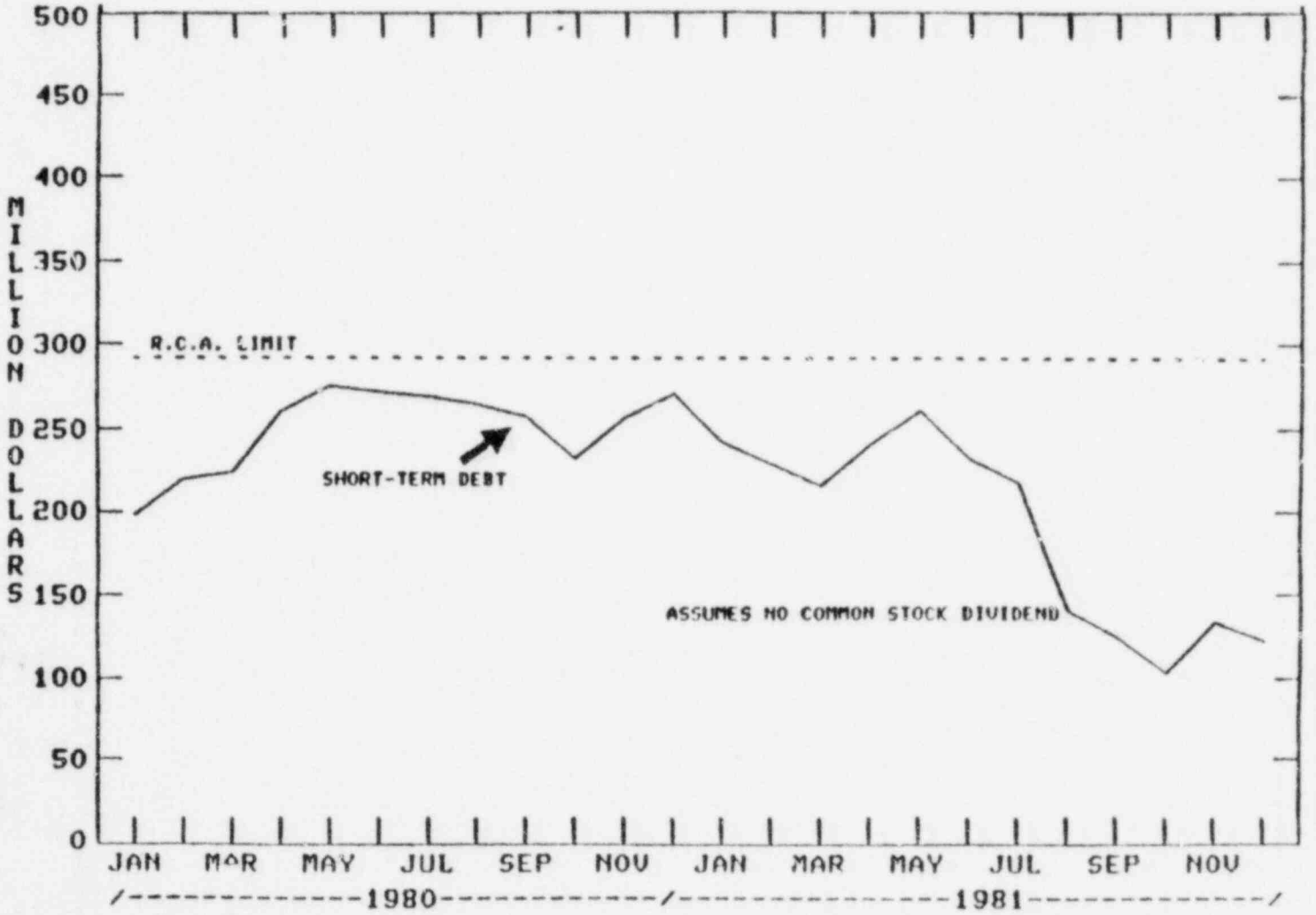



Figure 5-1 GPU System: Total forecasted short-term debt balance.

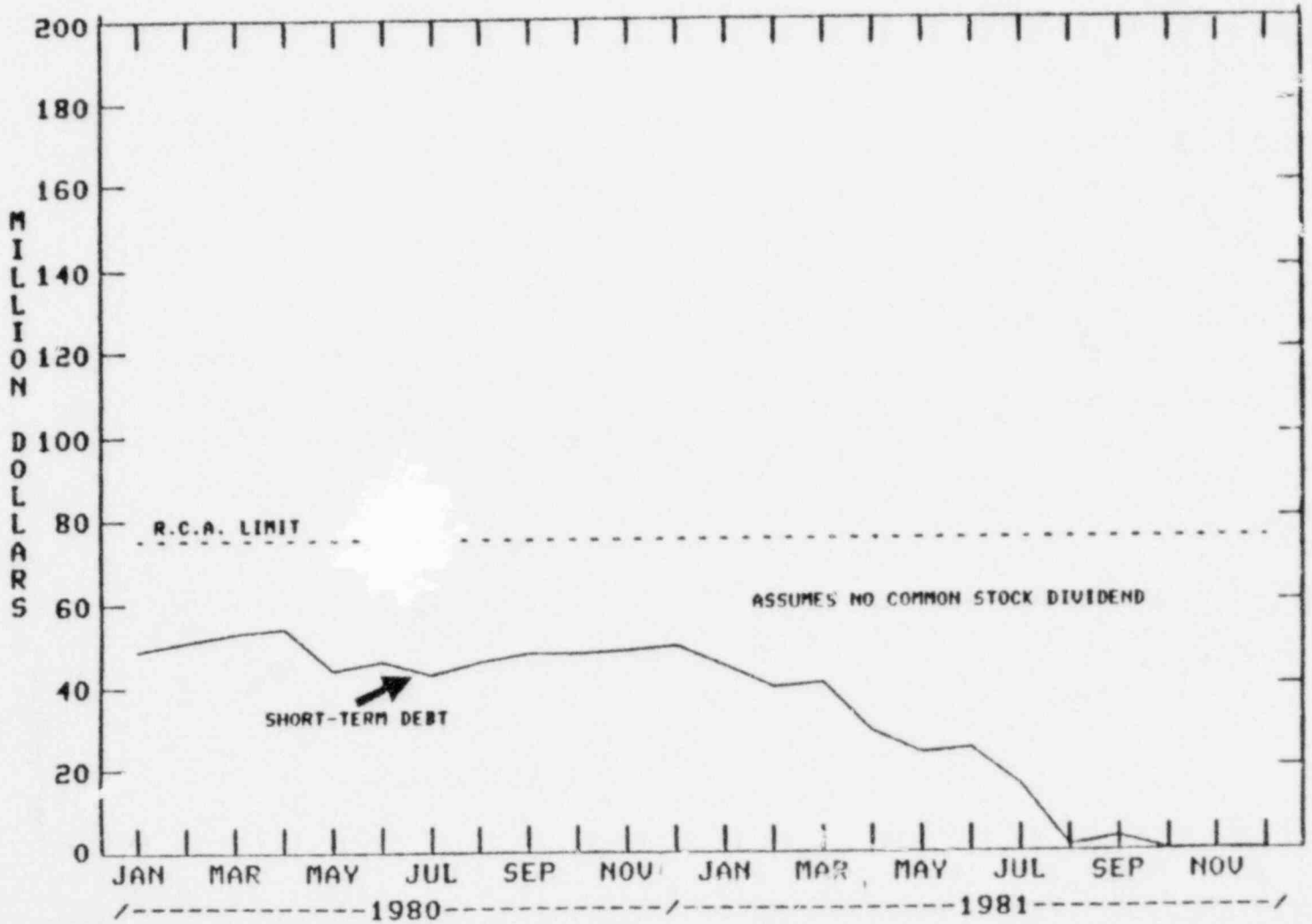



Figure 5-2 GPU Corporation: Forecasted short-term debt balance.

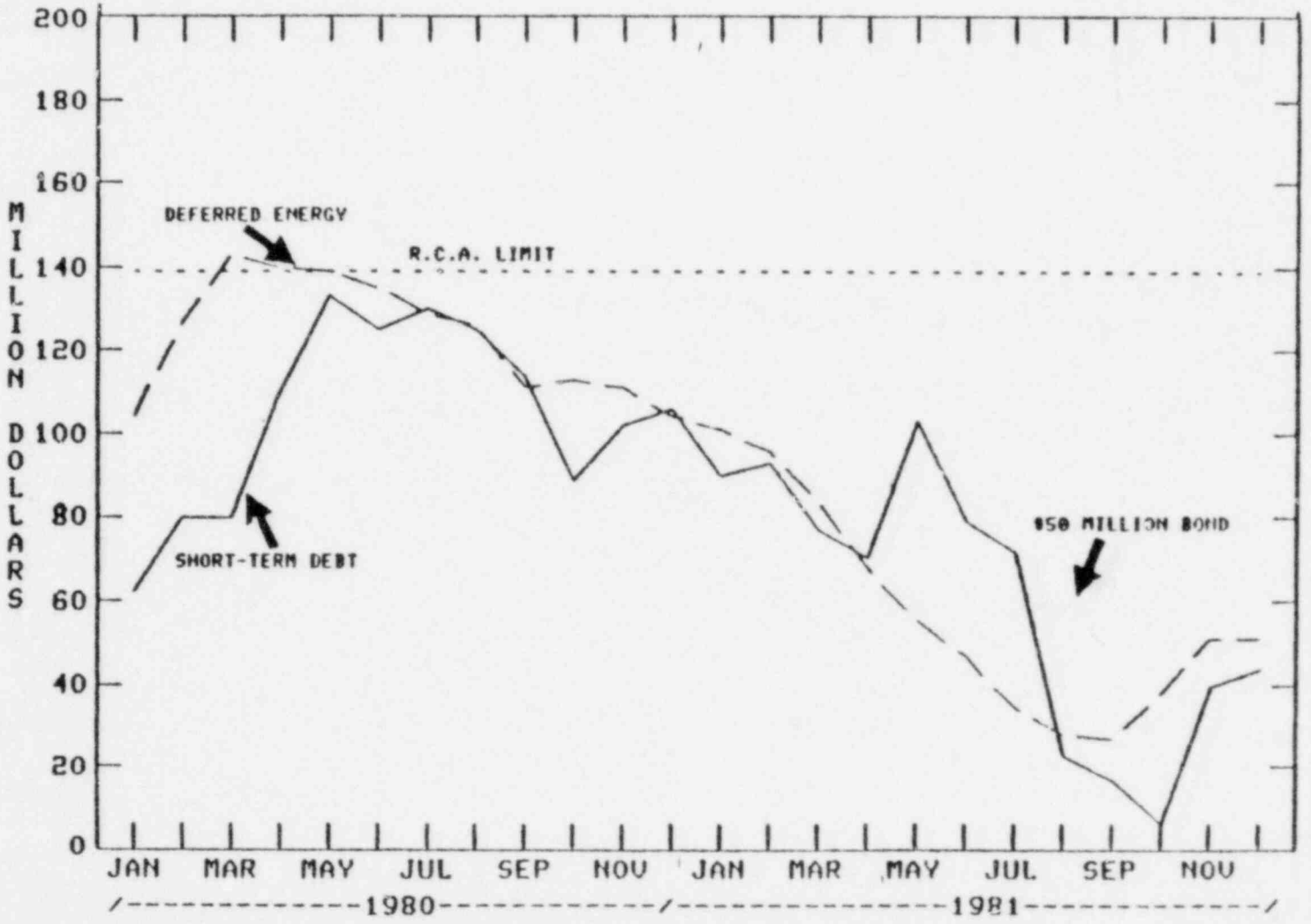



Figure 5-3 Jersey Central: Forecasted short-term debt and deferred energy balance.

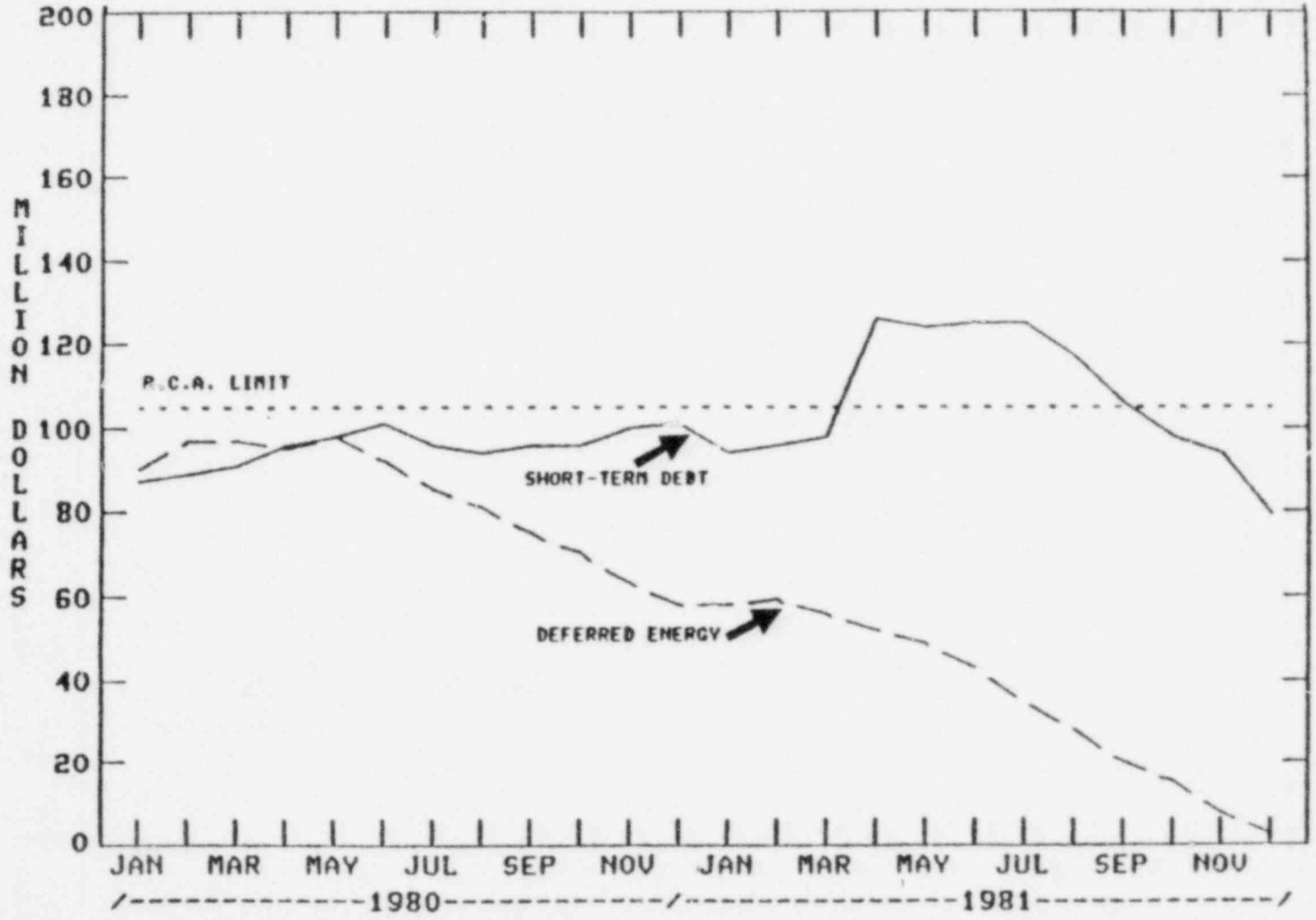



Figure 5-4 Met-Ed: Forecasted short-term debt and deferred energy balance.

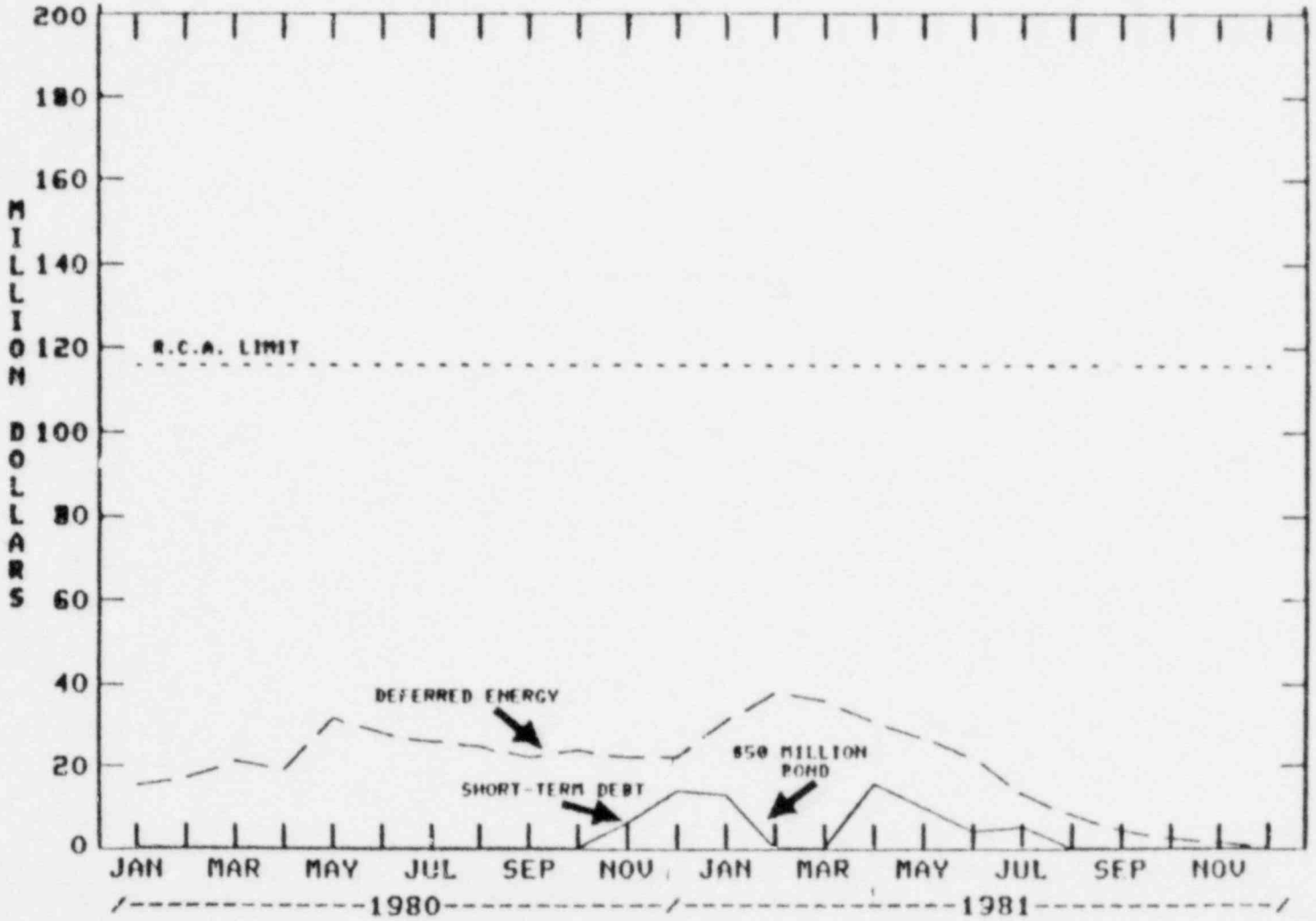



Figure 5-5 Penelec: Forecasted short-term debt and deferred energy balance.

Table 5-1 Ratemaking

| Utility | Rate Actions Assumed--Base Rates |
|---|---|
| Jersey Central | Filed for $173 million, of which (1) $51 million is to amortize Forked River over 10 years without return, (2) $22 million is for TMI-1 operation and maintenance expenses, based on a mid-1981 restart and (3) $100 million is for higher operation and maintenance costs, increased rate base, higher return allowance, and the like.<br><br>$60 million interim allowed June 1, 1980. $15 million additional allowed January 1, 1981. $51 million allowed July 1, 1981 to amortize Forked River. No increase in base rates for TMI-1 return to service, but $16 million amortization of deferred energy ends as of July 1, 1981. |
| Met-Ed | Will file for $73 million, of which (1) $34 million will be for TMI-1 and (2) $39 million for non-TMI related cost increases. Will complain against temporary rates and will ask for increased interim revenues.<br><br>No change in rates from complaint against temporary rates or from interim application. $25 million allowed January 1 1981 for non-TMI costs. $27 million allowed July 1, 1981 for TMI-1 return to service. |
| Penelec | Will file for $63 million, of which (1) $15 million will be for TMI-1 and (2) $49 million will be for non-TMI related cost increases; will also ask that there be no reduction of base rates for the expiration of amortization on the pre-7/78 energy clause. Will complain against temporary rates.<br><br>No change in rates from complaint against temporary rates. $30 million allowed January 1, 1981 for non-TMI costs. $12 million allowed July 1, 1981 for TMI-1 return to service. |
| | **Rate Actions Assumed--Energy Cost Recovery** |
| Jersey Central | September 1980: $73 million allowed; this is a judgmental estimate between (a) full tariff implementation of $112 million and (b) recovery of current cost only of $20 million.<br><br>March 1981: $80 million, representing full tariff implementation.<br><br>September 1981: Reduction of $52 million, representing full tariff implementation with TMI-1 savings reflected. |
| Met-Ed | January 1981: No change in current billing factor, which is sufficient to recover current cost in 1981 pending return of TMI-1 to service.<br><br>July 1981: Reduction of $55 million, representing savings from TMI-1 generation.<br><br>January 1982: Reduction of $26 million, representing (a) a reduction of $55 million from completion of 18-month TMI deferral recovery and (b) an increase of $29 million representing 1982 energy cost estimate. |
| Penelec | January 1981: $21 million increase to keep energy recovery approximately current, pending TMI-1 return to service without over-recovery.<br><br>July 1981: No change with TMI-return.<br><br>January 1982: No change; end of amortization of TMI deferred costs is enough to offset 1982 cost increase. |

Source: "GPU System, Cash and Earnings Forecast, June 1980 - December 1981," presented to the GPU Board of Directors, June 5, 1980.

Although the actions by PAPUC and NJBPU have eased the cashflow crisis regarding energy cost, these revenues do not provide for financing the cleanup of unit 2. Thus, while the financial stability of the companies could be maintained at least in the short run, the major concern of the NRC, the cleanup of unit 2, may languish.

In addition to causing a loss of return on invested capital, the removal of the TMI units from the rate bases precludes the companies from recovering any costs associated with serving debt and preferred stock, depreciation expense, and station operation and maintenance (O&M) expense. Fixed O&M expenses and interest on fuel costs for TMI-1 are about $26 million,* and fixed costs on invested capital are about $70** million per year.

Met-Ed has been particularly hard hit because of its 50-percent ownership of TMI. Jersey Central, with its 25-percent share of TMI, faces less difficulty in this instance. However, it does have to pay fixed costs amounting to $30 million per year on the $350 million invested in the Forked River project (see Section 4.0, above).

TMI-1 was removed from the rate base of the three utilities because it was not found to be "used and useful"; a restart of the unit would have a positive, "triggering" effect on GPU's financial situation. It would allow the unit to be put back into the rate base. This in turn, would reduce the expenses of purchasing power, while increasing cash flow, earnings, and interest coverage of the three subsidiaries. It is likely to be a signal to the banks of favorable regulatory action and, therefore, justify the availability of more credit.

Although the TMI accident had a great impact on GPU and its subsidiaries, cost of cleanup and restoration is only one of several major capital expenditures GPU must make over the next several years. The $600-million cost for TMI-2 cleanup and restoration (net of insurance proceeds) is about 15 percent of GPU's total major capital investments projected through 1986. Table 5-2 shows these projects and cost.

* Based on 800 MWe and 3.7 mills/kWh for fixed O&M costs and for interest charges on nuclear fuel.

**Based on capital costs of $400 million and a fixed-charge rate of 17%.

Table 5-2 Major capital expenditures proposed for the GPU system, 1981-1986.

| Expenditure | Estimated cost ($ millions) |
|---|---|
| New power generation | |
| Seward 7 coal plant | $ 700 |
| Other | 250 |
| Modify existing generation | 430 |
| Transmission system | |
| Ontario Hydro Intertie | 250 |
| Other | 450 |
| Extend distribution system | 730 |
| Nuclear fuel | 400 |
| Other (including conservation and load-management programs) | 140 |
| TMI-2 cleanup and restoration | 600* |
| Total Proposed Expenditures | $3950 |

Source: "Three Mile Island: The Financial Fallout," General Accounting Office, June 1980.

*Current estimate net of $300 million insurance proceeds.

6.0 RECENT DEVELOPMENTS IN MET-ED'S FINANCIAL SITUATION

Before September 1980, it was projected that the next critical time in regard to Met-Ed's finances would come in early 1981 when Met-Ed's need for cash would exceed its borrowing limit. (See Table 5-1 of this appendix for rate-making assumptions, and Figures 5-1 through 5-5 for a forecast of Met-Ed's short-term debt and deferred energy balance.) Unless either Met-Ed's borrowing limit or cash flow were increased, Met-Ed would experience a cash shortfall.

On July 29, 1980, Met-Ed filed a rate-increase petition with the PAPUC. This filing sought both an emergency increase in base rates of $35 million on an interim basis and a permanent increase in revenues of $76.5 million. Met-Ed asked that the emergency increase be allowed to go into effect no later than September 1, 1980. In testimony provided to the PAPUC, Mr. Herman Dieckamp, President of GPU, stated that Met-Ed would have to make service cutbacks if the emergency rate relief were not granted. A schedule of these cutbacks listed layoffs of 1000 people, including employees of TMI-1 and -2.

On August 20, 1980, the Administrative Law Judge hearing the matter issued a recommended decision (Ref. 4). After finding that although Met-Ed's financial condition is poor (Ref. 4, p. 18), the Administrative Law Judge found that Met-Ed did not meet the statutory burden for the granting of emergency rate relief. As a result, he recommended that the PAPUC deny the company's request. As part of the basis for denial, the Administrative Law Judge stated: "The major thrust of the petition is to make available funds, directly or indirectly, for cleanup of TMI." He further stated: "This is not a valid purpose for extraordinary rate relief under the stringent requirements of the statute (Ref. 4, p. 7).

On August 28, 1980, the PAPUC adopted the recommendations of the Administrative Law Judge and issued an interim order denying Met-Ed's request for emergency rate relief without prejudice (Ref. 5). (While the recommended decision of the Administrative Law Judge stated that staff expedited treatment of the permanent rate increase request, this was rejected in his opinion (Ref. 4, p. 24-25).) The Pennsylvania Public Utility Code (66 Pa.C.S. Section 1308(e), however, provides that the PAPUC may permit a company to file a second request for an emergency rate increase. A final decision on the $76.5 million permanent increase request is due by April 1981.

In response to the August 28th denial of rate relief, the bank consortium participating in the RCA sent a letter to Met-Ed on September 8, 1980. This letter, sent by the RCA agents, Citibank, N.A. and Chemical Bank, further reduced the borrowing limit for Met-Ed. Among other things, the letter stated:

> The absence of earnings - and, therefore the absence of prospects for the refinancing of ME's obligations to the Banks - requires that the Banks evaluate the assets supporting such obligations. Because of the absence of earnings, the Banks do not believe that they can prudently ascribe a specific value for this purpose to the ME Bonds or the Borrowers' stock pledged to secure ME's obligations. Accordingly, the relevant assets in the view of the Banks are those which can be viewed as having reasonable short-term liquidity ("Liquid Assets") - namely ME's uranium pledged to the Banks (to which the Banks ascribe a value at $20,000,000 for this purpose) and ME's deferred energy account (as of the date hereof, approximately $71,000,000).
>
> At this time, the Banks are of the view that borrowings by ME under the Credit Agreement should not exceed the value of its Liquid Assets. Accordingly, it is the expectation of the Banks that, effective immediately, by not later than the tenth Business Day of each month, ME will, to the extent necessary, prepay its Notes so that the aggregate amount of its borrowings does not exceed the value of its Liquid Assets as at the last day of the immediately preceding month.
>
> The Banks are not unaware of the difficulty which ME may experience in fulfilling this expectation, but ME's lack of earnings and the other financial uncertainties facing it compel the keying of the Banks' exposure to ME's assets having short-term liquidity. The Banks anticipate that this posture will be maintained indefinitely

until ME's financial viability can be projected with some assurance. By the same token, however, the Banks are prepared to permit some outstandings in addition to the value of Liquid Assets to the extent that other acceptable short-term liquid assets are available to be pledged to the Banks, such as ME's accounts receivable or its coal inventory.

Confirming the provisions of the Credit Agreement, it is also the expectation of the Banks that GPU will not borrow under the Credit Agreement so as to make funds available to ME inconsistently with the foregoing.

In accordance with the revised terms imposed upon Met-Ed by the banks, Met-Ed subsequently filed a petition with the PAPUC requesting approval to pledge its accounts receivable. From an accounting viewpoint, accounts receivable are current assets which represent the claims against customers generated by credit sales for amounts still due to the company. Under any such pledge, the banks will extend additional credit to approximately half of the amount pledged, or $20 million.

Met-Ed's credit limit was $105 million. It has $83 million of borrowings outstanding under the RCA. Under the new arrangement, Met-Ed initially has a limit of $91 million, which will decline to about $74 million over the next 6 months with the amortization of the company's deferred energy balance.

Because of these recent developments, Met-Ed proposed to put cost reduction measures into action. These measures include the elimination of 280 jobs at TMI-1, which Mr. Dieckamp said, will seriously handicap Met-Ed's efforts to return TMI-1 to service. A further measure to reduce costs would eliminate approximately 350 jobs at TMI-2 and cut back expenditures at TMI-2 by $73 million, thereby delaying the cleanup and decontamination efforts. Nonetheless, Mr. Dieckamp emphasized that GPU's first priority is maintaining TMI-2 in a safe condition.

On September 12, 1980, in response to the PAPUC's August 28, 1980 Order, Met-Ed sent a letter to the PAPUC advising of Met-Ed's proposed service cutbacks. These cutbacks included a reduction of one-half of TMI-2 cleanup costs, thereby reducing them from $100 million to $50 million. Without the implementation of these cutbacks, the letter states, a shortfall of $1.3 million will occur in October 1980 for Met-Ed and increase to $19.8 million by December 1980. With the costs saved from the service reductions and the added credit available from the pledging of the accounts receivable, the letter states that credit requirements will modestly exceed credit available only through March 1981.

On September 18, 1980, the PAPUC issued its Prehearing Statement and Order in response to Met Ed's letter of September 12, 1980 (Ref. 6). In this order, the PAPUC stated its interest "that in the resolution of the upcoming rate proceeding, some control over the prospective dispersal of revenues by Met-Ed will be exercised to assure that intrastate utility revenues are not used for purposes that have not been authorized by this Commission for providing intrastate utility service. These recoverable costs exclude cleanup costs and

restoration which are in excess of existing insurance coverage." The PAPUC reiterated: "These cleanup costs and expenditures not covered by insurance ultimately are the responsibility of the company's stockholders and/or the Federal Government; however, they are not the responsibility of ratepayers." In accordance with these statements, the Commission therefore ordered that "the Metropolitan Edison Company cease and desist from using any operating revenues for uninsured cleanup and restoration costs."

REFERENCES

(1) Hearings of the U.S. Senate Subcommittee on Nuclear Regulation, Senate Committee on Environment and Public Works, November 7 and 8, 1979.

(2) General Public Utilities, "GPU System Statistics."

(3) General Public Utilities, "GPU System Cash and Earnings Report, June 1980-December 1981," presented to the GPU Board of Directors, June 5, 1980.

(4) Recommended Decision, PAPUC v. Met-Ed, PAPUC Docket Nos. R-80051196 and P-80070235, August 20, 1980.

(5) Order, PAPUC v. Met-Ed, PAPUC Docket Nos. R-80051196 and P-80070235, August 28, 1980.

(6) Prehearing Statement and Order, PAPUC v. Met-Ed, Docket No. R-80051196, September 18, 1980.

# APPENDIX C

## IMPACT OF THE TMI ACCIDENT ON STATE UTILITY COMMISSIONS, RATEPAYERS, AND POWER SUPPLY

CONTENTS



TABLES



FIGURES

# APPENDIX C

## IMPACT OF THE TMI ACCIDENT ON STATE UTILITY COMMISSIONS, RATEPAYERS, AND POWER SUPPLY

### 1.0 IMPACT ON STATE UTILITY COMMISSION

The Pennsylvania Public Utilities Commission (PAPUC) and the New Jersey Board of Public Utilities (NJBPU) are responsible for ensuring that customers have a reliable source of electricity at fair cost. These agencies must, therefore, foster viable utility companies which can operate in an efficient manner. The financial difficulties of General Public Utilities (GPU), which were brought on by the TMI accident, raise questions as to the ability of GPU to clean up TMI-2; this places extensive burdens on the PAPUC and the NJBPU to protect customers from high electricity rates, yet at the same time provide the financial environment to ensure cleanup.

Various consultants (as well as the PAPUC and NJBPU) have concluded that alternatives to having GPU supply service area needs would be even more burdensome than continued operation by GPU (Refs. 1, 2, 3, 4, 5). However, if GPU is financially unable to continue the cleanup, the PAPUC and the NJBPU would be faced with certifying---and perhaps finding---another operator. Because any new operator would have to be assured of eventual recovery of costs, the state utility commissions would have to ensure a favorable financial climate for the new operator.

The most likely operator to take over would be another utility. Only a utility with higher average costs than those of Metropolitan Edison (Met-Ed), the Pennsylvania Electric Light Co. (Penelec), and Jersey Central Power and Light Co. (Jersey Central) would willingly step forward to replace the GPU subsidiaries. Any takeover-candidate utilities would have to be ensured of an immediate rate adjustment to accommodate the additional responsibilities of meeting the needs of the acquired service area. Because both TMI units are not producing power, it is possible that the TMI station could be excluded from the new operator's responsibilities. Hypothetically, a public power authority could take over the operation and cleanup. (New Jersey currently has authorization for a public power authority; Pennsylvania does not.) However, it seems quite unlikely that a public power authority will be arranged to take over the cleanup of TMI-2, because neither New Jersey nor Pennsylvania has shown any inclination to use this mechanism. Moreover, if a public power authority were to assume ownership of TMI, it would then be responsible for operation and cleanup costs. The costs would not be avoided, but would instead merely be shifted to a broader segment of citizens (than the ratepayers).

### 2.0 IMPACT ON RATEPAYERS

This analysis assumes no bankruptcy. If bankruptcy occurs, the following analysis is not valid. The apportioning of cleanup costs between ratepayers and equity holders would depend on bankruptcy court decisions, which cannot be accurately predicted or rationally analyzed at this stage.

Unless external assistance in the financing of cleanup costs is provided, the cost of cleanup must eventually be passed on to either current or future ratepayers in one form or another (i.e., passed through to the current ratepayers as cleanup costs accure, or to future ratepayers in the form of fixed charges on the debt incurred as a result of cleanup costs in the form of higher costs for future capital).

One at-least-partial source of funds for cleanup is the money which would normally be distributed to equity holders as dividends. While use of these funds relieves the burden on current customers, it is not desirable for this practice to continue. For buyers to be attracted to purchase stocks, they must be assured of a rate of return equivalent to that attainable from similar investments (with respect to risk, liquidity, etc.). Long-term reduction or elimination of dividends would not offer investors this equivalent return. Moreover, prospective revenues must be sufficient to pay the equivalent return on outstanding shares. This revenue must come from customers.

A second source of funds is short-term credit, which ultimately would be refinanced with bonds and preferred and common stock. This debt would at some time have to be capitalized into the rate base to pay off the bonds and accumulated interest. Again, revenue from customers is the ultimate source which would be used to retire these obligations. (It must be noted that without complete financial recovery, any new obligations would have a higher cost, reflecting their higher risk. Quite likely, the ratings of these securities would be lowered, thereby raising the yield and lowering the price which future securities would bear.)

A loan guarantee, Federal or from another source, would not materially reduce the eventual impact on ratepayers, as compared to debt financing on the strictly private market. Loan guarantees would provide for the accessibility of funds and possibly lower the interest rates (because of the lower risk attendant with a guarantee of payment of interest and repayment of principal; this, in turn, raises the quality and ratings of a debt security), but the loans would have to be repaid eventually.

The third source of revenue is one which would incorporate TMI-2 cleanup costs in current customer charges. This would be similar in concept to the practice of allowing the cost of construction work in progress (CWIP) to be included in the rate base (that is, allowing additional revenues to be collected from ratepayers to help finance construction as these costs accrue.) However, other obligations must also be financed, such as the other construction expenditures necessary for meeting service obligations.

Each of these options has policy and equity considerations which are beyond the scope of this paper. They are presented here to show how and when the cost impacts are likely to occur. The only payment arrangement which would not impact the ratepayers---either now or later---is a situation in which a grant would be given by a public agency (i.e., the state or Federal government). In this case, the costs would be spread over the people who pay the taxes from which the grant was obtained.

This section considers the impacts on (1) current ratepayers, if cleanup costs are passed directly through as costs accrue (with no interest charges necessary),

and on (2) future ratepayers, if cleanup costs are accumulated and capitalized at the end of the cleanup operation, and then amortized over a long period of time. Many intermediate scenarios could be assumed, but these two approximate the extremes. The exact values are not important to this study; the comparison of the relative magnitude of cleanup costs (when expressed in unit cost of generation (mills/kWh*) for the GPU subsidiaries) and the comparison of relative cleanup cost to the average cost of electricity to the ratepayers are of interest.

Some statistics from GPU's annual report and the staff's estimated unit cost for cleanup are shown in Table 2-1. The average cost to ratepayers for electricity was obtained by dividing the revenues received from the sale of electricity by the amount of electricity (number of MWh) sold. Note that the average cost of electricity to ratepayers in 1979 ranged from $42 per megawatt-hour ($/MWh) for Met-Ed to 52 $/MWh for Jersey Central. If the cleanup costs are passed through as they accrue over a 5-year period, these unit costs would increase by about 7.4 $/MWh for Met-Ed and about 2.5 $/MWh for Jersey Central and Penelec. If the cleanup costs are spread over 7 years, the unit cost of electricity would be about 5.3 mills/kWh for Met-Ed and about 1.8 mills/kWh for Jersey Central and Penelec. The higher unit cost for Met-Ed is the result of its bearing the larger portion of cleanup cost and having lower electric sales. (See footnotes 1 to 3 of Table 2-1 for the assumptions used in the calculations, and footnote 4 for the conversion to customer cost in $ per month.)

For the scenario where cleanup costs plus interest are accumulated over the cleanup period and capitalized at the end of cleanup, included in the rate base, and then amortized, the 1st-year unit cost is slightly less than in the first scenario, and the unit cost would decrease each succeeding year as electric sales grew. At an assumed 5-percent growth in sales, the 30th-year unit cost would be about percent of the 1st-year cost. Different assumptions will not significantly alter these impacts.

A more complete appreciation of the relative magnitude of the cleanup cost and the impact of this cost on ratepayers may be obtained by comparing the average cost of electricity for a number of utilities in the region. This comparison is shown in Table 2-2, which was taken from a GAO report (Ref. 6). The costs are for 1978 (preaccident). In 1978, Jersey Central's costs were 5th highest of 13 utilities, and only 3 utilities had lower average costs than Penelec and Met-Ed. Following the accident, the cost of electricity to GPU system customers has remained in the range of other utilities in the region, even though the system purchased substantial power to replace the loss of generating capacity of TMI-1 and -2. This cost remained low primarily because the utilities were not allowed to pass on to their customers immediately the full cost of replacement power. The rate increases granted by the State commissions prior to April 1, 1980 have largely reflected energy-clause adjustments that were not TMI-related or that were offset by the removal of TMI-2 from the rate base. Figure 2-1 compares typical electric bills for a residential customer purchasing 500 kWh of electricity per month from various neighboring utilities in April 1, 1979 and June 1, 1980. The chart also shows what costs would be if rate increases filed by the utilities as of June 1, 1980 (and July 29, 1980 for Met-Ed) are approved. Although Jersey Central's rates are on the high

*mills/kWh = $/MWh

Table 2-1 Selected 1979 statistics and cleanup costs.

| Item | Jersey Central | Met-Ed | Penelec | GPU |
|---|---|---|---|---|
| Total assets, $ million | 2,114 | 1,327 | 1,497 | 4,992 |
| Revenues, $ million | 665 | 338 | 493 | 1,490 |
| Number of customers, thousands | 691 | 358 | 509 | 1,558 |
| Electric sales (MWh), thousands | 12,771 | 8,084 | 11,140 | 31,995 |
| Average cost, $/MWh | 52 | 42 | 44 | 47 |
| Average cost (in 1979 dollars) of accident to: | | | | |
| current ratepayers where cleanup costs are spread over 5 years $/MWh[1,2] | 2.3[3] | 7.4[3] | 2.7[3] | 3.8[3] |
| future ratepayers where cleanup costs are capitalized: 1st year, $/MWh [2,4] | 1.9 | 6.2 | 2.3 | 3.1 |
| 30th year, $/MWh [2,5] | 0.4 | 1.4 | 0.5 | 0.7 |

[1]Assuming the net cost of cleanup is about $600 million, the shared cost in proportion of ownership is $150 million, $300 million, and $150 million for Jersey Central, Met-Ed and Penelec, respectively. The unit costs are based on cleanup costs divided evenly over 5 years and divided by 1979 electric sales (MWh). If electric sales grew at 5%, the 5th-year unit cost for cleanup would be about 20% less. Gross revenue tax paid by the utilities would increase this by about 15%.

[2]If a customer used 1000 kWh of electricity per month, the amounts shown would be the cleanup cost in $ per month. For example, a Met-Ed customer using 1000 KWh per month would pay $7.4 per month for cleanup over a 5-year period.

[3]If the cleanup costs are spread over 7 years instead of 5 years, these costs would be 1.7, 5.3, 1.9 and 2.7 $/MWh, respectively.

[4]Assuming the net cleanup cost of $600 million plus interest over the 5-year period (at 10% per year on an average debt of $300 million over the 5 years, or about $150 million), or a total of $750 million, is capitalized at the end of 5 years and payment spread over 30 years. Based on a fixed charge rate of 17%, the annual cost would be $32 million, $64 million, and $32 million for Jersey Central, Met-Ed, and Penelec respectively. The 1st-year unit cost is the annual cost divided by the 1984 electric sales (MWh), assuming electric sales grow at 5% per year. If cleanup extended over 7 years instead of 5 years, the capitalized cost would be about 8% higher.

[5]Assuming electric sales grow at 5% per year over the 30-year period.

Table 2-2 Average cost to customers.
(12 months ended December 1978)

| Company | Cost (mills/kWh)* |
|---|---|
| Consolidated Edison Co. of New York | 81.4 |
| Rockland Electric Co. | 68.5 |
| Long Island Lighting Co. | 57.3 |
| Public Service Electric & Gas Co. | 53.3 |
| Atlantic Electric Co. | 47.4 |
| Jersey Central Power & Light Co. | 47.2 |
| Duquesne Light Co. | 45.3 |
| Philadelphia Electric Co. | 44.7 |
| Pennsylvania Electric Co. | 38.3 |
| Metropolitan Edison Co. | 38.0 |
| Pennsylvania Power & Light Co. | 35.3 |
| Pennsylvania Power Co. | 33.1 |
| West Penn Power Co. | 31.8 |

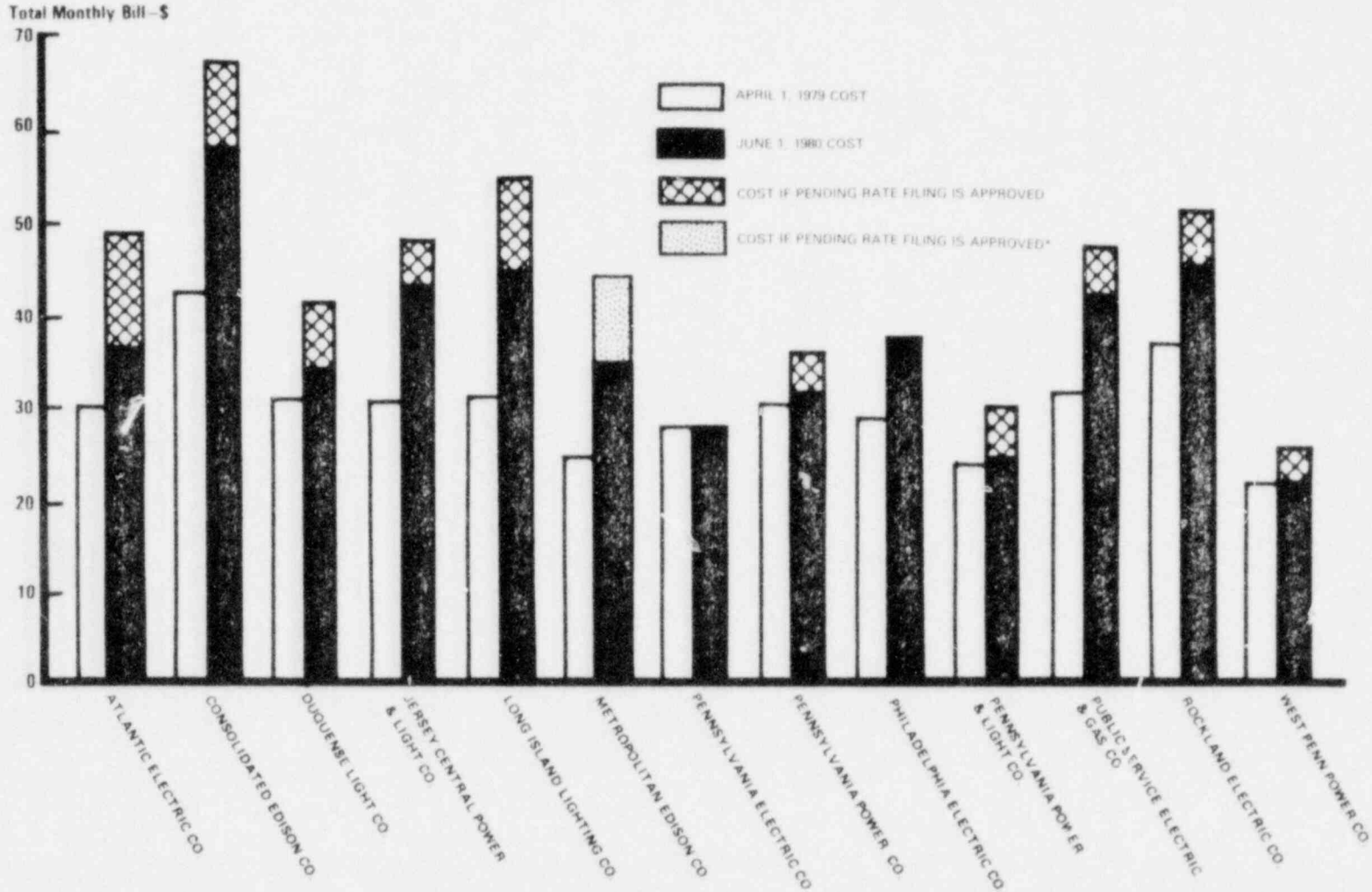
*mills/kWh = $/MWh

side, rates for Met-Ed and Penelec are still favorable when compared to most other utilities.

Another perspective is the comparison of the estimated cost of generating electricity at TMI-2 before the accident with the estimated cost after cleanup and restart. These cost estimates are shown in Table 2-3, and the footnotes explain the assumptions and source of data. The cost of cleanup plus the interest cost on invested capital in TMI-2 during the cleanup period will more than double the former cost of generating electricity from TMI-2. However, the total cost, including cleanup, of about 72 mills/kWh, is in the range of the estimated cost of generation (65 to 74 mills/kWh) from new coal-fired units coming on line in the late 1980s in the New Jersey/New York and Middle Atlantic region, and slightly higher than the estimated cost of generation from new nuclear units (57 to 64 mills/kWh) coming on line in the same time period and region (Ref. 7).

Figure 2-1

TYPICAL ELECTRIC BILL COMPARISONS RESIDENTIAL–NO WATER HEATING–500 KWH/MONTH




SOURCE: GPU Corporation.

*This material added by the NRC staff.

Table 2-3 TMI-2 Cost of Generation

| Item | $/MWh or mills/kWh |
|---|---|
| Pre-1979 accident | |
| Fixed cost[1] | 23.7 |
| Operation and maintenance[2] | 1.8 |
| Fuel[2] | 6.5 |
| Subtotal | 32.0 |
| Cleanup cost[3] | 24.9 |
| Interest cost on TMI-2 during cleanup[4] | 14.6 |
| Total | 71.5 |

[1]Based on 900 MWe, 17% fixed-charge rate and 65% capacity factor and $715 million capital cost.

[2]From NUREG-0480: The 1990 cost for O&M and fuel were deescalated at 5% per year to 1979.

[3]Based on $750 million ($600 million net after insurance plus $150 million interest at 10% during recovery over 5-year period) capitalized at end of the recovery period, 17% fixed-charge rate and 65% capacity factor.

[4]Based on 10% interest compounded and $715 million initial capital cost for TMI-2, the interest charges would be $440 million over a 5-year period. The $440 million is capitalized at the end of the recovery period. The unit costs are based on 17% fixed-charge rate and 65% capacity factor.

The perspective in the above paragraphs assumes that TMI-2 is cleaned up and put back into service. What would the impact be if TMI-2 is not put back into service? For this situation, the staff assumed that the decision to not restart TMI-2 is made 5 years after the accident, that the cost will be amortized over 30 years and passed through to the ratepayers, and that the total cost includes $715 million original investment in TMI-2 plus $440 million interest charges on investment over 5 years, plus $600 million cleanup cost, plus $150 million interest on cleanup cost, for a total of $1.9 billion (see footnotes to Table 2-3 for these costs). If this cost is split in proportion to the

utilities' ownership of TMI-2 and amortized at 12 percent per year (to cover return on investment and depreciation over 30 years), the annual cost would be $57 million, $114 million, and $57 million for Jersey Central, Met-Ed, and Penelec respectively. If these costs are divided by 1979 electric sales (see Table 2-1), the average cost to the ratepayers would be 4.46 mills/kWh, 14.10 mills/kWh, and 5.12 mills/kWh for Jersey Central, Met-Ed, and Penelec respectively for the 1st year. If electric sales increase at 5 percent per year, the 30th-year cost would be about 20 percent of the 1st-year cost. The Pennsylvania and New Jersey gross-revenue taxes paid by the utilities would increase this by about 15 percent.

## 3.0 POWER SUPPLY CONSIDERATIONS ASSOCIATED WITH THE UNAVAILABILITY OF THE TMI NUCLEAR STATION

The Three Mile Island Nuclear Station is owned by the three operating companies of GPU. Met-Ed, the operator, owns 50 percent, and Jersey Central and Penelec each owns 25 percent. The TMI units have summer ratings of 776 MWe (unit 1) and 880 MWe (unit 2).

These utilities are members of the Pennsylvania-New Jersey-Maryland Interconnect (PJM). Through its member companies, the PJM controls the generation, transmission, and interchange of electric power within its control area. Subject to flow constraints imposed by system security, the PJM system draws upon all the resources available to member companies and minimizes the incremental cost of electricity to all parties. Because of the high degree of coordination among member utilities and because the PJM system centrally dispatches energy from a single point, reliability is determined primarily at the regional level.

The nonavailability of the TMI units (totalling 1656 MWe) is not expected to create reliability problems on the PJM system for the next 2 years. PJM's planned reserve margins during the summers of 1981 and 1982 are estimated at 27.9 percent and 27.8 percent respectively, without the TMI nuclear station. PJM has established 22 percent as adequate to maintain minimum-acceptable reliability; therefore, the PJM system should have adequate capacity to meet peak demand during this period.

The PJM reserve-margin estimates derived here assume that all planned additions as well as scheduled retirements, deactivations, and deratings will continue as projected by the PJM utilities. In all, almost 3200 MWe of new capacity is scheduled to be added in this time period, and slightly more than 900 MWe will be lost to retirements, deratings, and deactivations. If all scheduled additions were indefinitely delayed but all capacity losses continued as planned, PJM's summer reserve margins in the 1981-and-1982 period would fall to 23.5 percent and 18.9 percent in 1981 and 1982, respectively.

The favorable power-supply outlook depicted above for PJM as a whole contrasts with the expected inadequacies in the GPU system itself. An examination of GPU's situation (as if it were independent of outside support) results in summer-peak-load reserve margins in 1981 of about -12.8 percent. Assuming TMI-1 is returned to service in late 1981, the GPU summer-peak-load reserves are estimated at +0.3 percent in 1982 and at -6.1 percent in 1983. Thus, if peak demand on the GPU system grows according to GPU's latest projections, and

no outside support is forthcoming, serious reliability problems would surface on the GPU system. It must be stressed, however, that given the expected reserves of other PJM utilities and capacity available from other systems, this is not a likely scenario. It is presented here solely for information purposes and to highlight the fact that GPU will be highly dependent on other utility systems in order to service its load reliably.

To date, the electrical energy that would have been generated by the TMI station has been replaced by more expensive power sources from either the PJM interchange or from direct purchases from other utility systems. For 1979, GPU's net purchases and interchange increased to about $268 million, or more than double the amount for 1978. Excess capacity on the PJM interchange is predominantly oil fired and is made available to GPU under a current split-savings rate schedule. Under this schedule, the price of purchased energy is determined by splitting the difference between the marginal cost of the energy supplied and what it would cost had this importing system supplied the energy internally. The purchases of power from non-PJM sources are from primarily coal-fired generation, and they are considerably less expensive than that offered through the PJM network. Major sources of this purchased power are Ontario Hydro, Pennsylvania Power and Light, Jamestown, and various utilities in western Pennsylvania. Between April 1979 and March 1980, replacement power costs were about $91 million lower than what would have been incurred had GPU been totally dependent on the PJM interchange. Over the next several years, the outlook for replacement-power costs appears promising because of the likelihood of an increasing dependence on lower cost coal as the major source of replacement energy.

In conclusion, the near-term reliability of the PJM system during the expected summer peaks should not be adversely affected by the unavailability of the TMI units. Although GPU is not expected to be able to independently support its own load, excess capacity from the PJM interchange and other utilities suggests that reliable service on the GPU system can be maintained over the next 2 years. Table 3-1 shows PJM's projected resources, peak demands, and reserves that were used in this review.

Table 3-1 PJM estimated peak resources, demand, and margin for the 1979-1982 summer periods.

| | Summer[1] 1979 | Summer 1980 | Summer 1981 | Summer 1982 |
|---|---|---|---|---|
| Resources in MW (without TMI-1 and -2) | | | | |
| (1) Net dependable capability | 43,686 | 43,099 | 44,354 | 45,645 |
| (2) All scheduled imports | 180 | 157 | 107 | 107 |
| (3) All scheduled exports | 0 | 0 | 0 | 0 |
| (4) Inoperable capability | -475 | -28 | -259 | -231 |
| (5) Operable resources (1+2-3-4) | 43,391 | 43,228 | 44,202 | 45,521 |
| Demand in MW | | | | |
| (6) Peak-hour demand | 33,446 | 33,550 | 34,550 | 35,610 |
| Margin (without TMI-1 and -2) | | | | |
| (7) Margin in MW (5-6) | 9,945 | 9,678 | 9,652 | 9,911 |
| (8) Margin as % of peak-load demand (7/6 x 100%) | 29.7 | 28.8 | 27.9 | 27.8 |
| (9) Margins as % of peak-load demand (without TMI-1 and -2 and assuming all scheduled additions planned in 1980 through 1982 are indefinitely delayed) | - | 28.8 | 23.5 | 18.9 |

Source: All data derived from MAAC Regional Reliability Council Response to ERA Order #411, April 1, 1980, Table 3-A, Page III-A-1.

[1]Summer 1979 data are from 1979 MAAC filing to ERA Order #411. Although data do not reflect actual reserves experienced in 1979, the information is consistent with the planning reserve estimates reported for 1980 through 1982.

## REFERENCES


(1) Testimony of Harvey A. Miller, PAPUC Docket No. I-79040308, p. 14, January 14, 1980.

(2) Testimony of James M. Hogan, PAPUC Docket No. I-79040308, pp. IV-5 and IV-6, March 4, 1980.

(3) Testimony of Aaron Levy, Securities and Exchange Commission, before the NJBPU, pp. 480, 481, 488, May 24, 1978.

(4) Order of the PAPUC, Docket No. I-79040308, pp. 4 and 5, May 23, 1980.

(5) NJBPU, Statement of President on behalf of BPU, Docket No. 804-285, 803-172, and 795-508A, May 13, 1980.

(6) U.S. General Accounting Office, "Three Mile Island: The Financial Fallout," July 1980 (available from the U.S. Government Printing Office).

(7) U.S. Nuclear Regulatory Commission, "Coal and Nuclear: A Comparison of the Cost of Generating Baseload Electricity by Region" (NUREG-0480), December 1978.*


These references are available for inspection and copying for a fee in the NRC Public Document Room, 1717 H Street, N.W., Washington, D.C. 20555.

*This document is available for purchase from the National Technical Information Service, Springfield, VA 22161.

# APPENDIX D

# BANKRUPTCY

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APPENDIX D

BANKRUPTCY

## 1.0 INTRODUCTION

Fundamental to the issue of who must ultimately bear the monetary burden of "cleaning up" TMI Unit 2 is a determination of whether the licensee is financially capable in the first instance of both undertaking and completing the decontamination process.

The "Report of the Governor's Commission on Three Mile Island" (Report) proposed six financial mechanisms available to General Public Utilities (GPU) in order to respond to its financial difficulties.[1] The six methods are as follows:

(1) types of voluntary reorganization including merger and consol dation;
(2) reduction of common stock dividends;
(3) rate relief, which would include costs not covered by insuran e;
(4) creation of a state power authority;
(5) F deral responsibility for some of the costs; and
(6) ba kruptcy proceedings including liquidation and reorganization un er court-appointed trustees.[2]

In reference to the first alternative, the Report dismissed merger on the basis of existing prohibitive legal restrictions, yet stated that GPU intends to undergo management consolidation in tandem with "its plan to transfer nuclear operations to a separate corporation with an infusion of new high-level management."[3] Since the Report was published, GPU has gone further than the second alternative by deciding to omit its next two quarterly dividends.[4] Concerning alternative three, rate relief, the Pennsylvania Public Utility Commission (PAPUC) issued an initial decision on May 9, 1980, which the PAPUC subsequently finalized on May 23, 1980 (Order). In this Order the PAPUC concluded that Metropolitan Edison (Met-Ed) should continue to operate as a public utility, yet ruled that TMI-1 is not "used and useful" in the public service as a property to be included in the rate base.[5] The PAPUC therefore reduced the base rates of Met-Ed and Pennsylvania Electric Company and set temporary base rates in order to allow for the recovery of replacement power, including power purchased and generated in lieu of TMI-1 generation.[6]

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1/ Report of the Governor's Commission on Three Mile Island, §2.5 at 35 (alternatives available to respond to financial demands) (hereinafter cited as Report).

2/ Id.

3/ Id. at 36.

4/ Id. at 37.

5/ Pennsylvania Public Utility Commission Order at 4, 13 (May 23, 1980) (hereinafter cited as Order).

6/ Id. at 4, 14-15.

The Report also discusses the fourth alternative, creation of a State power authority, and concludes that the feasibility and efficiency of such an authority are questionable.[7] Notwithstanding the availability of these four options as methods of ameliorating the financial predicament of GPU, however, both the Report and the PAPUC in its May 9, 1980 decison urged monetary participation on the part of the Federal government (alternative five in the Report). Both statements ground their recommendations on earlier Federal promotion and subsidization of the commercial nuclear industry.[8]

Whether the Federal government, in particular the NRC, will ultimately be required to assume responsibility for the cleanup would seem to depend upon the future financial viability of the licensee, namely whether the licensee either voluntarily or involuntarily suffers the initiation of bankruptcy proceedings (alternative six in the Report).[9] This section will treat the structure and purpose of the new bankruptcy laws as well as the effect of their potential application to the financial affairs of the licensee and the cleanup of TMI-2. Unfortunately, even experts have little experience in this area because there have been virtually no electric public utilities to go bankrupt under former bankruptcy law.[10] Moreover, the provisions of the current law have not yet been utilized to solve the distressed financial affairs of an electric utility company and therefore have not yet been judicially interpreted.[11] The judicial opinions that are discussed in this paper were decided under prior law. There is therefore no concrete basis upon which to conclude that a court would guarantee that funds will be made available under currently applicable bankruptcy law for the cleanup of TMI-2. A literal interpretation of the new provisions, however, would appear to lean in favor of the secured creditors or bondholders --- as opposed to the public interest in cleaning up the site --- because the new law increases the difficulty involved in obtaining the necessary funds to pay the operating expenses of a company that provides a service to the public.[12]

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7/ Report, supra note 1, at 40-41.

8/ Report, supra note 1, at 41-42; Order, supra note 5, at 6-7.

9/ See Report, supra note 1, at 39-41. See also Report of Special Task Force on Three Mile Island Cleanup, Memorandum to William J. Dircks from N. M. Haller, dated February 28, 1980, at IV-20, ¶ M(6): "Ineffective use of limited financial resources of the licensee and the possibility that the licensee could go bankrupt and not be able to complete the cleanup, an eventuality for which no contingency plans have been identified."

10/ Testimony of Aaron Levy of the Securities and Exchange Commission, Division of Corporate Regulation, before the New Jersey Board of Public Utilities at 470, 494-95 (May 24, 1978) (hereinafter cited as Levy Testimony).

11/ Direct Testimony of Thomas E. Dewey, Jr. (Theodore Barry & Associates Study), Statement No. 3, at III-5 (March 4, 1980) (hereinafter cited as Dewey Testimony).

12/ Levy Testimony, supra note 10, at 483-84; telephone conversation with Grant Guthrie, Securities and Exchange Commission, Division of Corporate Regulation.

It is important also to recognize that before the accident at TMI-2, the licensee was a solvent corporation. It was therefore not financial mismanagement that precipitated the financial distress of the licensee. Instead, the accident at TMI-2, which led to the inoperability of that unit as well as the shutdown of unit 1, was the factor leading to the need to buy electricity from other sources to supply its customers as well as the costly need to decontaminate that facility.[13/] For this reason, experts have not endorsed bankruptcy---either liquidation or reorganization---as an option that would solve any of the currently existing problems.[14/] Rather, the potential strength of the licensee to continue operation or cleanup, or both, appears to be contingent upon whether the licensee is afforded the rate increases to cover the costs of substituted energy sources and the cleanup of TMI-2.[15/]

## 2.0 BANKRUPTCY

The option of bankruptcy becomes a consideration when, in a debtor-creditor situation, the debtor is unable to perform its part of an agreement because of the existence of excess debts on the part of the debtor in relation to the amount of the debtor's assets.[16/] One solution that the bankruptcy law utilizes to remedy this situation is a court proceeding in which the debtor surrenders virtually all its assets for distribution to creditors on a pro rata or partial basis.[17/] Although satisfaction of the obligations of the debtor occurs in a manner generally uncontemplated by either of the parties, the debtor-creditor relationship remains intact during the proceeding.[18/] This type of solution, obviously viewed as less than perfect by both the debtor and the creditor, was envisioned by Congress as early as 1800[19/] as

13/ See Levy Testimony, supra note 10, at 473-74 (GPU), 483, 520 (JCP&L).

14/ See Levy Testimony, supra note 10, at 483, 491, 502 and references in note 77, infra.

15/ See Levy Testimony, supra note 10, at 501-02.

16/ 9 Am. Jur. 2d Bankruptcy Reform Act of 1978: Overview § 1.1, at 4 (1979).

17/ The individual debtor is entitled to certain property exemptions, which constitute property or assets that do not pass to the trustee for eventual distribution among the creditors. See 11 U.S.C.A. §522 (1979).

18/ 9 Am. Jur. 2d, supra note 16, §1.1, at 4.

19/ In 1800 Congress first enacted the Bankruptcy Act. Since that time, numerous acts and amendments have appeared. See J. MacLachlan, Handbook of the Law of Bankruptcy §28, at 21 et seq. (1956). A major act was the Bankruptcy Act of 1898, id at 22, which was amended in 1938 by what was known as the "Chandler Act". Id. at 24; 1D. Cowans, Bankruptcy Law and Practice, §12, at 7 (2d ed. 1978) (hereinafter cited as Cowans). Finally, 40 years later Congress enacted the current Bankruptcy Code, which is codified in Title 11 of the United States Code. Cowans, supra, §12, at 7.

a desirable method of balancing the necessity of relieving the debtor from the woes of inextricable, prebankruptcy financial burdens[20] and the desirability of allowing the creditor to salvage some payment where the debt cannot or will not be paid in full.[21]

In this vein and pursuant to the power delegated to Congress in Article I, §8 of the United States Constitution to legislate on the subject of bankruptcy,[22] Congress enacted the latest version of the bankruptcy laws, the Bankruptcy Code of 1978 (Code), 11 U.S.C.A. § 101 et seq. As mentioned above, one form of bankruptcy requires the debtor to surrender the property of and the property interests in its estate to the trustee, who uses, or liquidates, those assets to pay the claims of the debtor's creditors.[23] This type of bankruptcy, called liquidation, is found in Chapter 7 of the Code and is generally utilized if continuation of the business is not a viable option.

Liquidation results in the discharge of virtually all of the debtor's obligations.[24] Another solution, offered in Chapter 11 of the Code, is preferable to a debtor that wishes to continue its business. Under a Capter 11 "reorganization," the court enjoins creditors from attempting to claim the debtor's assets until either the debtor or an interested party formulates and presents a plan of reorganization to the creditors.[25]

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20/ Certain debts remain nondischangeable under 11 U.S.C.A. §523. For example, debtors must pay certain taxes and customs duties, §523 (a)(1), and debts incurred as a result of false pretenses, fraud, §523(a)(2), or willful and malicious injury to another entity or to the property of another entity, §523(a)(6).

21/ 1 Cowans, supra note 19, §1, at 1; Arner, The Worthier Creditors (And a Cheer for the King)--Revisited, 53 Am. Bankr. L. J. 389, 391 (1979) (hereinafter cited as Arner). The purpose of the bankruptcy laws from the public's point of view have been stated to be:

> (1) to return to useful production a man so harrassed by debt that he cannot do his work properly [and thus avoid transforming the debtor into a public charge], and (2) to divide fairly among the ...creditors such assets as he has. (Cowans, supra note 19, §1, at 1.)

22/ Article I, §8 of the United States Constitution reads in pertinent part as follows: "The congress shall have power to ... establish ... uniform laws on the subject of bankruptcies throughout the United States...."

23/ 11 U.S.C.A. §704 (1979) (duties of trustee).

24/ 2 Collier Bankruptcy Manual, ¶ 700.01, at 700-1 (3d ed. L. King 1979); 3 Cowans, supra note 19, §901, at 80-81.

25/ 3 Cowans, supra note 19, §901 at 81. Mr. Cowans notes that Federal courts are "hospitable" to Chapter 11 proceedings because reorganization with consequent rehabilitation is considered to be more desirable than liquidation. Id., §901, at 83. See 11 U.S.C.A. §362 (1979) (automatic stay provision).

## 2.1 Chapter 7 Under the Code

Under Chapter 7, either the debtor or one or more creditors may file a petition for bankruptcy in the bankruptcy court. In the former instance, the proceeding is called "voluntary." In the latter event, it is deemed "involuntary."[26] In both cases, however, a trustee is a necessary part of the Chapter 7 proceeding. In fact, immediately after the order for relief which occurs upon commencement of a voluntary case under Chapter 7,[27] the court will appoint as interim trustee a disinterested person who is either a member of a panel of private trustees or who was serving as trustee in the case immediately preceding the order for relief.[28] The service of the interim trustee terminates upon the election of the trustee.[29]

## 2.2 Financial Implicatons of the Legal Obligations of a Chapter 7 Trustee

One of the duties of the trustee in a Chapter 7 case is to collect and reduce to money the property of the debtor's estate and to close up the estate as quickly as possible in view of the best interest of the creditors.[30] Although these particular tasks appear to be irreconcilable with the idea of safeguarding any of the assets of the business for a purpose such as cleaning up TMI-2, another duty of the trustee may arguably align itself more closely with the public interest in and regulatory concern with safeguarding the public from the danger of radiological harm emanating from the contaminated plant. This duty, the fifth duty enumerated in section 704 of the Code, is as follows: "[T]he trustee shall if advisable, oppose the discharge of the debtor."[31] The general effect of a discharge under section 727 is to relieve the debtor from having to pay all debts that arose before the date of the order for relief under Chapter 7.[32]

This provision could be utilized to discharge the licensee solely from its non-license-related monetary obligations so that these funds could be used to cleanup TMI-2. The responsibility for TMI-2 cleanup occasioned under the license issued by NRC pursuant to Section 103 of the Atomic Energy Act of 1954, as amended (AEA) is not a debt within the meaning of the Code. Therefore, use of the discharge provision to nullify the licensee's obligation to

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26/ 11 U.S.C.A. §§301, 303 (1979).

27/ Id. §301 (1979).

28/ Id. §701(a) (1979).

29/ Id. §701(b) (1979). The creditors who may vote for a trustee may also elect a committee of creditors who hold an allowable, unsecured claim to consult with the trustee, make recommendations to the trustee and submit to the court questions affecting the administration of the estate. Id. §705 (1979).

30/ Id. §704(1) (1979).

31/ Id. §704(5) (1979).

32/ Id. §727(b) (1979). See also Klein, The Bankruptcy Reform Act of 1978, 53 Am. Bankr. L. J. 1, 19 (1979) (hereinafter cited as Klein) (exceptions to discharge provision).

clean up TMI-2 would not only be an improper application of the Code provisions to the licensor-licensee relationship between the NRC and the licensee, but also would thwart the NRC's regulatory authority to insist that the licensee fulfill its responsibility to clean up the site. Under the AEA, only the NRC can discharge a licensee from its license, thus excusing the licensee from its duties incurred pursuant to that license.[33/] Rather than revoke the license, however, it would be in the public interest for the NRC to insist that the licensee either restore TMI-2 to useful service or comply with its duty under section 50.82 of the NRC Regulations to decontaminate and perhaps decommission TMI-2. The argument could then be made that funds to clean up TMI-2 should be allocated as an administrative expense incurred as an "actual, necessary [cost and expense] of preserving the estate."[34/] In the Code, administrative expenses are given first priority over the general claims against the estate.[35/] Arguments raised under the AEA should be determinative of the fact that the licensee has the first duty pursuant to the AEA to decontaminate TMI-2 whether or not the licensee is in bankruptcy proceedings.

Nonetheless, assuming arguendo that the debtor-creditor provisions of the Code are applied to the responsibilities that the licensee has incurred as a regulated entity, the language of the Code would not necessarily exclude decontamination as a preferred priority. The licensee is a debtor in the sense that it owes both the public and the NRC the duty to clean up a potentially dangerous situation. Nevertheless, one could draw the inference from expert testimony before the PUC that it might be inadvisable to promote an analogy under the Code between the grant of a license and a debtor-creditor relationship between the licensee and the NRC. Under the Code, with various exceptions and subject to court approval, a trustee may assume or reject any executory contract[36/] or unexpired lease of the debtor. As noted in this

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33/ Atomic Energy Act of 1954, as amended, 42 U.S.C. §2234, 2236 (1976). Cf. Palmer v. Massachusetts, 308 U.S. 79, 83 (1939) (District Court had no power to deal with matter in keeping of state authorities).

34/ 11 U.S.C.A. §503(b)(1)(A) (1979).

35/ Testimony of Harvey Miller, of private New York law firm before Pennsylvania Public Utility Commission (Cross Examination), at 1496-97 (January 29, 1980) (hereinafter cited as Miller Testimony; 11 U.S.C.A. §507(a)(1) (1979).

If the NRC's claim were deemed not to qualify as an administrative expense, it could be relegated to the status of a general, unsecured claim and thus placed in the same category with such claims as wages, salaries and commissions. See 11 U.S.C.A. §507(a)(3) (1979). But see 10 C.F.R. §50.81(a)(1) (rights of creditor secured by lien upon production or utilization facility, which is subject of license, may be exercised only in compliance with and subject to same NRC requirements and restrictions as is licensee).

36/ The term "executory" denotes that which has yet to be executed or performed. Black's Law Dictionary 680 (4th ed. 1968).

testimony, some creditors may urge that the license to operate TMI is a contractual delegation, with that part of the license, which relates to decontamination, as an executory contract and thus subject to rejection under section 365(d) of the Code.[37]

Such a claim, however, may not prevail in light of a recent Seventh Circuit Court decision.[38] In that case, the court noted that a literal definition of a contract executory in whole or in part could include the unperformed obligation of either the debtor or the bankrupt under a contract fully performed by the other party.[39] Yet, the court reasoned that this interpretation in bankruptcy cases would enable the trustee to repudiate accrued obligations. The court therefore held that "a contract which is executory only in the sense that it provides the fully performed non-bankrupt party with a claim against the bankrupt estate is not one which may be assumed or rejected."[40] If, however, the license is viewed as executory contract and is assumed rather than rejected by the trustee, it is the above-mentioned witness' belief that the costs associated with satisfying the contract would become an administrative expense and would therefore take priority over the claims of the other creditors.[41]

One further possibility under a Chapter 7 liquidation proceeding is that the debtor could attempt to exempt certain assets of the estate for the cleanup.[42] Although Section 522 applies to individual debtors, the obvious intent of the section (which governs such exemptions) is to allow the debtor a minimal amount of assets and property necessary to avoid forcing the debtor and the debtor's dependents to become wards of society.[43] This section arguably could be applied by analogy to fill the gaps in the Code, which does not address the peculiarities of a bankrupt public utility with a contaminated nuclear power plant. In any event, whether any exemption could be large enough to accomplish the cleanup of TMI-2 depends upon whether the entire "estate" of the licensee yields enough assets to clean up the site. Such an arrangement, which would very likely result in none of the creditors being paid, is not necessarily an unlikely result notwithstanding the fact that one of the major purposes of the Code is to reimburse creditors. One of the

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37/ Miller Testimony (Direct), supra note 35, at 17. Miller also testified that GPU advised him that it is committed to cleaning up TMI-2 as long as its rates permit sufficient revenues to effectuate clean up. Id. at 18.

38/ See In re Chicago, Rock Island & Pacific R.R. Co , 604 F.2d 1002 (7th Cir. 1979).

39/ Id. at 1003.

40/ Id. at 1003-04.

41/ See Miller Testimony (Cross Examination), supra note 35, at 1496-97.

42/ See generally Klein, supra note 32, at 23.

43/ See 11 U.S.C.A. §522 (1979). Obviously this idea could be carried to an extreme: if GPU is not permitted to retain sufficient assets to clean up TMI-2, then the contaminated plant will become the ward and thus the expense of society.

reasons for the existence of a bankruptcy law is the recognition that creditors of a debtor with severe financial problems should be able to recoup at least a proportional amount of their claims. In view of the public interest associated with decontamination, however, creditors of a public utility should expect to recoup less than creditors of any other type of corporation if the funds are necessary to avert a public hazard.[44/] Although a Chapter 7 liquidation would be the appropriate option if TMI-1 and -2 were shut down permanently, creditors would have a better chance to recoup their losses, in spite of the decontamination of TMI-2, if the licensee were reorganized rather than liquidated.

## 2.3 Chapter 11 Under the Code

If the NRC authorizes the operation of TMI-1, the more appropriate chapter to pursue under the Code would be a Chapter 11 reorganization. The purpose of Chapter 11 is to allow the debtor to restructure its financial situation so that the debtor may operate its business, thus providing employment as it earns funds to pay creditors and to pay returns on stocks held by those who invested in the business.[45/] One commentator has aptly stated that the "fundamental premise for a business reorganization is that assets used for production in the industry for which they were designed are more valuable than those same assets sold for scrap."[46/] Certainly, in a situation where the corporation supplies the public with a basic necessity such as electricity, the need of the public may also be better satisfied by reorganization, rather than liquidation. Moreover, the generation of electricity would lead to revenues that could be used to clean up TMI-2.

As under Chapter 7, a Chapter 11 case may be commenced either voluntarily or involuntarily.[47/] Unlike a liquidation proceeding, however, in a reorganization the court only appoints a trustee where a party in interest so requests and where the court has made certain findings, such as fraud, dishonesty, incompetence, gross mismanagement, or that such an appointment is in the best interests of creditors, equity security holders, and other interests of the estate.[48/]

If no request is made for a trustee or if the court does not order the appointment of a trustee, then the debtor in possession has all the rights and duties of a trustee subject to any limitations on a trustee and other than the right to compensation.[49/] If a trustee is appointed, and unless the court orders otherwise, the trustee may operate the debtor's business.[50/]

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44/ See text accompanying note 143, infra.

45/ Klein, supra note 32, at 7. See also King, Chapter 11 of the 1978 Bankruptcy Code, 53 Am. Bankr. L. J. 107, 107 (1979); Klee, All You Ever Wanted To Know About Cram Down Under the New Bankruptcy Code, 57 Am. Bankr. L. J. 133, 133 (1979) (hereinafter cited as Klee).

46/ Klein, supra note 32, at 7.

47/ 11 U.S.C.A. §§ 301, 303 (1979). See generally Klein, supra note 32, at 29-30.

48/ Id. §1104 (1979).

49/ Id. §1107 (1979).

50/ Id. §1108 (1979).

The trustee, in effect, replaces the Board of Directors. Although the trustee usually chooses to retain the key management of the corporation to continue the business of the corporation,[51] the trustee also has the discretion, with court authorization, to replace management personnel.[52] Also unlike in a Chapter 7 case, where unsecured creditors with allowable claims may choose to form a creditors' committee,[53] the court in a Chapter 11 proceeding appoints a committee of unsecured[54] creditors as soon as practicable after the order for relief in a Chapter 11 case.[55] Among the powers and duties of such a committee in a reorganization proceeding are the power to authorize the employment of such persons as attorneys and accountants; the power to consult with the trustee or debtor in possession; the power to request the appointment of a trustee or examiner; and the power to participate in the formulation of a reorganization plan.[56]

The debtor may file a reorganization plan with a petition commencing a voluntary case or at any time in a voluntary or an involuntary case.[57] However, the debtor has only 120 days within which to enjoy the exclusive right to file a plan after the date of the order for relief. Any party in interest, including the debtor, the trustee, and a creditors' committee, among others, may file such a plan if a trustee has been appointed, if the debtor has not filed a plan before 120 days after the date of the order for relief and if the debtor has not filed a plan that has been accepted before 180 days after the date of the order for relief by each class the claims or interest of which are impaired under the plan.[58]

The reorganization plan must designate, subject to certain conditions, each class of claims, specify any class of claims or interests that is not impaired under the plan, specify the treatment of any class of claims or interests that is impaired under the plan, provide the same treatment for each claim or interest of a particular class unless the holder of a particular claim or interest agrees otherwise, provide an adequate mechanism for execution of the

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51/ Levy Testimony, supra note 10, at 488.

52/ Levy Testimony, supra note 10, at 497-98.

53/ 11 U.S.C.A. §705 (1979).

54 An allowed claim of a creditor secured by a lien on property in which the estate has an interest is a secured claim to the extent of the value of the creditor's interest in such property. The claim is unsecured to the extent that the value of the creditor's interest is less than the amount of the allowed claim. 11 U.S.C.A. §506(a) (1979).

55/ Id. §1102(a)(1) (1979). Other committees may be appointed upon a request by a party in interest. Id. §1102(a)(2) (1979).

56/ Id. §1103 (1979).

57/ Id. §1121 (1979).

58/ Id. §1121(b), (c) (1979). See generally Klein, supra note 32, at 9-10.

plan---e.g., retention by the debtor of all or part of the property of the estate, transfer of property to one or more entities, merger or consolidation of the debtor with one or more persons, sale of property belonging to the estate---and provide for modification of the corporate charter.[59]

If the company undergoing financial difficulties is a registered holding company, as is GPU, that company must comply with the mandate of the Public Utility Holding Company Act of 1935, as amended (Act).[60] The Act requires registered holding companies to file their proposed reorganization plans with the Securities and Exchange Commission (SEC) for the approval of the SEC after an opportunity for an initial hearing before the SEC prior to its submission to the court.[61] The SEC has the right to propose the plan in the first instance.[62] Moreover, the SEC has the jurisdiction to either approve or disapprove of the expenditure of funds for fees, expenses and remuneration paid in connection with a liquidation, reorganization or receivership case.[63] Notwithstanding the section in the Code, which states that the SEC may not appeal from any court judgment, order, or decree entered in the case,[64] if a registered holding company enters into reorganization proceedings, that company must obtain approval of its plan from both the SEC and the bankruptcy court.[65] As does the NRC, the SEC acts in the public interest. In specific, the SEC has jurisdiction under the Act to protect the investors and consumers of public utility holding companies.[66]

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59/ 11 U.S.C.A. §1123 (1979). After the plan is filed, the holder of a claim or interest may accept or reject the plan, id. §1126 (1979), or the plan may be modified. Id. §1127 (1979). The court may confirm the plan if certain conditions are met. Id. §1129 (1979). After confirmation, and absent an order revoking an order of confirmation, the debtor may execute the plan. Id. §§1142, 1144 (1979).

60/ 15 U.S.C. §79 et seq. (1976).

61/ 15 U.S.C.A. §79k(f) (Supp. 1980); Levy Testimony, supra note 10, at 477, 526.

62/ 15 U.S.C.A §79k(f) (Supp. 1980).

63/ Id.; Levy Testimony, supra note 10, at 525.

64/ 11 U.S.C.A. §1109(a) (1979). Section 1109(a) also provides that the SEC may raise and may appear and be heard on any issue in a case under Chapter 11.

65/ Levy Testimony, supra note 10, at 477. Telephone conversation with Grant Guthrie, Securities and Exchange Commission, Division of Corporate Regulation.

66/ See 15 U.S.C. §79a (1976); 15 U.S.C.A. §79k(f) (Supp. 1980).

The first hurdle a company faces is whether the company has enough assets and cash to operate pending formulation and acceptance of the plan.[67] Although there are provisions in the Code for court approval of a plan even though some classes of creditors do not approve of the plan,[68] the aim of Chapter 11 is the negotiation of a consensual plan between the debtor and the creditors.[69] While negotiating the plan, the debtor must be careful not to encourage dissent by even the common shareholder class, or else the debtor will risk alienating creditor classes that might ordinarily later decide to invest in the stock of the utility.[70]

If the debtor is unable to negotiate a plan that satisfies all of the creditors, the "cram down" provision of the Code becomes applicable. This provision allows judicial confirmation of a plan over the dissent of one or more classes of creditors if the plan does not discriminate unfairly and is fair and equitable with respect to each class of claims or interests that is impaired under and has not accepted the plan.[71] In effect, the provision requires that each priority claim be satisfied unless the holder of the claim agrees otherwise.[72] Under the plan each member of the dissenting class receives the amount that would have been received upon liquidation.[73] For example, a secured creditor receives the value of its secured position in cash or cash equivalents,[74] and no junior creditor or stockholder may receive anything until the dissenting creditor class is paid in full.[75] If a plan essentially cannot be consummated, on request of a party in interest and after notice and a hearing, the court may convert the Chapter 11 proceeding into a Chapter 7 case.[76] In this event it appears that the priorities system set out in section 507 of the Code would apply to the claims of the creditors.

2.4 Financial Implications of Legal Obligations of a Chapter 11 Trustee

Even if a plan could be devised for the reorganization of the licensee, and although reorganization would be a more favorable option than liquidation,

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67/ Miller Testimony (Cross Examination), supra note 35, at 1433.

68/ See 11 U.S.C.A. §1129(b) (1979).

69/ Miller Testimony (Cross Examination), supra note 35, at 1436-37.

70/ Id. at 1440-41.

71/ 11 U.S.C.A §1129(b)(1). See generally Klein, supra note 32, at 14-15; Klee, supra note 45, at 134-38.

72/ Klee, supra note 45, at 137.

73/ Id.

74/ Miller Testimony (Cross Examination), supra note 35, at 1431.

75/ Id. at 1432.

76/ 11 U.S.C.A. §1112(b)(7). Section 1112 also describes other situations that could result in conversion--or dismissal--of a Chapter 11 case.

such a course of action has not been recommended.[77] Many problems are associated with a Chapter 11 proceeding aside from the general confusion that occurs during formulation of the plan: vendor credit may become more difficult to obtain and bank loans may be limited and subject to approval of the court;[78] various issues may arise that may result in lengthy litigation proceedings;[79] a stigma attaches to a once-bankrupt company;[80] there are higher interest rates imposed on a once-bankrupt company;[81] operation of the company is inefficient during reorganization because of numerous court appearances and required attendance at creditors' meetings;[82] the costs of reorganization are high.[83] In this case reorganization would

77/ See, e.g., Report, supra note 1, at 39-40; Dewey Testimony, supra note 11, at III-5; Miller Testimony (Direct and Cross Examination), supra note 35, passim.

78/ Miller Testimony (Direct), supra note 35, at 8, 21; Miller Testimony (Cross Examination), supra note 35, at 1409.

Under GPU's revolving credit agreement with the lending commercial banks, the institution of bankruptcy proceedings against GPU would be viewed as a default on the part of GPU and would therefore authorize the acceleration of the maturity of outstanding loans by GPU if so agreed upon by a majority of the banks. Statement by J. Graham, Treasurer of GPU, in Response to Letter from Senators Alan K. Simpson and Gary Hart at 11 (November 25, 1979). Moreover, all of Met-Ed's outstanding bonds provide that if Met-Ed should become subject to reorganization proceedings, the maturity of all its outstanding bonds may be accelerated and interest shall thereafter accrue on the bonds at a rate equal to the highest rate payable on any outstanding Met-Ed bond. Id. at 14. See generally id. at 12-15 (adverse effects of bankruptcy).

79/ Miller Testimony (Direct), supra note 35, at 8-9, 15, 16, 17 (regarding use of revenues to supply electricity services at prices below current costs, i.e., whether the bankruptcy case is being used to subsidize reduced costs to customers resulting in an invasion of case collateral; whether court will permit allocation of the insurance funds to clean up TMI-2; regarding whether the TMI operating license is an executory contract so that decontamination of TMI-2 can be avoided).

80/ Id. at 28.

81/ Id. at 29.

82/ Id. at 34.

83/ Id. at 14, 34; (Cross Examination) at 1487, 1498 (costs are associated with hiring trustee, counsel, accountants, creditors' committees; appraisers, examiners, etc.); Levy Testimony, supra note 10, at 483, 510.

not be a solution to any of the problems associated with the plant. It would simply permit the current situation to continue as before reorganization except that a trustee might be appointed as a supervisor.[84]

The negotiation of a plan, however, may give the regulatory agencies additional leverage to insist that decontamination of TMI-2 be treated as an administrative expense and thus a first priority item. If the company refuses or is unable to undertake decontamination without court approval, and if the court is unpersuaded by a claim that the licensee must satisfy its obligations under the AEA before paying debts pursuant to the Code, the PAPUC could refuse to allow the rate increases necessary to maintain the business and thus frustrate confirmation of the reorganization plan.[85] Furthermore, if the situation warranted such an action, the NRC under section 103 of the AEA could refuse to find the licensee financially qualified to operate the plant. If another company were granted a certificate of convenience by the PUC to operate TMI-1, the NRC could refuse to allow a transfer of the operating license under §184 of the AEA and 10 C.F.R. §50.80, both of which require NRC approval to alienate a license.

3.0 THE EFFECT OF STATE BANKRUPTCY LAWS

Because the Code was conceived as a result of a specific power granted to Congress by the Constitution, the Code possesses the status of the supreme law of the land. Provisions of the Code thus take precedence over and supercede any state or local laws in conflict with the Code.[86] For example, priorities in the Federal Bankruptcy Code prevail over nonbankruptcy priorities in state law,[87] and states may not exercise their power of eminent domain over property within the jurisdiction of the bankruptcy court.[88]

However, the Code continues to adopt various state laws that define and prescribe property rights and liabilities of persons and entities.[89] The Code refers specifically to state law for exemptions of property that should

84/ Levy Testimony, supra note 10, at 488.

85/ 11 U.S.C.A. §1129(a)(6).

86/ Greenberg, Municipal Bankruptcy: Same Basic Aspects, 10 Urban Lawyer 266, 267 (1978) (hereinafter cited as Greenberg); Cowans, supra note 19, §11, at 3. See also Perez v. Campbell, 402 U.S. 637, 649 (1971) (test of conflict is whether state statute "stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress").

87/ 1 Cowans, supra note 19, §11, at 4.

88/ Id., §11, at 6.

89/ Cowans, supra note 19, 1979 Supplement at xvii.

be left to the debtors, namely certain essentials necessary for the protection of themselves and their family.[90] Moreover, state law that attempts not to administer the affairs of debtors but only to prescribe the effect of bankruptcy upon property or persons is generally permissible.[91] State law also retains its authority concerning any matter that has not been specifically addressed by the Code.[92]

The States of both New Jersey and Pennsylvania have provisions in their corporate statutory laws for the appointment of a receiver upon a bill of equity or an action by creditors or shareholders.[93] In Pennsylvania the provision applies when the corporation becomes insolvent or finds itself in financial difficulty. In New Jersey the receivership action may be brought when the corporation is insolvent, has suspended its ordinary business for lack of funds or is being conducted at a great loss and is greatly prejudicial to the interests of its creditors and shareholders.

In view of the fact that the Federal Bankruptcy Code governs in the area of bankruptcies where state legislation may conflict, the purpose of the state law must be analyzed in order to ascertain whether the Code supercedes the state law. The current provision in New Jersey, for example, which refers to insolvency, not bankruptcy, is actually a revision of certain earlier repealed sections. The current version, section 14-2, differs from one of these earlier sections, section 14-3, in that it limits the type of creditor that may be a plaintiff in a receivership action. However, the purposes of the present section 14-2 and the earlier section 14-3 appear to be identical.[94] One commentator noted that under the previous section 14-3, a New Jersey

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90/ 1 Cowans, supra note 19, §20, at 15-16, §381, at 520-21; 1979 Supplement, §381, at 29.

91/ Id. §21, at 17. State decisions that attempt to interpret the Code are not binding on federal courts, however. Id., §23, at 19, citing Petition of Portland Electric Power Co., 162 F.2d 618 (9th Cir.), cert denied, 332 U.S. 837 (1947).

92/ Greenberg, supra note 86, at 267.

93/ N.J. Stat. Ann. 14A: 14-2 (West); Pa. Stat. Ann. tit. 15, §1319 (Purdon).

New Jersey also has a separate provision for receiverships in the event that a railroad, canal or turnpike company becomes insolvent. N.J. Stat. Ann. 48: 3-28 (West).

94/ The earlier section 14-3 reads as follows:

> When any corporation shall become insolvent or shall suspend its ordinary business for want of funds to carry on the same, or if its business has been and is being conducted at a great loss and greatly prejudicial to the interest of its creditors or stockholders, any creditor...may...apply to the court of chancery for an injunction and the appointment of a receiver or receivers or trustees.

quoted in Kramer, Insolvent Estates in Federal and State Courts and the Application of Section 2 Subsection a(21) of the Bankruptcy Act, 5 Rutgers L. Rev. 391, 391 n.3 (1951) (hereinafter cited as Kramer).

court recognized the predominance of Federal bankruptcy law even when the Federal law was invoked subsequent to the state law.[95] This commentator also analyzed other sections of the New Jersey "Insolvency, Receivers and Reorganization Act" in light of early chancery court cases and concludes that "when read in toto [they] fit snugly into the mold of an insolvency law."[96] In the 1800's, courts of New Jersey interpreted the purpose of the state statute as being identical to the bankruptcy laws: to prevent fraud by corporations and to ensure the creditors of these institutions an equal distribution of the company's assets.[97] In the 1930's, courts confirmed the "bankrupt character" of the New Jersey statute.[98]

Although these sections of the New Jersey act have been repealed since these decisions, the sections in the current chapter on insolvency appear to have the same intent: the appointment of a receiver in the event that a corporation becomes financially unstable to undertake possession of the corporation's property and to settle or compromise with any debtors or creditors of the corporation. The receiver may also continue the business of the corporation.[99] As does the Code, the New Jersey statute provides for the rights of setoff and counterclaim as well as a determination of preferences.[100] It appears that the New Jersey statute, although entitled "insolvency," is in reality a bankruptcy act similar to the Code.[101]

The Supreme Court case of International Shoe Company v. Pinkus is controlling. The Court there stated that "[i]t is apparent, without comparison in detail of the provisions of the Bankruptcy Act with those of the Arkansas statute, that intolerable inconsistencies and confusion would result if that insolvency law be given effect while the national Act is in force" (emphasis supplied).[102] This case dispells any belief that an insolvency law is not encompassed

95/ Kramer, supra note 94, at 406.

96/ Kramer, supra note 94, at 407.

97/ Kramer, supra note 94, at 408, quoting Van Wagenen v. Paterson Savings Bank, 10 N.J. Eq. 13 (Ch. 1854).

98/ See, e.g., Bloch v. Bell Furniture Co., 111 N.J. Eq. 551, 561, 162 A. 414, 418 (E&A 1932).

99/ N.J.S.A. 14A: 14-5(g) (West) (Powers of receivers; general).

100/ Id. §§ 14-8, 14-14.

101/ See Kramer, supra note 94, at 409.

102/ 278 U.S. 261, 265 (1929).

by the Code.[103] Therefore, it is certain that both the New Jersey statute and that of Pennsylvania--whose law refers both to insolvency and bankruptcy---would govern in state court proceedings only to the extent that they do not conflict with the Code.

If the laws of either state were applied, because state laws are not permitted to conflict with the provisions of the Code, an adjudication by a state court concerning the duty to clean up TMI-2 would not differ from that of a Federal court as a result of the substance of the law that is applied to the case. In any event, because of the large amount of money at issue and the fact that two states would be involved because of the location of GPU's headquarters as opposed to the place of the accident, which is the residence of the licensee, a bankruptcy proceeding would probably be brought in the Federal district court, where the Code provisions would govern. The Code would also apply in both state and Federal courts in the reorganization proceeding of a company because both New Jersey and Pennsylvania have corporate reorganization provisions that defer to Federal bankruptcy law.[104]

## 4.0 TREATMENT OF PUBLIC UTILITIES UNDER THE CODE

As stated earlier, the main purpose of the Code is to discharge debtors from their obligation to satisfy existing debts in their entirety and to equalize the resultant financial losses placed upon the debtors' creditors.[105] There are no provisions in the Code designed specifically to assure that the interest of the public -- in continued service, for example -- will be protected if the bankrupt corporation is a public utility. In fact, with two exceptions, there are no special provisions in the Code for the administration of the affairs of a bankrupt public utility.

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103/ See also 9 Am. Jur. 2d Bankruptcy § 12, at 55 (1963) (well settled that insofar as insolvency laws and bankruptcy laws relate to same subject matter and affect same persons, all conflicting or inconsistent state laws on insolvency are superceded or suspended by Federal law). But see Stellwagen v. Clum, 245 U.S. 605, 616 (1918) (state laws providing for sale and distribution of a debtor's property may not amount to insolvency laws). The Stellwagen Court explained that one of the principal requirements of a true bankruptcy law is that it discharges the debtor's property from the obligation of existing debts. Id. The Stellwagen case was cited by the Supreme Court in Straton v. New, 283 U.S. 318, 327-28 (1931), which held in effect that the rule in Stellwagen would not apply upon a showing that the statutory action in the state court is an insolvency action.

104/ N.J. Stat. Ann. 14A: 14-23 thru 14-27 (West); Pa. Stat. Ann. tit. 15, §1320 (Purdon).

105/ Lowell, A United States Bankruptcy Statute, 50 Am. Bankr. L.J. 99, 99 (1976).

The two exceptions are municipalities (Chapter 9) and railroads (Chapter 11, Subchapter 4), which are both imbued with a public mandate. Since municipalities and railroads serve basic public needs in the manner of a public utility, it is instructive to understand the origin and the provisions of these chapters. Both Chapter 9 and Chapter 11(4) were enacted as remedial measures in order to facilitate financial rehabilitation. Both assume that the corporate structure will continue its operations throughout the bankruptcy proceeding.[106]

## 5.0 CHAPTER 9 UNDER THE CODE

Current Chapter 9 of the Code, which is entitled "Adjustment of Debts of a Municipality," was first conceived in 1934 in order to ameliorate the national problems of municipal corporations and instrumentalities that were suffering difficult financial situations.[107] Although municipalities supply necessary services to its inhabitants such as police protection and rubbage retrieval and disposal, the peculiar character of municipalities as a creation of the state has necessitated the enactment of unique provisions in Chapter 9. First, the Code reserves power to the states to control municipalities by legislation or otherwise in the exercise of its political or governmental powers, including the expenditures for political or governmental actions.[108] Nevertheless, creditors are not bound by state law prescribing a method of composition of indebtedness. Nor does a judgment entered under state law bind a creditor that does not consent to the composition.[109] Second, the court may not interfere with any of the debtor's political or governmental powers, property or revenues, or enjoyment of any income-producing property without the consent of the debtor.[110] Chapter 9 is also unique in relation to both Chapters 7 and 11 under the Code because only the debtor - municipality, as opposed to creditors, may petition the court under Chapter 9[111] and only the debtor may file a plan for the adjustment of its debts.[112] The

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106/ 5 Collier on Bankruptcy, ¶77.02[1], at 478-79 (14th ed. J. Moore, L. King 1978) (hereinafter cited as 5 Collier). Chapter 9 has outlived its use as emergency legislation. After its repeal in 1946, its subsequent reenactment integrated it into the Code as a permanent chapter. Id. ¶81.01 [1.10], at 1556-57. See also 11 U.S.C.A. §901 (1979) (adopts certain provisions of Chapter 11, but not of Chapter 7).

107/ 5 Collier, supra note 106, ¶81.02, at 1557-68.

108/ 11 U.S.C.A. § 903 (1979).

109/ Id. §903(1), (2) (1979).

110/ Id. § 904 (1979).

111/ Id. § 921 (1979). 5 Collier, supra note 106, ¶81.02, at 1560. Section 301 of Title 11, which relates to voluntary cases, has been incorporated into Chapter 9 by section 901, as opposed to section 303, which refers to involuntary cases under Chapters 7 and 11. Historical and Revision Notes, 11 U.S.C.A. § 901, at 382 (1979).

112/ 11 U.S.C.A. § 941 (1979).

provision regarding the contents of the reorganization plan filed in a Chapter 11 case is generally applicable to a Chapter 9 bankruptcy.[113]

The special features peculiar to Chapter 9 by virtue of the relationship of the municipality with the state reduce the analogical value between municipal bankruptcy proceedings and those of public utilities. The important factor here is the genesis of Chapter 9 as emergency legislation that ultimately evolved into a permanent chapter of the Code.

## 6.0 RAILROAD REORGANIZATION -- CHAPTER 11(4) UNDER THE CODE

In 1933 bankruptcy law concerning railroads, enacted as Section 77 of the Bankruptcy Act, was passed to aid and simplify the administration of the monetary affairs of railroads during the period when they were in severe financial situations.[114]

Before the Federal bankruptcy law was enacted, if a railroad went into receivership in a state court, ancillary proceedings were necessary in every state in which the railroad had property. If the proceeding were held in a Federal court, ancillary proceedings were necessary in every circuit. What is now Chapter 11(4) was enacted to simplify the bankruptcy proceeding, thus eliminating unnecessary expense, confusion and delay.[115]

Under Chapter 11(4) of the Code, the court appoints a disinterested person to serve as a trustee.[116] The Interstate Commerce Commission, the Department of Transportation and any state or local commission having regulatory jurisdiction over the debtor may raise, may appear and be heard on any issue in a case under Chapter 11.[117] With several exceptions,[118] the trustee and the debtor are subject to the provisions of the Interstate Commerce Act that are applicable to railroads and the trustee is subject to orders of any Federal, state or local regulatory body to the same extent as the debtor would be if a petition commencing the case under Chapter 11 had not been filed.[119] Any order of a regulatory commission requiring the expenditure

113/ Id. §§ 901, 1123 (1979). Section 1123 applies to a Chapter 9 bankruptcy with three exceptions, subsections 1123(a)(6), 1123(a)(7) and 1123(c). The first subsection refers to the rights associated with voting equity securities, the second provides for the manner of selecting a trustee, officer or director under the plan and the last subsection refers to cases concerning individuals.

114/ See 5 Collier, supra note 106, ¶ 77.02[1], at 475-77.

115/ Id.

116/ 11 U.S.C.A. § 1163 (1979).

117/ Id. § 1164 (1979) (these regulatory bodies may not appeal, however, from any judgment, order or decree entered in the case).

118/ Id. § 1166 (1979) (exceptions are abandonment or merger, modification of the financial structure of the debtor or issuance or sale of securities under a plan).

119/ Id.

or incurring of an obligation for the expenditure of money from the estate is not effective, however, unless approved by the court.[120]

Chapter 11(4), unlike other chapters in the Code, specifically requires ". . . the court and the trustee [to] consider the public interest in addition to the interests of the debtor, creditors, and equity security holders."[121] This is one of the major differences among the different types of bankruptcy proceedings discussed in this paper. The distinctions among liquidation, reorganization, and railroad reorganization have been clearly elucidated as follows:

> All of the respondents' contentions overlook the distinctions between ordinary bankruptcy proceedings and reorganization proceedings in general, and the further distinctions between a . . . reorganization proceeding and the special provisions . . . relating to railroad reorganizations. An ordinary bankruptcy is directed toward the liquidation of the debtor's business, and the distribution of the debtor's assets among its creditors. A . . . reorganization is directed toward the continuation of the debtor's business so that it may be restored to solvency, and its creditors ultimately satisfied. A railroad reorganization . . . involves an additional element, the overriding public interest in the continuation of rail transportation services.[122]

In spite of the existence of a Federal bankruptcy law enacted solely to administer the bankruptcies of railroads, the financial problems of railroads in the Midwest and Northeast regions of the United States persisted. In order to stymie a potentially worse situation and thus safeguard the economic well being of the entire nation, Congress enacted the Regional Rail Reorganization Act of 1973 (RRR Act).[123] The necessity and purpose of the RRR Act were explained by Mr. Justice Brennan of the Supreme Court of the United States:

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120/ Id. § 1166(1) (1979).

121/ Id. § 1165 (1979). See also New Haven Inclusion Cases, 399 U.S. 392, 431 (1970) (conservation of debtor's assets for benefit of creditors and preservation of ongoing railroad in public interest).

122/ In re Penn Central Transp. Co., 315 F. Supp. 1281, 1283 (E.D. Pa. 1970), aff'd 453 F.2d 520 (3d Cir.), cert. denied, 408 U.S. 923 (1972).

123/ 2 U.S. Code Cong. & Ad. News, 93d Cong., 1st Sess. 3248-49 (1973); In re Ann Arbor R.R. Co., 414 F. Supp. 812, 818 (E.D. Mich., S.D. 1976).

> A rail transportation crisis seriously threatening the national welfare was precipitated when eight major railroads in the northeast and midwest region of the country entered reorganization proceedings under . . . the Bankruptcy Act . . . . After interim measures proved to be insufficient, Congress concluded that solution of the crisis required reorganization of the railroads, stripped of excess facilities, into a single, viable system operated by a private, for-profit corporation. Since such a system cannot be created under [bankruptcy] rail reorganization law, and since significant Federal financing would be necessary to make such a plan workable, Congress supplemented [the Bankruptcy Act] with the Rail Act, which became effective on January 2, 1974. (footnotes omitted)[124/]

The RRR Act states the six purposes that this Act was designed to accomplish:

> (1) the identification of a rail service system in the midwest and northeast region which is adequate to meet the needs and service requirements of this region and of the national rail transportation system;
>
> (2) the reorganization of railroads in this region into an economically viable system capable of providing adequate and efficient rail service to the region;
>
> (3) the establishment of the United States Railway Association, with enumerated powers and responsibilities;
>
> (4) the establishment of the Consolidated Rail Corporation, with enumerated powers and responsibilities;
>
> (5) assistance to States and local and regional transportation authorities for continuation of local rail services threatened with cessation; and
>
> (6) necessary Federal financial assistance at the lowest possible cost to the general taxpayer.[125/]

124/ Regional Rail Reorganization Act Cases, 419 U.S. 102, 108-09 (1974).

125/ Regional Rail Reorganization Act of 1973, 45 U.S.C.A. § 701(b) (1976).

The United States Railway Association is an incorporated, nonprofit association,[126] which has, among other powers, the power to engage in the preparation and implementation of the final system plan.[127] One of the goals of such a plan is the creation, through reorganization, of a "financially self-sustaining rail and express service system in the region."[128] The final system plan must designate the rail properties of railroads in reorganization in the region or of railroads leased, operated, or controlled by any railroad in reorganization in the region, that are to be transferred to the Consolidated Rail Corporation.[129] This Corporation is a for-profit corporation that is a creation of state laws. It is neither a Federal agency nor an instrumentality of the Federal Government.[130]

Although both the RRR Act and the Code deal with the reorganization of bankrupt railroads, the difference between the two enactments has been described in the following manner:

> Reorganization under the Rail Act, pursuant to the Final System Plan, involves the transfer of a major portion of the railroad properties and the obligation to operate a railroad from [the railroad's] Trustee to Conrail. The principal purpose of this physical restructuring of the railroad 'is to reorganize the regional rail structure, not to determine the rights and priorities of creditors and stockholders of the bankrupt railroad. These matters remain governed by...the [Code], which continues in effect except where specifically contradicted by the Rail Act.' (footnotes omitted)[131]

The reorganization court must utilize the RRR Act in the reorganization proceeding unless the court finds that the railroad is reorganizable on an income basis within a reasonable amount of time under bankruptcy law and that

126/ Id. § 711(a) (1976).

127/ Id. § 712(a)(1) (1976).

128/ Id. § 716(a)(1) (1976).

129/ Id. § 716(c)(1)(A) (1976).

130/ Id. § 741(b) (1976).

131/ In re Lehigh Valley R.R. Co., 558 F.2d 137, 141 (3d Cir. 1977).

the public interest would be better served by such a reorganization than by reorganization under the RRRA or that the RRR Act does not provide a fair and equitable process for reorganizing the estate of the railroad.[132]

In view of the fact that both the RRR Act and Chapter 11(4) of the Code are grounded upon the principle of continuous service by the reorganizing corporation,[133] the oft-litigated conflict between the right of the public to receive a fundamental service and the right of the creditors to receive satisfaction of their claims against the debtor is of great importance. The reasoning of the Supreme Court, which has attempted to balance these competing, mutually exclusive claims, may also be relevant by analogy to the prospects of cleaning up TMI-2. Whether Met-Ed's funds will be used for clean-up as a means of protecting the public's interest in continued health and safety or for satisfying the claims of creditor's is an issue that must be resolved.

The arguments made in favor of continuing rail service in the public interest are: the personal convenience of the users of the railway service; the economic health of the nation, which depends upon carrier service for the marketing of crops and other products; the fact that the "overriding theme of the RRR [Act] is the paramount public interest associated with continued operation of the rail lines and the obvious inability of private interests, most notably those of creditors, to provide an effective counterweight;"[134] and that creditors of the railroad company, by choosing to invest in a public utility, took upon themselves the risk that there might be a chance of continued unprofitable operation and that their rights would be secondary to the public interest.[135] The United States Supreme Court has generally recognized that the rights of bondholders ". . . do not command Procrustean measures [and] do not dictate that rail operations vital to the Nation be jettisoned despite the availability of a feasible alternative."[136]

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132/ 45 U.S.C.A. §717(b)(1) (1976). See also In re Penn Central Transp. Co., 384 F. Supp. 895, 917-18 (Sp. Ct. 1974); 382 F. Supp. 856, 859 (E.D. Pa. 1974); In re Boston & Maine Corp., 378 F. Supp. 68, 80 (D. Mass. 1974).

133/ 5 Collier, supra note 106, ¶ 77.02[1], at 479-80 (section contemplates continued corporate existence of debtor, but not to exclusion of crediters who may share in debtor's assets); 45 U.S.C.A. § 701(a)(4) (1976) (continuation and improvement of essential rail service is necessary to preserve and maintain adequate national rail services and an efficient national rail transportation system. See also In re Central R.R. Co., 521 F.2d 635, 638 (3d Cir. 1975) (under RRR Act, reorganization proceeding must be designed to keep railroad operational until final railroad reorganization plan has been designed), citing In re Lehigh Valley R.R. Co., 508 F.2d 332, 338-40 (3d Cir. 1975).

134/ In re Ann Arbor R.R. Co., 414 F. Supp. 812, 817-18 (E.D. Mich. 1976).

135/ Mazer, Assuring Adequate Rail Service: The Conflict Between Private Rights and Public Needs, 45 Fordham L. Rev. 1429, 1433 (1977).

136/ Penn-Central Merger Cases, 389 U.S. 486, 510-511 (1968).

The issue of whether creditors must bear the financial burden of continuing to provide unprofitable rail service to the public cannot be resolved with a simple affirmative or negative answer because of the countervailing principle, equally recognized by the United States Supreme Court, that a carrier cannot be compelled to operate even a portion of its business at a loss.[137]

Indeed, these two contrary policies -- public interest versus creditors' rights -- have forced the Court to seek an equitable balance between the needs of the public and the rights of creditors.

Creditors ground their right to discontinue the use of their property in an unprofitable venture upon the guarantee of the Fifth Amendment, which provides: "No person shall . . . be deprived of life, liberty or property, without due process of law; nor shall private property be taken for public use, without just compensation."[138] This argument has been upheld by the Supreme Court, which stated that a company does not devote irrevocably or absolutely its property to the public use, but instead conditions the use of its property upon the expectation that the public will sufficiently utilize the services at a reasonable rate in order to yield a fair return.[139] The Court also held that absent just compensation, the railroad could not be compelled to provide service when there is a reasonable certainty that such service will occasion a loss.[140]

Subsequently, in the New Haven Inclusion Cases, the Court modified its approach to the problem of deciding where creditors deserve to receive just compensation for the unprofitable operation of a railroad.[141] The Court noted that the Fifth Amendment prohibition against taking private property for public use without just compensation does not necessitate the conclusion that creditors need not suffer a substantial loss.[142] The Court distinguished between sacrificing property in order to create a "depression-proof" railroad and assuming the risk associated with investing in a public utility

137/ Brooks-Scanlon Co. v. Railroad Comm'n., 251 U.S. 396, 399 (1920). This proposition was extended in Bullock v. Railroad Comm'n., 254 U.S. 513, 520-21 (1921) (creditors of railroad are not bound to continue service at a loss if no reasonable prospect of profitable operation in the future), citing Brooks-Scanlon Co. v. Railroad Comm'n, supra.

138/ Indeed, section 171 of the Atomic Energy Act of 1954, as amended, similarly provides for just compensation in certain circumstances. See 42 U.S.C. §2221 (1976).

139/ Railroad Comm'n v. Eastern Texas R.R. Co., 264 U.S. 79, 85 (1924). See also Louisville Joint Stock Land Bank v. Radford, 295 U.S. 555, 589 (1935) (bankruptcy power is subject to Fifth Amendment).

140/ Railroad Comm'n v. Eastern Texas R.R. Co., supra at 85.

141/ New Haven Inclusion Cases, 399 U.S. 392 (1970).

142/ Id. at 491.

that owes an obligation to the public.[143] Although severely criticized for failing also to distinguish between a temporary loss of control by creditors over collateral and a loss of the collateral itself,[144] the Supreme Court has not overruled its ruling in the New Haven case. It is therefore necessary to apply the rule of New Haven in railroad cases where the company is operating at a loss and where creditors claim compensation for what they perceive to be an unconstitutional taking of property.

An analogy can be drawn between unprofitable rail service and the clean up of TMI-2, which, standing alone, is also an unprofitable venture. Rail service for the benefit of the public is hardly more important than assuring public safety from radiological harm. If the reasoning of the Supreme Court in New Haven were therefore applied to the TMI-2 situation, the logical ruling would be in favor of utilizing Met-Ed's existing funds to clean up TMI-2 rather than to satisfy the claims of creditors. Such a ruling would be particularly appropriate if TMI were allowed once again to operate and thus to recoup funds for the benefit of creditors.

## 7.0 CONCLUSION

Bankruptcy, although an option available to a company that is undergoing financial difficulties, would not be a solution for the licensee. The problems that led to the current financial distress of the licensee will continue to persist whether or not bankruptcy is pursued. If bankruptcy proceedings were instituted, however, it is uncertain whether some or all of the licensee's assets available for distribution to creditors would be utilized to finish the cleanup of TMI-2. If not, it is possible that an entity other than the licensee would have to take the responsibility for cleaning up the site.

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143/ Id. at 491-92.

144/ Note, Takings and the Public Interest in Railroad Reorganization, 82 Yale L. J. 1004, 1013 (1973).

# APPENDIX E

# INSTITUTIONAL RESPONSIBILITIES IF METROPOLITAN-EDISON IS UNABLE TO CONTINUE CLEANUP OF TMI-2

CONTENTS

APPENDIX E

INSTITUTIONAL RESPONSIBILITIES IF METROPOLITAN-EDISON
IS UNABLE TO CONTINUE CLEANUP OF TMI-2

Institutions in the public and private sectors have specific responsibilities in the event that Metropolitan Edison Co. (Met-Ed) is unable to continue and complete the cleanup of TMI-2. The legal bases of these responsibilities are discussed in the sections below.

1.0 NUCLEAR REGULATORY COMMISSION

The primary responsibility for the safe operation of a nuclear power plant rests with the utility that is licensed to operate the plant. This includes the responsibility to properly decontaminate, safely shutdown, or decommission the facility under a plan approved by the Nuclear Regulatory Commission (NRC). The responsibilities of a licensee may be terminated only with NRC approval.

The Federal Government (through the NRC) has the principal regulatory responsibility for matters of radiological health and safety associated with a nuclear power plant. The NRC regulations relating to the financial qualifications of applicants appear in 10 CFR 50.33(f). This Section directs that "Each application shall state... (f) Information sufficient to demonstrate to the Commission the financial qualifications of the applicant to carry out ... the activities for which the permit or license is sought....If the application is for an operating license, such information shall show that the applicant possesses the funds necessary to cover estimated operating costs or that the applicant has reasonable assurance of obtaining the necessary funds, or a combination of the two." 10 CFR 50.33(f) further provides requirements for facilities described in Sections 50.21(b) or 50.22 of 10 CFR 50. The types of facilities covered in the latter Section are reactors constructed for commercial purposes such as the generation of electricity. For such facilities, Section 50.33(f) of 10 CFR 50 provides: "If the application is for an operating license, such information shall show that the applicant possesses or has reasonable assurance of obtaining the funds necessary to cover the estimated costs of operation for the period of the license or for 5 years, whichever is greater, plus the estimated costs of permanently shutting the facility down and maintaining it in a safe condition. Without limitation on the generalities of the foregoing requirements, each application for...an operating license submitted by an entity recognized for the primary purpose of...operating a facility shall include information showing the legal and financial relationships it has or proposes to have with its stockholders or owners, and their financial ability to meet any contractual obligation to such entity which they have incurred or propose to incur, and any other information necessary to enable the Commission to determine the applicant's financial qualification (emphasis added)." Section I(B) of Appendix C to 10 CFR 50 generally restates this requirement, but it defines the substantive requirement for demonstrating operating license financial qualification to be a showing of the "...availability of resources sufficient to cover estimated operating costs for each of the first 5 years of operation, plus the estimated costs of permanently shutting the facility down." Thus the regulations specifically require that applicants demonstrate to the satisfaction of the staff a reasonable assurance that their

financial resources are sufficient to cover decommissioning expenses. While the Commission's decision in Seabrook (Public Service Co. of New Hampshire, et al. (Seabrook Station, Units 1 and 2 CLI-78-1, 7 NRC 1) 1978), addresses the regulations cited above from the viewpoint of construction permit proceedings and provides general guidance as to the criteria of the financial qualification requirements, it does not address the issue of decommissioning financing.

In December 1978, the NRC staff issued its "Plan for Reevaluation of NRC Policy on Decommissioning of Nuclear Facilities," Revision 1 (NUREG-0436). This report mentions (p. 56) that the life of a facility can be shortened by an accident or breakdown which makes repair not economically justified, thereby accelerating decommissioning; however, the report does not address the consideration that the costs of decommissioning under these circumstances would be greater than those required for a planned voluntary shutdown situation.

If a utility is forced to shut down one or more reactors it owns, and if the reactor or reactors contribute substantially to the utility's rate base, even a previously financially sound utility could be forced into bankruptcy and default on its obligations as a licensee. Certainly the accident at TMI-2 indicates that a utility can rapidly find itself in a precarious financial position, with the resulting uncertainties that such a position raises.

The basic issue which must be considered in this report for contingency planning purposes is: if the utility licensed to possess and operate TMI-2 becomes financially unable to carry out its responsibility under the NRC license, what existing statutory authority at the Federal and state levels (Pennsylvania and New Jersey) is available to ensure that the public health and safety is protected?

Although a variety of alternatives are available to ensure in advance that a licensee is financially able to carry out its responsibilities under the license, these alternatives are of no avail in the present circumstances (see NUREG-0584, Rev. 1, "Assuring the Availability of Funds for Decommissioning Nuclear Facilities," Draft Report). NRC has no rate jurisdiction over the TMI-2 licensees to allow them to raise adequate funds to carry out their license responsibility under the circumstances created by the accident at that plant. Thus this analysis will consider what statutory authority exists to enable the government (Federal and/or state) to take actions necessary to protect the public health and safety (which are clearly the responsibility of the licensees) and which actions should be taken by licensees, if they were financially able to do so.

Neither the Atomic Energy Act nor current authorizations for the NRC include any funds for the NRC to use to ensure, either by direct government action or by indirect financial support to the licensee, that necessary actions are taken to protect the public health and safety. This is true even though it has been stated repeatedly that public safety considerations are paramount in licensing activities under the Atomic Energy Act (Power Reactor Development Co. v. Electrical Workers Union, 367 U.S. 396, 402 (1961)). Although this statement may be correct in the context of the licensing process and a licensee's responsibilities, it does not mean that the NRC itself has the resources (beyond, of course, technical assistance) to take whatever steps are necessary to ensure public health and safety should the financial ability of a licensee to operate a nuclear power plant decrease to the extent that it may be unable to carry out its responsibility as a licensee.

Aside from the very practical matter of available resources, however, the NRC does have certain relevant statutory authority. Financial failure of a licensee would provide grounds for immediate revocation of the license to operate under Section 186a. of the Atomic Energy Act, 42 U.S.C. 2236a. Subsection 186c. would then empower, but not require, the Commission to

> ... immediately retake possession of all special nuclear material held by the licensee. In cases found by the Commission to be of extreme importance to the national defense and security or to the health and safety of the public, the Commission may recapture any special nuclear material held by the licensee or may enter upon and operate the facility.... Just compensation shall be paid for the use of the facility.

The NRC has further discretionary authority to operate a nuclear facility under Section 188 of the Atomic Energy Act, 42 U.S.C. 2238. This section provides in pertinent part

> Whenever the Commission finds that the public convenience and necessity ... requires continued operation of a ... facility the license for which has been revoked pursuant to section 186, the Commission may, after consultation with the appropriate regulatory agency, State or Federal, having jurisdiction, order that possession be taken of and such facility be operated for such period of time as the public convenience and necessity or the production program of the Commission may, in the judgment of the Commission, require, or until a license for operation of the facility shall become effective. Just compensation shall be paid for the use of the facility.

It appears that these "take-over" sections have never been invoked for a nuclear power plant. Further, it appears that no regulations, guides, or policy statements give any specifics on how this authority is to be exercised. The legislative history of these sections is similarly unenlightening. Nevertheless, on their face, these statutory provisions clearly give the Commission the authority to act if, in its judgment, action on its part is needed to protect the public health and safety. Moreover, it would be reasonable to interpret this authority as being available for such actions as the Commission deems necessary to repair or decontaminate a damaged nuclear power plant for which the licensee is financially unable to carry out its license responsibility.

Under the circumstances being considered, Section 184 of the Atomic Energy Act, 42 U.S.C. 2234 is also relevant. This section provides that no license granted under the Atomic Energy Act "shall be transferred, assigned or in any manner disposed of, either voluntarily or involuntarily, directly or indirectly, through transfer of control of any license to any person, unless the Commission shall, after securing full information, find that the transfer is in accordance with the provisions of this Act, and shall give its consent in writing...."

This section simply means that no licensee may terminate its responsibility under an NRC license without the prior approval of NRC and that no other person may assume the responsibility of an NRC licensee without prior NRC approval. This authority is applicable even though the impetus for such a

transfer is under another law such as the Federal Bankruptcy Law (P.L. 95-598, 11, U.S.C. 101 et seq.) or an action by a state public utility commission which could affect the role of the licensee as a public utility (see, for example, 66 Pa. C.S. Chapter 15).

## 2.0 GENERAL PUBLIC UTILITIES AND ITS OPERATING COMPANIES

General Public Utilities (GPU) is a registered utility holding company under the Public Utility Holding Company Act of 1935 (15 U.S.C. 79 et seq.). It is composed of three operating utilities: Metropolitan Edison Co. (Met-Ed), Pennsylvania Electric Co. (Penelec), and Jersey Central Power and Light Co. (Jersey Central). GPU also includes a subsidiary service corporation, General Public Utilities Service Corp. (GPUSC), which provides technical services to the operating subsidiaries.

TMI-2 is jointly owned by the three operating companies; all three are named as licensees in License No. DPR-73. Among other things, this license provides that

- The application for license was filed by Met-Ed, Penelec, and Jersey Central.
- The licensee was found to be technically qualified "to engage in the activities authorized by this operating license in accordance with the rules and regulations of the Commission."
- The license was issued to Met-Ed, Penelec, and Jersey Central.
- The license states that the TMI-2 reactor is owned by Met-Ed, Penelec, and Jersey Central and is operated by Met-Ed.
- The Commission licensed Met-Ed "pursuant to Section 103 of the Act and 10 CFR Part 50...to possess, use, and operate the facility."
- The Commission licensed Met-Ed to receive, possess, and use certain byproduct, source, and special nuclear material.

Under License No. DPR-73, Met-Ed has the lead role in that it is licensed to operate the facility. The Commission's regulations do not distinguish between the "operating" holder of an operating license, such as Met-Ed, and the other participating utilities, which are also technically licensees.

In past cases, the NRC has granted the "operating" utility a license to operate the nuclear facility and to possess certain nuclear material. The other participating utilities are identified in the license as simply holding a license to possess the facility. In addition, License No. DPR-73 looks to each of the licensees in making the financial qualifications finding to engage in the activities authorized by the operating license.

Although GPU is not a licensee under License No. DPR-73, in essence, GPU is totally liable for the financial well-being of its subsidiaries. GPU is a holding company covered by the Public Utility Holding Company Act of 1935. Its principal assets are the three operating companies. The income of GPU

consists almost exclusively of earnings on the common stock of Met-Ed, Penelec, and Jersey Central. GPU also owns some minor assets (such as property at its headquarters in Parsippany, N.J., and in Reading, Pa., and a fuels company), but these would appear to too inconsequential to itemize in the statement of assets and liabilities in its 1979 Annual Report. In addition, GPU has proposed to establish a new nuclear management company, but this company does not constitute an asset of GPU at this time.

By virtue of a revolving credit agreement, guaranty, and pledge agreement (all dated June 20, 1979), GPU has pledged its stock in Met-Ed, Penelec, Jersey Central, and GPUSC to the creditor banks, along with any dividends, cash, and other instruments received for the stock, plus any further instruments, documents, or action requested by the banks to protect their security interest. This stock constitutes 100 percent of the outstanding common stock and capital stock of the subsidiaries. Under the interpretation of the attorneys for the banks and GPU, the pledge of the shares created a valid and perfected first priority security interest in the stock. Under a separate loan agreement of the same date, the creditor banks also received a security interest in rights owned by Met-Ed and Jersey Central in a contract for conversion services and nuclear fuel from Kerr-McGee, as well as proceeds from the services. GPU and its subsidiaries also pledged to the banks certain bonds issued by Jersey Central and Met-Ed, creating a valid and perfected first priority security interest in the banks' favor on property owned by Met-Ed and Jersey Central as collateral for the bonds.

GPU would appear to have already committed virtually all of its assets as security for bank loans. In the event of bankruptcy of GPU or any of its subsidiaries, or any adverse material change in the financial condition of one of them, the banks could call the debts and sell the collateral. In such an event, GPU would essentially be forced to do what it could to cover for the loss, or to go out of business.

The GPU subsidiaries are limited in their ability to lend money to each other. The Public Utility Holding Company Act of 1935 makes it unlawful for a registered company such as GPU to borrow or receive extensions of credit from another public utility company in the same system (15 USC 79f(c)). It is also unlawful for one company (a nonholding company) to borrow or lend, through a sale of securities in excess of $100,000 value, to another company within the same system without SEC approval (15 U.S.C. 791). In Met-Ed testimony before the PAPUC, it was the opinion of two witnesses (Graham and Hafer) that it is unlikely that the SEC would approve a loan from Jersey Central or Penelec to Met-Ed. They indicated that the SEC would not be likely to consider such a loan to be in the interest of Jersey Central's or Penelec's public investors. Further, such a loan would require the prior approval of the State utility commissions and, probably, FERC. The revolving credit agreement also restricts the ability of the subsidiaries to make loans to anyone without prior approval of 85 percent of the creditor banks. A further limitation on the ability of GPU or its subsidiaries to create additional short-term debt can be found in the articles of Incorporation and Debenture Indentures. They limit the availability of short-term credit to 10 percent of the capitalization of the subsidiaries. (See testimony of John Graham, before PAPUC; Met-Ed, Penelec Statement, PAPUC Docket No. I-79040308.)

## 3.0 ENVIRONMENTAL PROTECTION AGENCY

The Environmental Protection Agency (EPA) has the authority to evaluate the environmental impact of thermal water pollution of a nuclear plant, and the EPA must issue a new point discharge elimination system permit before any discharge is permitted.

EPA also is responsible for setting national emission standards for radiation releases to the atmosphere, it advises the President on matters related to radiation and the environment, it was designated by the President as the lead agency for radiation monitoring at TMI, and it has certain other responsibilities related to emergency response planning.

The EPA has limited statutory authority under which it directly assumes responsibility to act to cope with public health problems associated with hazardous materials which are not adequately controlled by responsible parties.

The Resources Conservation and Recovery Act (RCRA) (P.L. 94-580, 42 U.S.C. 6901 et seq.) focuses on present and future hazardous waste disposal practices. While it contains an emergency powers clause, for it to be invoked successfully requires an identifiable, financially solvent liable party, as well as prolonged judicial action. Only at the end of this process can the public and the environment be protected. The RCRA definition of hazardous wastes (in Section 3001, 42 U.S.C. 6921) specifically excludes special nuclear material, source material, and byproduct material.

Section 7003 of the RCRA (42 U.S.C. 6973) authorizes EPA to bring suit in district courts to enjoin an owner (or other responsible party) of an active or inactive site on which hazardous substances are located to take remedial action to prevent or abate an imminent and substantial danger to human health or the environment. EPA can exercise this authority only where the owner (or responsible party) is identifiable and is financially and otherwise able to remedy it. Even where these conditions are met, the "imminent and substantial" test can often be difficult. In addition, any remedial efforts can begin only after successful judicial action, which can take a long time, sometimes years. Moreover, Section 7003 of the RCRA is not an effective tool if the perpetrator is unknown, cannot be located, cannot afford cleanup, or declares bankruptcy and walks away from the site, or if the responsible company was dissolved. The Section does not deal directly with these contingencies.

Section 311 of the Clean Water Act (33 U.S.C. 1321) provides for Federal cleanup and mitigation of spills of oil and hazardous substances. EPA regulations implementing this Act do not include radionuclides in the list of hazardous substances, which are limited to specific compounds and elements. In any event, the use of Section 311 is subject to some limitations which seriously detract from its usefulness.

First, it is limited to spills or threats of spills into navigable waters and thus does not address spills affecting soil or air to the exclusion of waters. Moreover, Section 311 is applicable only to designated hazardous substances. A discharge of a substance not designated under Section 311, or which cannot be identified because it is part of commingled wastes, would not be covered by the Section.

Another limitation relates to the size and nature of the fund provided by Section 311. It was authorized at a level of $35 million and, as of Fall 1979, contained about $5 million. The fund was established initially by appropriation; it is maintained by any recovered costs and additional appropriations. Even if the fund were somehow deemed applicable to the bulk of hazardous waste disposal sites, its size limitation would preclude the use of Section 311 in most cases.

The Clean Water Act also contains an emergency powers provision (Section 504, 33 U.S.C. 1364), but its authorization is limited to $10 million. The administration has not requested, and the Congress has not provided, funding for this Section.

## 4.0 DEPARTMENT OF ENERGY

The Energy Reorganization Act of 1974 (P.L. 93-438, 88 STAT. 1233, 42 U.S.C. 5801 et seq.), which established the NRC as an independent regulatory agency, also transferred to the Energy Research and Development Administration (ERDA) the research, development, demonstration, and production authority and responsibilities in the nuclear field which the Atomic Energy Act 1954, as amended, once bestowed on the Atomic Energy Commission. ERDA became a part of the Department of Energy (DOE) in 1977 as a result of the enactment of the Department of Energy Organization Act (P.L. 95-91, 91 STAT. 565, 42 U.S.C. 7101 et seq.). DOE assumed the research, development, demonstration, and production authority and responsibility in the nuclear field. This includes the operation of the national laboritories and related technical support capabilities.

Although DOE has assumed this authority and responsibility under the Atomic Energy Act of 1954, as amended, Congress apparently did not give DOE any specific authority or establish a fund for emergency action to assist a commercial nuclear power plant licensee which is financially unable to comply with its license requirements.

DOE's research, demonstration, and development authority in the nuclear field under the Atomic Energy Act of 1954, as amended, is extensive. This authority has been used in the past (at least by the old Atomic Energy Commission) as the basis for many "programmatic" decisions (i.e., actions which serve the research, development, and demonstration objectives of the Atomic Energy Act), including contributing to the cost of the decontamination of abandonned sites at which nuclear material was possessed and used. None of this financial assistance, however, appears to have approached the magnitude of the costs involved in the cleanup of a damaged licensed nuclear power plant. Most of the assistance appears to have involved comparatively modest Federal costs of less than $100,000, with, in some instances, a greater share contributed by a state. It would appear that any substantial DOE assistance in this area would require Congressional authorization. This is suggested by Section 105 of Public Law 95-238, which directed the Secretary of Energy to prepare a report on the options available for decommissioning or the further use of the Western New York Service Center in West Valley, New York. The U.S. Senate, on June 12, 1980, passed legislation to authorize DOE to carry out a high-level-liquid-nuclear-waste-management demonstration project at that center. A companion bill is being considered in the House. (The Senate bill is S.2443, which was reported in S. Rep. No. 96-787, 96th Cong., 2nd Sess., May 20, 1980.

The House bill is H.R. 6965, which was jointly referred to three Committees of the House and has been reported by one of them, H. Rep. 96-1100, June 1, 1980.) S.2443 as amended, was passed by the Congress on September 17, 1980 and was signed by the President on October 1, 1980 (P.L. 96-368, 94 Stat. 1347). A copy of the text appears in Appendix J.

Among other things, the Senate Report on S. 2443 (p. 5) provides

> While there is no current threat to the public health and safety from the storage of the commercial high-level nuclear waste in tanks at the Western New York Nuclear Service Center, there is historical precedent for carbon steel tanks to develop leaks after they have been in use a number of years. Thus the West Valley tanks constitute a potential for uncontrolled migration of the high-level nuclear waste at some future date. It is therefore timely to begin consideration of how to solidify these high-level commercial nuclear wastes. Since these commercial nuclear wastes are stored at a commercially owned facility on land leased from the State of New York with responsibility for the long-term management of the waste vested in the State of New York (after expiration of the lease), the solidification of these commercial nuclear wastes might be delayed for a considerable period of time prior to resolution of the source of funding to put the waste into a form suitable for disposal in a long-term Federally operated repository. Since a full-scale demonstration facility for solidifying high-level nuclear waste has never been operated in the United States, there is a potential for significant technical knowledge to be gained from such a project in addition to licensing information which would be obtained if such a demonstration facility were to require licensing. On this basis the Federal government should derive sufficient benefit to pay 90 percent of the cost associated with this solidification demonstration project. This bill gives the Department of Energy the requisite authority and direction to enter into such a demonstration project based on a cooperative agreement with the State of New York as specified in the bill and subject to future authorization and appropriation acts.

The cooperative agreement referred to would be under the Federal Grant and Cooperative Agreement Act of 1977 (P.L. 95-224, S. Rep. No. 96-737 at p. 1). On this matter, the Committee's report (p. 7) states

> Public Law 95-224 limits a cooperative agreement to the provision of federal funding, assistance and other support without the federal government taking title to or direct responsibility for any property or real estate in a demonstration project. The amendment [the bill was amended in Committee*] to provide for such a cooperative agreement requires the cooperative agreement to provide for the conduct of the demonstration project without transfer to the United States of title to the high-level nuclear waste or to the project site. The cooperative agreement is also to provide for the demonstration of vitrification technology or technologies which can be replicated for other applications in the United States.

*Material in brackets added for clarity.

If necessary for conduct of the demonstration project the Secretary, pursuant to the cooperative agreement, is to submit, with the State of New York, an application to the Nuclear Regulatory Commission for a licensing amendment to the license held by Nuclear Fuel Services. The cooperative agreement is to provide for application of the Atomic Energy Act of 1954, as amended, and the Energy Reorganization Act of 1974, as amended, to all aspects of the demonstration project. Further, the cooperative agreement is to provide for the conduct of other activities at the projects as determined by the Secretary to be appropriate to protect the public health and safety and to be in the national interest regarding the safe management of nuclear waste in the United States.

The intent of the Committee in adopting this amendment is to insure that a joint activity is pursued by the State of New York and the Department of Energy to immobilize the commercial wastes. The Committee believes that it is not desirable to relieve completely the parties currently responsible for the wastes from future involvement in the project by enactment of this legislation. The intent is not to transfer title of waste or any facilities at the Western New York Service Center to the federal government at this time.

## 5.0 FEDERAL ENERGY REGULATORY COMMISSION

The Federal Energy Regulatory Commission (FERC), now an agency of DOE and formerly the Federal Power Commission, has economic regulatory authority over certain interstate power transactions. Because all three GPU companies are involved in interstate power transactions by virtue of their power interchange and their interconnection with the PJM pool, they are subject to the regulations of the FERC. The basic authority of FERC to regulate electric utility companies is derived from the Federal Power Act of 1935, as amended (16 U.S.C. 792, et seq.). The Department of Energy Organization Act (P.L. 95-91) authorizes (in Subsection 206(b), 42 U.S.C. 7136b) the Secretary of Energy "Consistent with the provisions of Title IV (which establishes FERC as an 'independent regulatory commission' within the Department) to utilize the Economic Regulatory Administration (ERA) 'to administer such functions as he may consider appropriate.'" Under this authority, it is understood that the Secretary has assigned to the ERA the responsibilities for ensuring the adequacy of bulk power supply and for monitoring State regulatory bodies' reviews of various rate structures and standards. This allocation of responsibility to the ERA is pertinent in considering the sections of the Federal Power Act which are discussed below and which, prior to the Department of Energy Organization Act, were primarily the responsibility of the Federal Power Commission (now FERC).

Section 201(a) of the Federal Power Act (16 U.S.C. 824a) states

> . . . the business of transmitting and selling electric energy for ultimate distribution to the public is affected with a public interest . . . and the Federal regulation of matters relating to generation [to the extent provided in this Act] . . . of that part of such business which consists of the transmission of electric energy in interstate

commerce and the sale of such energy at wholesale in interstate commerce is necessary in the public interest, such Federal regulation, however, to extend only to those matters which are not subject to regulation by the States.

Subsection 202a(a) of the Federal Power Act (16 U.S.C. 824a(g)) directs

> In order to insure continuity of service to customers of public utilities, the Commission shall require by rule, each public utility to
>
> (1) report promptly to the Commission and any appropriate State regulatory authorities any anticipated shortage of electric energy or capacity which would affect such utility's capability of serving its wholesale customers,
>
> (2) submit to the Commission, and to any appropriate State regulatory authority, and periodically revise, contingency plans respecting:
>
> (A) shortages of electric energy or capacity, and
>
> (B) circumstances which may result in such shortages, and
>
> (3) accommodate any such shortages or circumstances in a manner which shall:
>
> (A) give due consideration to the public health, safety, and welfare...

Section 203 of the Federal Power Act (16 U.S.C. 824b) requires FERC approval prior to any proposed disposition or consolidation of property of a public utility which is subject to its jurisdiction. The section provides that after notice of and opportunity for a hearing, the Commission shall give its approval if it finds that "the proposed disposition, consolidation, acquisition, or control will be consistent with the public interest."

Section 204 of the Federal Power Act (16 U.S.C. 824c) forbids a public utility, without prior FERC approval, to issue "any security, or to assume any obligation or liability as guarantor, indorser, surety, or otherwise in respect of any security of another person, unless and until, and then only to the extent that, upon application by the public utility, the Commission, by order, authorizes such issue on assumption of liability."

The section also provides that a public utility must obtain the consent of FERC to "apply any security or any proceeds thereof to any purpose not specified in the Commission's Order. . ." (16 U.S.C. 824c(c)).

Section 205 of the Federal Power Act provides that all rates subject to the jurisdiction of FERC "shall be just and reasonable, and any such rate or change that is not just and reasonable is hereby declared to be unlawful" (16 U.S.C. 824 d(a)).

FERC is authorized by Section 209 of the Federal Power Act (16 U.S.C. 824h(a)) to refer to a joint board any matter arising in connection with its jurisdiction over electric utility companies under that Act. This board is to be composed of a member or members, as determined by the Commission, from the state or each of the states affected by the matter. This section also provides for cooperation by the Commission with the state commission on matters of mutual interest (16 U.S.C. 824h(b) and (c)).

Section 311 of the Federal Power Act (16 U.S.C. 825j) authorizes and directs FERC to conduct investigations to secure information necessary or appropriate as a basis for legislation regarding all aspects of electrical energy, whether or not it is otherwise subject to the jurisdiction of FERC. The Commission "shall report to Congress the results of investigations made under authority of this section."

The staff has not located any statutory authority which would enable FERC to act expeditiously to provide funds or take direct actions under the circumstances such as those which are the subject of this report.

## 6.0 STATE UTILITY COMMISSIONS

The three operating companies of GPU are regulated utilities on the retail level. Met-Ed and Penelec are subject to the jurisdiction of the Pennsylvania Public Utility Commission (PAPUC), as their service areas are within the Commonwealth of Pennsylvania. Jersey Central is regulated by the New Jersey Department of Energy, Board of Public Utilities (NJBPU), because it serves customers within that State.

The primary duty of each of these bodies is to regulate the rates that a public utility, such as the GPU companies, charges its customers. This prevents exploitation of the "natural monopolies" utilities have in certain markets. The guiding principle in that regulation is to provide for a just and reasonable return on the fair value of the property "used and useful" in the public service. (See the Pennsylvania Public Utility Code, which is published in 66 Pa. C.S. 101 et seq. and the New Jersey Code in 48 N.J.S. 48:1 et seq.)

The application of this principle in the TMI circumstances is revealed in recent decisions of the PAPUC and NJBPU. (See PAPUC Order dated May 23, 1980, Docket No. I-79040308, and NJBPU Interim Order, dated May 13, 1980, BPU Docket No. 795-508A.) They point out the extensive authority and power these State governmental bodies have to control the fate of an electric generating utility. For example, the PAPUC order (pp. 4-5) states

> The basic conclusion of the Commission in this order is that Met Ed should continue to operate as a public utility. The Commission will provide Met Ed the means of financial rehibilitation. However, we will write no blank checks on its ratepayers. We find that TMI-1 is no longer used and useful and that the base rates of both Met Ed and Penelec should be reduced. This order, with its provisions for a fully current recovery of energy costs, provides an adequate framework for Met Ed's recovery. Respondent must convince its bank creditors that it has the will and the ability to rehabilitate itself.

* * *

> We need not decide the limits of the Commission's [PAPUC] authority to revoke the certificate of an electric public utility. But we note in general that although there is no express provision in the Public Utility Code dealing with the subject, the Commission has the same power to revoke a certificate as it has to issue it, upon due cause being shown, and that a utility holding a certificate of public convenience accepts it subject to the statutory provision which permits the certificate to be modified or rescinded for legal cause. (Material in brackets added for clarity.)

Similarly, the power and role of the NJBPU in dealing with the financial needs of an electric generating utility is illustrated by the following language in its Interim Order of May 13, 1980, at p. 3 (footnotes omitted)

> Indeed, since Hope [Hope Natural Gas Co., 320 U.S. 591 (1944)] and pursuant to the legal standards we have enunciated, this Board is duty bound to provide necessary funds to a utility on an emergency basis, subject to refund in the event of a financial and service crisis. We have defined emergency in rather stringent terms to protect the consumer. There has to be a showing that but for an immediate infusion of rate payer funds Petitioner [i.e. JCP&L] would not be able to continue to provide safe adequate and proper service or reasonable access the market for needed construction or expense. This may take the form of a coverage crisis, an inability to access the financial markets for needed construction and/or a cash-flow crisis. Mere attrition in earnings is not sufficient unless it impacts financing, construction, or service. It is our inescapable conclusion, after review of this record, that JCP&L is in an emergency financial crisis impacting its ability to serve customers this day and in the months to come and that a rate increase of $60 million in base rates is absolutely necessary for continued service. Without such relief Petitioner and its customers will surely suffer irreparable harm unprecedented in electric utility regulatory experience.

Future decisions of the PAPUC and the NJBPU will largely determine the financial viability of GPU and the three operating companies. These State governmental bodies have the power and the responsibility to rule on key factors such as the inclusion of plants in the rate base, the possible revocation of certificates of convenience and necessity, the allocation of costs for cleanup, etc. (See "Report of the Governor's Commission on Three Mile Island," Commonwealth of Pennsylvania, February 26, 1980, at pp. 26-29, 115-116.)

It should also be noted that an electric utility company cannot discontinue its service or dispose of its facilities without the prior approval of the PAPUC or, in the case of Jersey Central, the NJBPU. (See 66 Pa. C.S., Chapter 15 and 66 Pa. C.S. 2102; and N.J. C.S., 48:2-24, 48:3-7 and 48:3-10.)

There do not appear to be any specific provisions in the statutes of the Commonwealth of Pennsylvania or in the State of New Jersey which cover a situation in which an electric generating utility is no longer able to carry out its public interest responsibilities because of a financial crisis. As has been noted, this situation has been recognized in recent PAPUC and NJBPU orders. Nevertheless, there is no apparent statutory authority which provides for the contingency of financial insolvency by an electric generating company. The situation would appear to be unprecedented. The PAPUC and NJBPU, however, clearly have the power and the responsibility initially (and up to the point of placing obvious unreasonable hardship on customers) to act to provide adequate revenues so that an electric generating company is financially able to meet its responsibilities to the public.

## 7.0 OTHER STATE AGENCIES AND AUTHORITY

Powers reserved to states (generally referred to as "police powers") broadly encompass the right to "prescribe regulations to promote the health... of the people, and to legislate so as to increase the industries of the state, develop its resources and add to its wealth and prosperity" (Barbier v. Connally, 113 U.S. 27, 31 (1885)). In connection with the exercise of the historic police powers of a state (such as those designed to protect the public health, safety, or welfare), it should be noted such powers have been given considerable deference in various Federal environmental statutes, including the Clean Air Act (42 U.S.C. 7401 et seq.), the Clean Water Act (33 U.S.C. 1251 et seq.), and the Resource Conservation and Recovery Act (42 U.S.C. 6901 et seq.).

Consistent with the foregoing, both the Commonwealth of Pennsylvania and the State of New Jersey have enacted laws which place the authority and responsibility for the protection of the public health and safety in certain designated departments and agencies of state government. (See 35 Pa. C.S. ss 1 et seq. and 26 N.J. C.S. ss 26:1 et seq.) The Pennsylvania Department of Environmental Resources, through its Bureau of Radiation Protection (BRP), is responsible for environmental monitoring around nuclear power plants. This department is the Commonwealth's lead agency for emergency response during any incident at a nuclear power plant in Pennsylvania which requires action by the Commonwealth. The department operates as the technical arm for the Pennsylvania Emergency Management Agency (PEMA). (See "Report of the Governor's Commission on Three Mile Island," Commonwealth of Pennsylvania, February 26, 1980, at pp. 53-54.) The authority and responsibility of PEMA are set forth in Title 35 Pa. C.S. Appendix, Part V Chapters 71, 73, 75 and 77.

There does not appear to be any generally available fund which would enable an agency or department of the Commonwealth to proceed directly with the Commonwealth's resources to deal with a major potential public health problem. The authority to use funds for such direct governmental action would appear to be limited to modest efforts, such as action to abate a nuisance (see 35 Pa. C.S. s 691.316).

It appears that the Commonwealth enforces its requirements for the protection of the public health and safety by a variety of legal sanctions, such as the imposition of penalties, suits to enjoin or abate a source of pollution, criminal prosecution, etc. Even though these legal remedies are available, the fact is that they do not deal in practical terms with a situation where the perpetrator is unknown or where, as under the circumstances considered in this report, the responsible party is known but may be financially incapable of carrying out its responsibilities.

The staff has concluded that this situation is not dealt with under the state statutes (Pennsylvania and New Jersey) which it has reviewed. This conclusion is corroborated by a review of the published testimony in the hearings on the "superfund" legislation. (See Hearings before the Subcommittee on Transportation and Commerce, House Committee on Interstate and Foreign Commerce, "Superfund" (H.R. 4571, H.R. 4566, and H.R. 5290), 96th Cong., 1st Sess., June, August, and October 1979; and Joint Hearings before Subcommittees on Environmental Pollution and Resource Protection, Senate Committee on Environment and Public Works, "Hazardous and Toxic Waste Disposal" (S.1341, S.1480), 96th Cong., 1st Sess., June, July, and September 1979.) The point was made in these hearings that although ultimately a State has the direct authority and responsibility to respond to threats to the public health and safety from hazardous substances, etc., the major problem was the availability of money to see that the job is done. One of the objectives of some of the superfund bills (e.g. S.1480) is to establish a fund that would be financed initially through Federal and state appropriations and sustained through fees assessed against the industries involved.

With the lack of adequate funds to deal with the cleanup of hazardous wastes generally, it does not seem surprising that Pennsylvania would have no statutory contingency plan for dealing with the cleanup of a damaged nuclear power plant. Furthermore, the regulation of the radiological hazards associated with a nuclear power plant is exclusively the right of the Federal government through a pervasive Federal statutory and regulatory scheme which has preempted state authority in that area (see "Report of the Governor's Commission on Three Mile Island, supra at 44). In this regard, the PAPUC commented (in its Order of May 23 pp. 5-6)

> The Commission is acutely aware of the substantial, continuing public debate over whether or not radiological dangers exist at Three Mile Island....To the extent that these allegations relate to the safety of the people of Pennsylvania, this Commission is required to recognize that the Federal Government has completely pre-empted the States in the licensing and regulation of the commercial use of nuclear reactors and in the protection of the public from radiological hazards. Northern States Power Company v. State of Minnesota, 447 F.2d 1143 (8th Cir. 1971) aff'd mem. 405 U.S. 1035 (1972).
>
> * * *
>
> The Federal government has been a keystone in the development of commercial uses of nuclear power. It has insured, promoted and exclusively regulated its development. Duke Power Company v. Carolina Environmental Study Group, Inc., 438 U.S. 59(1978). The

people of Pennsylvania should not have to bear the entire burden--emotionally or financially--where that burden properly belongs to all those who have benefitted from the development of nuclear energy.

## 8.0 ROLE OF NUCLEAR PROPERTY INSURANCE

### 8.1 Background

The legal responsibilities of the insurance pools for TMI cleanup are limited to the provisions in the property insurance agreement between those pools and the licensee. The NRC has no regulatory involvement in this property insurance, which is strictly a business arrangement between the insured and insurer. Thus, the legal responsibilities of the property insurance pools regarding the TMI cleanup must be determined solely on the basis of the agreements and understandings between the insurer and the insured.

As far as third-party liability insurance under the Price-Anderson Act is concerned, there is, of course, regulatory involvement on the part of NRC. This insurance is not, however, available to pay for the expenses associated with the cleanup, restoration, or decommissioning of the reactor because of the definition of the term "public liability" in Section 11w., 42 U.S.C. 2014w, of the Atomic Energy Act of 1954, as amended. Among other things, this definition excludes "claims for loss of, or damage to, or loss of use of property which is located at the site of and used in connection with the licensed activity where the nuclear incident occurs." Therefore, if the licensee's onsite property (e.g. the reactor) is covered, it is covered by such property insurance as the licensee may choose to carry. Onsite property is not protected under the Price-Anderson insurance-indemnity system, which is designed to be responsive to third-party public liability claims.

### 8.2 Licensee's Nuclear Property Insurance

Metropolitan Edison Company, Jersey Central Power and Light Company, and Pennsylvania Electric Company are the named Insureds under a nuclear property insurance policy issued by American Nuclear Insurers (ANI) and Mutual Atomic Energy Liability Underwriters (MAELU). This policy (which was in effect at the time of the March 28, 1979 accident and continues in effect) covers loss to all real and personal property at the Three Mile Island Nuclear Station Units 1 and 2 from radioactive contamination and all other risks of loss such as fire, tornado, or hurricane. The policy also provides coverage for removal of debris and decontamination of the property. Therefore, expenses incurred by Met-Ed in decontaminating TMI Unit 2 would be covered under the policy. However, the licensee's nuclear property insurance policy for TMI excludes claims for engineering and design.

As of the date this report was written, total payments made in connection with the accident were in excess of $150 million. These payments are divided into two categories: (1) a fuel damage payment totaling $63 million and (2) direct physical loss and radioactive decontamination for the remainder. Before claims are paid, the Insureds must submit a proof of loss statement. Insurance pool auditors, aided by technical consultants, determine whether expenses contained in these submittals are covered under the policy. If coverage is

provided, checks are then sent to each of the three Insureds and their respective mortgage trustees to coincide with ownership shares of the reactor. Metropolitan Edison and its mortgage trustee, Morgan Guaranty, receives a check for 50 percent of the claim, with Jersey Central Power and Light and its mortgage trustee, Citibank, N.A., and Pennsylvania Electric and its mortgage trustee, Banker's Trust, each receiving a check for 25 percent of the claim.

## 9.0 CONCLUSION

The NRC under existing law has the statutory authority to act to ensure that the public health and safety will be protected should the utility be unable financially to carry out its responsibilities as a licensee. This authority is not, however, self-implementing. The resources needed to use this authority under the circumstances being considered (i.e., direct NRC involvement and assumption of cleanup activities, which would be beyond its usual responsibilities of regulatory functions and providing technical assistance) are not available under existing law. Under existing law, however, the NRC does have the final say over who may assume the responsibility of a licensee.

At this time, neither the Federal government nor the Commonwealth of Pennsylvania has a program to handle emergency situations involving a threat to the public health and safety from potentially hazardous substances. As discussed below, existing authority at the Federal level is narrowly focused (oil spills and certain hazardous substances) and even in the areas covered, the funds available for governmental action are modest. At the state level, governmental action would appear to rely heavily on tort and nuisance suits and enforcement actions in the form of civil penalties or criminal prosecution, or injunctive action, in the event certain statutes are violated. These remedies would not appear to be adequate, however, if the responsible party is bankrupt and funds are needed for steps to be taken by someone to protect the public health and safety. In view of the inadequacies in existing law on such matters, the Congress has been considering so-called "superfund" legislation, which would provide for Federal and State roles, with funds made available, so that emergency responses can be taken to protect the public health and safety from certain hazardous materials which are spilled or which are located in inactive waste dumps. It is not known whether this legislation will be enacted during the 96th Congress, and, if it is, whether it would cover any cleanup expenses at a disabled nuclear power plant. From the information available, it would appear that the superfund legislation probably is not intended to cover a site-specific situation where a potential health and safety problem is presented by a disabled nuclear power plant licensed and regulated by the NRC. The studies associated with the superfund legislation do confirm, however, the conclusion reached by the staff's independent research (which was necessarily limited by time constraints) that existing statutory authority does not provide a sound basis for contingency planning regarding governmental assistance to a utility licensed to operate a nuclear power plant when the plant has been disabled by an accident, and when, as a result of the accident, the utility is financially unable to carry out its responsibilities as a licensee. This precise situation appears to be unprecedented.

pplicable law at the State level (in this instance the Commonwealth of Pennylvania and New Jersey) does provide a means, within reason (e.g. considering he economic burden on the consumers) for ensuring that the utility is not laced in such a financially perilous position. These laws, of course, are hose relating to the functions and authority of the PAPUC and the NJBPU. hese bodies exercise the traditional State authority to fix the rates so that n electric generating utility is able to obtain the revenues needed to carry ut its responsibilities. However, their function is not to guarantee financial tability to any given utility. Instead, their function is to allow it.

APPENDIX F

THE WHITE HOUSE

WASHINGTON

July 3, 1980

Dear Madam Chairman:

The President has asked me to respond to your recent letter regarding federal financial assistance relative to clean-up and recovery costs associated with the March 28, 1979, accident at the Three Mile Island nuclear generating plant. In responding to this request, we have carefully considered the points raised in your letter suggesting federal responsibility for sharing the costs of this accident with the citizens of Pennsylvania.

In the first instance, there is no statutory authority for any form of direct financial aid to assist in clean-up and recovery costs. The Administration has however taken steps to provide for the monitoring of TMI-2 through efforts by the EPA. The Department of Energy will be examining the core and the studying of the effects of the accident on critical plants components upon clean-up.

Your letter notes the financial involvement of the Federal Government in the early stages of the commercialization of nuclear power including the Price Anderson Act and its renewal. This history indeed exists; however, once private industry was capable and willing to support the commercial deployment of nuclear reactors for the generation of electricity, the principal role of the Federal Government became one of enforcing the regulatory provisions of the Atomic Energy Act.

The Administration is closely following the progress of the proceedings you outlined currently underway before your commission; the companion case in New Jersey; and related proceedings at the Federal Energy Regulatory Commission. The FERC action would provide for a discount for Met Ed in purchasing power while the TMI plant is down. In addition, the Nuclear Regulatory Commission is conducting a licensing proceeding to decide whether or not TMI-1 should be allowed to resume operation.

We also understand that you have recently taken action which will allow Met Ed to remain solvent until a more detailed consideration of the case can be made.

The Administration shares your concern about this accident and its potential impact on the future of the utility industry. Within the limits of our legal authority, we believe that federal assistance at TMI has been sensitive to the needs of the State and the affected community. Please be assured that we will continue to help in any way that is appropriate.

Sincerely,

SIGNED BY Stuart E. Eizenstat

Stuart E. Eizenstat
Assistant to the President
For Domestic Affairs and Policy

Ms. Susan M. Shanaman
Chairman
Pennsylvania Public Utility Commission
Commonwealth of Pennsylvania
Harrisburg, Pennsylvania 17120

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

CHAIRMAN

May 7, 1980

Ms. Susan M. Shanaman, Chairman
Pennsylvania Public Utility Commission
Commonwealth of Pennsylvania
Harrisburg, PA 17120

Dear Chairman Shanaman:

In your letter dated March 21, 1980, you asked two questions relating to the possibility of financial failure of the Metropolitan Edison Company. The first concerned NRC statutory powers and the second NRC contingency plans in the event of such a failure.

Financial failure of a licensee would provide grounds for immediate revocation of the license under Section 186(a) of the Atomic Energy Act, 42 U.S.C. 2236(a). Subsection (c) of this section would then empower the NRC to enter upon and operate the licensed facility. Although, as indicated below, the Commission has not determined the specifics of how this authority would be exercised, the Commission reads this section as authorizing any action necessary to protect public health and safety, including repair or decontamination of a damaged facility. The NRC has further authority to operate a facility under Section 188 of the Atomic Energy Act, 42 U.S.C. 2238. Under this section, the NRC could continue to operate a facility until a new license is issued. However, we must point out that current authorizations for the NRC do not include any funds for such operation. Provision of the necessary funding would present a major policy question requiring action by the Congress and the Administration, a matter that could not be expected to be speedily resolved.

In response to your second question, the NRC has not completed any specific contingency plans to cover the possibility of financial failure of Metropolitan Edison, but such plans are now under development. We have no reason to believe that a failure is imminent, though we will, of course, continue to monitor the situation closely. Should the financial condition of Metropolitan Edison worsen to the extent that it may be unable to carry out its responsibilities as licensee for the Three Mile Island Station, the Commission will take whatever steps are necessary to ensure that the public health and safety will be protected.

Prior to the completion of such planning, a preliminary observation can be made about our current thinking on the matter. In the event of bankruptcy, we would expect that a receiver or trustee would be appointed immediately to continue the essential services being provided by Metropolitan Edison. We would expect the receiver or trustee to assume Metropolitan Edison's responsibilities as

licensee for Three Mile Island, including continuation of cleanup operations at the site. The NRC would then exercise supervisory control through the receiver.

Sincerely,

John F. Ahearne

## Public Law 92-69

AN ACT

August 6, 1971
[H. R. 4762]

To amend section 5055 of title 38, United States Code, in order to extend the authority of the Administrator of Veterans Affairs to establish and carry out a program of exchange of medical information.

Veterans.
Medical information exchange, extension.
80 Stat. 1375.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That section 5055 of title 38, United States Code, is amended by deleting in the first sentence of subsection (c)(1) "of the first four fiscal years following the fiscal year in which this subchapter is enacted" and inserting in lieu thereof the following: "fiscal year 1968 through 1971, and such sums as may be necessary for each fiscal year 1972 through 1975,".

Approved August 6, 1971.

## Public Law 92-70

AN ACT

August 9, 1971
[H. R. 8432]

To authorize emergency loan guarantees to major business enterprises.

Emergency Loan Guarantee Act.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

SHORT TITLE

SECTION 1. This Act may be cited as the "Emergency Loan Guarantee Act".

ESTABLISHMENT OF THE BOARD

Membership.

SEC. 2. There is created an Emergency Loan Guarantee Board (referred to in this Act as the "Board") composed of the Secretary of the Treasury, as Chairman, the Chairman of the Board of Governors of the Federal Reserve System, and the Chairman of the Securities and Exchange Commission. Decisions of the Board shall be made by majority vote.

AUTHORITY

SEC. 3. The Board, on such terms and conditions as it deems appropriate, may guarantee, or make commitments to guarantee, lenders against loss of principal or interest on loans that meet the requirements of this Act.

LIMITATIONS AND CONDITIONS

SEC. 4. (a) A guarantee of a loan may be made under this Act only if—

(1) the Board finds that (A) the loan is needed to enable the borrower to continue to furnish goods or services and failure to meet this need would adversely and seriously affect the economy of or employment in the Nation or any region thereof, (B) credit is not otherwise available to the borrower under reasonable terms or conditions, and (C) the prospective earning power of the borrower, together with the character and value of the security pledged, furnish reasonable assurance that it will be able to repay the loan within the time fixed, and afford reasonable protection to the United States; and

(2) the lender certifies that it would not make the loan without such guarantee.

(b) Loans guaranteed under this Act shall be payable in not more than five years, but may be renewable for not more than an additional three years.

Interest rates, determination.

(c)(1) Loans guaranteed under this Act shall bear interest payable to the lending institutions at rates determined by the Board taking into account the reduction in risk afforded by the loan guarantee and rates charged by lending institutions on otherwise comparable loans.

Guarantee fee.

(2) The Board shall prescribe and collect a guarantee fee in connection with each loan guaranteed under this Act. Such fee shall reflect the Government's administrative expense in making the guarantee and the risk assumed by the Government and shall not be less than an amount which, when added to the amount of interest payable to the lender of such loan, produces a total charge appropriate for loan agreements of comparable risk and maturity if supplied by the normal capital markets.

SECURITY FOR LOAN GUARANTEES

SEC. 5. In negotiating a loan guarantee under this Act, the Board shall make every effort to arrange that the payment of the principal of and interest on any plan guaranteed shall be secured by sufficient property of the enterprise to collateralize fully the amount of the loan guarantee.

REQUIREMENTS APPLICABLE TO LOAN GUARANTEES

Stock dividends or other payments, prohibition.

SEC. 6. (a) A guarantee agreement made under this Act with respect to an enterprise shall require that while there is any principal or interest remaining unpaid on a guaranteed loan to that enterprise the enterprise may not—

(1) declare a dividend on its common stock; or

(2) make any payment on its other indebtedness to a lender whose loan has been guaranteed under this Act.

Waiver.

The Board may waive either or both of the requirements set forth in this subsection, as specified in the guarantee agreement covering a loan to any particular enterprise, if it determines that such waiver is not inconsistent with the reasonable protection of the interests of the United States under the guarantee.

Managerial changes.

(b) If the Board determines that the inability of an enterprise to obtain credit without a guarantee under this Act is the result of a failure on the part of management to exercise reasonable business prudence in the conduct of the affairs of the enterprise, the Board shall require before guaranteeing any loan to the enterprise that the enterprise make such management changes as the Board deems necessary to give the enterprise a sound managerial base.

Financial statement.

(c) A guarantee of a loan to any enterprise shall not be made under this Act unless—

(1) the Board has received an audited financial statement of the enterprise; and

(2) the enterprise permits the Board to have the same access to its books and other documents as the Board would have under section 7 in the event the loan is guaranteed.

(d) No payment shall be made or become due under a guarantee entered into under this Act unless the lender has exhausted any remedies which it may have under the guarantee agreement.

(e)(1) Prior to making any guarantee under this Act, the Board shall satisfy itself that the underlying loan agreement on which the guarantee is sought contains all the affirmative and negative covenants

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and other protective provisions which are usual and customary in loan agreements of a similar kind, including previous loan agreements between the lender and the borrower, and that it cannot be amended, or any provisions waived, without the Board's prior consent.

Advances.

(2) On each occasion when the borrower seeks an advance under the loan agreement, the guarantee authorized by this Act shall be in force as to the funds advanced only if—

(A) the lender gives the Board at least ten days' notice in writing of its intent to provide the borrower with funds pursuant to the loan agreement;

(B) the lender certifies to the Board before an advance is made that, as of the date of the notice provided for in subparagraph (A), the borrower is not in default under the loan agreement: *Provided*, That if a default has occurred the lender shall report the facts and circumstances relating thereto to the Board and the Board may expressly and in writing waive such default in any case where it determines that such waiver is not inconsistent with the reasonable protection of the interests of the United States under the guarantee; and

(C) the borrower provides the Board with a plan setting forth the expenditures for which the advance will be used and the period during which the expenditures will be made, and, upon the expiration of such periods, reports to the Board any instances in which amounts advanced have not been expended in accordance with the plan.

Loan security, priority.

(f)(1) A guarantee agreement made under this Act shall contain a requirement that as between the Board and the lender, the Board shall have a priority with respect to, and to the extent of, the lender's interest in any collateral securing the loan and any earlier outstanding loans. The Board shall take all steps necessary to assure such priority against any other persons.

"Collateral."

(2) As used in paragraph (1) of this subsection, the term "collateral" includes all assets pledged under loan agreements and, if appropriate in the opinion of the Board, all sums of the borrower on deposit with the lender and subject to offset under section 68 of the Bankruptcy Act.

52 Stat. 878.
11 USC 108.

INSPECTION OF DOCUMENTS; AUTHORITY TO DISAPPROVE CERTAIN TRANSACTIONS

SEC. 7. (a) The Board is authorized to inspect and copy all accounts, books, records, memoranda, correspondence, and other documents of any enterprise which has received financial assistance under this Act concerning any matter which may bear upon (1) the ability of such enterprise to repay the loan within the time fixed therefor; (2) the interests of the United States in the property of such enterprise; and (3) the assurance that there is reasonable protection to the United States. The Board is authorized to disapprove any transaction of such enterprise involving the disposition of its assets which may affect the repayment of a loan that has been guaranteed pursuant to the provisions of this Act.

GAO audit.

(b) The General Accounting Office shall make a detailed audit of all accounts, books, records, and transactions of any borrower with respect to which an application for a loan guarantee is made under this Act. The General Accounting Office shall report the results of such audit to the Board and to the Congress.

Report to Board and Congress.

MAXIMUM OBLIGATION

SEC. 8. The maximum obligation of the Board under all outstanding loans guaranteed by it shall not exceed at any time $250,000,000.

EMERGENCY LOAN GUARANTEE FUND

SEC. 9. (a) There is established in the Treasury an emergency loan guarantee fund to be administered by the Board. The fund shall be used for the payment of the expenses of the Board and for the purpose of fulfilling the Board's obligations under this Act. Moneys in the fund not needed for current operations may be invested in direct obligations of, or obligations that are fully guaranteed as to principal and interest by, the United States or any agency thereof. Establishment; use.

(b) The Board shall prescribe and collect a guarantee fee in connection with each loan guaranteed by it under this Act. Sums realized from such fees shall be deposited in the emergency loan guarantee fund. Guarantee fee.

(c) Payments required to be made as a consequence of any guarantee by the Board shall be made from the emergency loan guarantee fund. In the event that moneys in the fund are insufficient to make such payments, in order to discharge its responsibilities, the Board is authorized to issue to the Secretary of the Treasury notes or other obligations in such forms and denominations, bearing such maturities, and subject to such terms and conditions as may be prescribed by the Board with the approval of the Secretary of the Treasury. Such notes or other obligations shall bear interest at a rate determined by the Secretary of the Treasury, taking into consideration the current average market yield on outstanding marketable obligations of the United States of comparable maturities during the month preceding the issuance of the notes or other obligations. The Secretary of the Treasury is authorized and directed to purchase any notes and other obligations issued hereunder and for that purpose he is authorized to use as a public debt transaction the proceeds from the sale of any securities issued under the Second Liberty Bond Act, as amended, and the purposes for which securities may be issued under that Act are extended to include any purchase of such notes and obligations. Payments. 40 Stat. 288, 506. 31 USC 774.

FEDERAL RESERVE BANKS AS FISCAL AGENTS

SEC. 10. Any Federal Reserve bank which is requested to do so shall act as fiscal agent for the Board. Each such fiscal agent shall be reimbursed by the Board for all expenses and losses incurred by it in acting as agent on behalf of the Board.

PROTECTION OF GOVERNMENT'S INTEREST

SEC. 11. (a) The Attorney General shall take such action as may be appropriate to enforce any right accruing to the United States or any officer or agency thereof as a result of the issuance of guarantees under this Act. Any sums recovered pursuant to this section shall be paid into the emergency loan guarantee fund. Attorney General, enforcement authority.

(b) The Board shall be entitled to recover from the borrower, or any other person liable therefor, the amount of any payments made pursuant to any guarantee agreement entered into under this Act, and upon making any such payment, the Board shall be subrogated to all the rights of the recipient thereof. Recovery rights.

REPORTS

Reports to Congress; recommendations.

SEC. 12. The Board shall submit to the Congress annually a full report of its operations under this Act. In addition, the Board shall submit to the Congress a special report not later than June 30, 1973, which shall include a full report of the Board's operations together with its recommendations with respect to the need to continue the guarantee program beyond the termination date specified in section 13. If the Board recommends that the program should be continued beyond such termination date, it shall state its recommendations with respect to the appropriate board, agency, or corporation which should administer the program.

TERMINATION

SEC. 13. The authority of the Board to enter into any guarantee or to make any commitment to guarantee under this Act terminates on December 31, 1973. Such termination does not affect the carrying out of any contract, guarantee, commitment, or other obligation entered into pursuant to this Act prior to that date, or the taking of any action necessary to preserve or protect the interests of the United States in any amounts advanced or paid out in carrying on operations under this Act.

Approved August 9, 1971.

## Public Law 92-71

August 9, 1971
[H. J. Res. 829]

JOINT RESOLUTION

Making further continuing appropriations for the fiscal year 1972, and for other purposes.

Continuing appropriations, 1972.
*Ante*, p. 91; *Post*, p. 680.

*Resolved by the Senate and House of Representatives of the United States of America in Congress assembled*, That clause (c) of section 102 of the joint resolution of July 1, 1971 (Public Law 92–38), is hereby amended by striking out "August 6, 1971" and inserting in lieu thereof "October 15, 1971": *Provided*, That obligations may be incurred for the activities of the Federal Power Commission from July 1, 1971, in anticipation of appropriations for the fiscal year 1972, and are hereby ratified and confirmed if otherwise in accord with the applicable terms of Public Law 92–38, as amended.

Approved August 9, 1971.

## Public Law 92-72

August 9, 1971
[H. J. Res. 833]

JOINT RESOLUTION

Making an appropriation for the Department of Labor for the fiscal year 1972, and for other purposes.

Department of Labor, Appropriation.

*Resolved by the Senate and House of Representatives of the United States of America in Congress assembled*, That the following sum is appropriated, out of any money in the Treasury not otherwise appropriated, for the fiscal year ending June 30, 1972, namely:

PUBLIC LAW 96-185 [H.R. 5860]; January 7, 1980

# CHRYSLER CORPORATION LOAN GUARANTEE ACT OF 1979

*For Legislative History of Act, see p. 2787*

An Act to authorize loan guarantees to the Chrysler Corporation.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

Chrysler Corporation Loan Guarantee Act of 1979.

SHORT TITLE

15 USC 1861 note.

SECTION 1. This Act may be cited as the "Chrysler Corporation Loan Guarantee Act of 1979".

DEFINITIONS

15 USC 1861

SEC. 2. For purposes of this Act—

(1) the term "Board" means the Chrysler Corporation Loan Guarantee Board established by section 3;

(2) the term "borrower" means the Chrysler Corporation, any of its subsidiaries or affiliates, or any other entity the Board may designate from time to time which borrows funds for the benefit or use of the Corporation;

(3) the term "Corporation" means the Chrysler Corporation and its subsidiaries and affiliates;

(4) the term "financing plan" means a plan designed to meet the financing needs of the Corporation as reflected in the operating plan and indicating in accordance with the requirements of section 8 the amounts to be provided at dates specified (for each year of the plan) from internally generated sources (including earnings and cost reduction measures), from loans guaranteed under this Act, and from nonfederally guaranteed assistance as required pursuant to section 4(a)(4);

(5) the term "fiscal year" means the fiscal year of the Corporation;

(6) the term "going concern" means a corporation the net earnings of which, as projected in the plan required under section 4(a)(3), are determined to be sufficient to maintain long-term profitability after taking into account probable fluctuations in the automobile market, and which meets such other tests of viability as the Board shall prescribe;

(7) the term "labor organization" has the same meaning as in section 2 of the National Labor Relations Act;

29 USC 152.

(8) the term "operating plan" means a document detailing production, distribution, and sales plans of the Corporation, together with the expenditures needed to carry out those plans (including budget and cash flow projections), on an annual basis, a productivity improvement plan setting forth steps to be taken by the Corporation and its workers to achieve a higher productivity growth rate, and an energy efficiency plan setting forth steps to be taken by the Corporation to reduce United States dependence on petroleum, in accordance with section 4(a)(3);

(9) the term "persons with an existing economic stake in the health of the Corporation" means banks, financial institutions, and other creditors, suppliers, dealers, stockholders, labor unions, employees, management, State, local, and other governments, and others directly deriving benefit from the production, distribution, or sale of products of the Corporation; and

(10) the term "wages and benefits" means any direct or indirect compensation paid by the Corporation to employees of the Corporation and shall include, but is not limited to, amounts paid in accordance with wage scales, straight time hourly wage rates, base wage rates, base salary rates, salary scales, and periodic salary grades, overtime premiums, night shift premiums, vacation payments, holiday payments, relocation allowance, call-in pay, bonuses, bereavement pay, jury duty pay, paid absence allowances, short-term military duty pay, paid leaves of absence, holiday pay including personal holidays, and medical, health, accident, sickness, disability, hospitalization, insurance, pension, educational, and supplemental unemployment benefits.

CHRYSLER CORPORATION LOAN GUARANTEE BOARD

SEC. 3. There is established a Chrysler Corporation Loan Guarantee Board which shall consist of the Secretary of the Treasury who shall be the Chairperson of the Board, the Chairman of the Board of Governors of the Federal Reserve System, and the Comptroller General of the United States. The Secretary of Labor and the Secretary of Transportation shall be ex officio nonvoting members of the Board. Establishment. Membership. 15 USC 1862.

AUTHORITY FOR COMMITMENTS FOR LOAN GUARANTEES

SEC. 4. (a) Subject to the provisions of this Act, the Board, on such terms and conditions as it deems appropriate, may make commitments to guarantee the payment of principal and interest on loans to a borrower only if at the time the commitment is issued, the Board determines that— 15 USC 1863.

(1) there exists an energy-savings plan which—

(A) is satisfactory to the Board;

(B) is developed in consultation with other appropriate Federal agencies;

(C) focuses on the national need to lessen United States dependence on petroleum; and

(D) can be carried out by the borrowers;

(2) the commitment is needed to enable the Corporation to continue to furnish goods or services, and failure to meet such need would adversely and seriously affect the economy of, or employment in, the United States or any region thereof;

(3)(A) the Corporation has submitted to the Board a satisfactory operating plan (including budget and cash flow projections) for the 1980 fiscal year and the next succeeding three fiscal years demonstrating the ability of the Corporation to continue operations as a going concern in the automobile business, and after December 31, 1983, to continue such operations as a going concern without additional guarantees or other Federal financing; and Operating plan, submittal to Board.

(B) the Board has received such assurances as it shall require that the operating plan is realistic and feasible;

Financing plan.

(4) the Corporation has submitted to the Board a satisfactory financing plan which meets the financing needs of the Corporation as reflected in the operating plan for the period covered by such plan, and which includes an aggregate amount of nonfederally guaranteed assistance of at least $1,430,000,000 as determined under subsection (b)—

(A) from financial commitments or concessions from persons with an existing economic stake in the health of the Corporation in excess of commitments or concessions outstanding as of October 17, 1979, or from other persons;

(B) from capital to be obtained through merger, sale of securities or otherwise after October 17, 1979;

(C) from cash to be obtained from the disposition of assets of the Corporation after October 17, 1979; and

Stock.

(D) from the issuance of $100,000,000 of common stock of the Corporation which shall be made available by the Corporation to its employees and labor organizations which are parties to collective bargaining agreements with the Corporation;

(5) the Board has received adequate assurances regarding the availability of all financing contemplated by the financing plan and that such financing is adequate (taking into account the amount of guarantees to be made available and the amount of wages and benefits not to be paid as a result of section 6) to meet all the Corporation's projected financing needs during the period covered by the financing plan;

Existing creditors, waiver.

(6) the Corporation's existing creditors have certified to the Board that they will waive their rights to recover under any prior credit commitment which may be in default unless the Board determines that the exercise of those rights would not adversely affect the operating plan submitted under paragraph (3) or the financing plan submitted under paragraph (4);

(7) no credit extended or committed on a nonguaranteed basis prior to October 17, 1979, is being converted to a guaranteed basis pursuant to this Act; and

(8) the financing plan submitted under paragraph (4) provides that expenditures under such financing plan will contribute to the domestic economic viability of the Corporation.

Nonfederally guaranteed assistance. Definitions.

(b)(1) For the purpose of computing the aggregate amount of at least $1,430,000,000 in nonfederally guaranteed assistance required to be provided under subsection (a)(4)—

(A) the term "financial commitment" means a legally binding commitment to provide additional nonfederally guaranteed assistance to meet the financing needs of the Corporation in excess of any such commitments outstanding as of October 17, 1979;

(B) the term "concession" means a legally binding commitment (or in the case of a concession from a State, local, or other government, a concession for which the Board has received adequate assurances) which will result in a reduction in the financing needs of the Corporation by an amount which is more than the amount of any reduction accomplished by any concessions outstanding as of October 17, 1979, and, except for a loan or other credit, shall be nonrecoupable;

(C) the term "capital" means sales of equity securities, any other transactions involving non-interest-bearing investments in the Corporation, or subordinated loans on which payment of principal and interest is deferred until after all guaranteed loans are repaid; and

(D) the amount of "cash to be obtained from the disposition of assets of the Corporation" shall be determined by the Board based on a conservative estimate of the minimum value realizable in a sale, with reference to the potential circumstances surrounding such a sale.

Computation of aggregate amount, exclusions.

(2) In computing the aggregate amount of at least $1,430,000,000 in nonfederally guaranteed assistance required to be provided under subsection (a)(4), there shall be excluded—

(A) the extent of any contribution, concession, or other element that does not actually and substantively contribute to meeting the Corporation's financing needs as defined in the financing plan required by this section; and

(B) deferral of any dividends on common or preferred stock outstanding as of October 17, 197[illegible]

Categories of nonfederally guaranteed assistance.

(c) The aggregate amount of nonfederally guaranteed assistance of at least $1,430,000,000 required to be provided under subsection (a) shall include—

(1) at least $500,000,000 from United States banks, financial institutions, and other creditors, of which—

(A) at least $400,000,000 shall be new loans or credits, in addition to the extension of the full principal amount of any loans committed to be made but not outstanding as of October 17, 1979; and

(B) at least $100,000,000 shall be concessions with respect to outstanding debt of the Corporation;

(2) at least $150,000,000 shall be from foreign banks, financial institutions, and other creditors in the form of new loans or credits, in addition to the extension of the full principal amount of any loans committed to be made but not outstanding as of October 17, 1979;

(3) at least $300,000,000 shall be from the disposition of assets of the Corporation;

(4) at least $250,000,000 shall be from State, local, and other governments;

(5) at least $180,000,000 shall be from suppliers and dealers, of which at least $50,000,000 shall be in the form of capital as defined in subsection (b); and

(6) at least $50,000,000 shall be from the sale of additional equity securities.

The Board may, as necessary, modify the amounts of assistance required to be provided by any of the categories referred to in this subsection, so long as the aggregate amount of at least $1,430,000,000 in nonfederally guaranteed assistance is provided under subsection (a)(4).

REQUIREMENTS FOR LOAN GUARANTEES

15 USC 1864.

SEC. 5. (a) A loan guarantee may be issued under this Act only pursuant to a commitment issued under section 4. The terms of any such commitment shall provide that a loan guarantee may be issued under this Act only if at the time the loan guarantee is issued, the Board determines that—

(1) credit is not otherwise available to the Corporation under reasonable terms or conditions sufficient to meet its financing needs as reflected in the financing plan;

(2) the prospective earning power of the Corporation, together with the character and value of the security pledged, furnish reasonable assurance of repayment of the loan to be guaranteed in accordance with its terms;

(3) the loan to be guaranteed bears interest at a rate determined by the Board to be reasonable taking into account the current average yield on outstanding obligations of the United States with remaining periods to maturity comparable to the maturity of such loan;

(4) the operating plan and the financing plan of the Corporation continue to meet the requirements of section 4 and appropriate revisions to such plans (including extensions of such plans to cover the then current four-year period) have been submitted to the Board to meet such requirements;

(5) the Corporation is in compliance with such plans;

(6) the Board has received such assurances as it may require that such plans are realistic and feasible;

Submittal of revised operating plan, financial plan, and related reports.

(7) the Corporation has agreed for as long as guarantees issued under this Act are outstanding—

(A) to have prepared and submitted on or before the thirtieth day preceding each fiscal year beginning after December 31, 1980, a revised operating plan and financial plan which cover the four-year period commencing with such fiscal year and which meet the requirements of section 4; and

(B) to prepare and deliver to the Board within one hundred and twenty days following the close of each fiscal year, an analysis reconciling the Corporation's actual performance for such fiscal year with the operating plan and the financial plan in effect at the start of such fiscal year;

(8) there is no substantial likelihood that Chrysler Corporation will be absorbed by or merged with any foreign entity; and

(9) the borrower is in compliance with the terms and conditions of the commitment to issue the guarantees required by the Board pursuant to section 9(b), except to the extent that such terms and conditions are modified, amended, or waived by the Board.

Determinations.

(b) Any determination by the Board that the conditions established by this Act have been met shall be conclusive, and such determination shall be evidenced by the issuance of the guarantee or commitment for which such determination is required. The Board shall transmit to the appropriate committees of the Congress a written report setting forth each such determination under this Act and the reasons therefor not less than fifteen days prior to the issuance of any guarantee. The validity of any guarantee when made by the Board under this Act shall be incontestable in the hands of a holder, except for fraud or material misrepresentation on the part of such holder. The Board is authorized to determine the form in which any guarantee made under this Act shall be issued.

Report to congressional committees.

Guarantee fees.

(c) The Board shall prescribe and collect no less frequently than annually a guarantee fee in connection with each guarantee made under this Act. Such fee shall be sufficient to compensate the Government for all of the Government's administrative expense related to the guarantee, but in no case may such fee be less than one-half of 1 per centum per annum of the outstanding principal amount of loans guaranteed under this Act computed daily.

(d) To the maximum extent feasible, the Board shall ensure that the Government is compensated for the risk assumed in making guarantees under this Act, and for such purpose the Board is authorized to—

(1) prescribe and collect a guarantee fee in addition to the fee required by subsection (c);

(2) enter into contracts under which the Government, contingent upon the financial success of the Corporation, would participate in gains of the Corporation or its security holders; or

Contract authority.

(3) use other instruments deemed appropriate by the Board.

(e) All amounts collected by the Board pursuant to subsections (c) and (d) shall be deposited in the Treasury as miscellaneous receipts.

(f) Nothing in this Act shall be interpreted to mean that any loan guarantee of the Federal Government under this Act is in any way an asset of the Corporation which can be sold or assigned by the Chrysler Corporation to any foreign entity.

REQUIREMENTS APPLICABLE TO EMPLOYEES

SEC. 6. (a) No loan guarantee may be issued under this Act if at the time of issuance or the proposed issuance the Board determines that—

Wage and benefit reductions.
15 USC 1865.

(1) collective bargaining agreements entered into by the Corporation after September 14, 1979, with labor organizations representing employees of the Corporation which govern the payment of wages and benefits to such employees from September 14, 1979, to September 14, 1982, have not been modified so that the cost to the Corporation of such wages and benefits, as determined by the Board, shall be reduced by a total amount of at least $462,500,000 for the three-year period ending on September 14, 1982, below the cost of such wages and benefits which the Corporation would otherwise have been obligated to incur during such period, except that such dollar amount shall include $203,000,000 in wages and benefits to be foregone pursuant to the master collective bargaining agreement entered into on October 25, 1979, between the Corporation and the International Union, United Automobile Aerospace and Agricultural Implement Workers of America; or

(2) the Corporation has not put into effect a plan for achieving at least $125,000,000 in concessions as defined in section 4(b)(1)(B) from employees not represented by a labor organization.

(b) The limitations set forth in subsection (a) of this section shall not apply to any increase in wages or benefits required by law.

(c) Any increase in the wages and benefits of a person employed by the Corporation resulting from reclassification or reevaluation of a job or a promotion effected in order to evade the provisions of this section shall be considered an indirect form of compensation.

(d)(1) To meet the requirements of this section, the Corporation shall not enter into a collective bargaining agreement with a labor organization which—

(A) reduces the amounts and levels of wages and benefits provided by such a collective bargaining agreement beyond the labor organization's proportionate share, as determined by the Board; or

(B) reduces wages and benefits below the levels and amounts provided on September 13, 1979.

(2) For purposes of this subsection, the proportionate share of a labor organization shall be determined by multiplying the total reduction required by paragraph (1) by the quotient obtained by dividing the total number of the Corporation's employees represented by that labor organization whose proportionate share is to be determined by the total number of the Corporation's employees represented by labor organizations.

(e) The cost reduction realized by the Corporation under the terms of this subsection shall not be recoupable.

Cash contributions.

(f) If the Board determines that cash contributions from labor organizations or employees are legally committed so that the total contributions from employees and labor organizations during the period of September 13, 1979, through September 13, 1982, will exceed the total amount of wages and benefits not paid as a result of subsection (a), the Board may permit an increase in the levels and amounts of employee wages and benefits beyond the levels and amounts in effect on September 13, 1979, which would otherwise be prohibited by subsection (a), if (1) such increase will not impair the ability of the Corporation to continue as a going concern, or to meet such other tests of viability as the Board shall prescribe, and (2) the amount of such increase does not exceed the amount of the cash contributions committed.

EMPLOYEE STOCK OWNERSHIP PLAN

15 USC 1866.

SEC. 7. (a) No guarantee or commitment to guarantee any loan may be made under this Act until the Chrysler Corporation, in a written agreement with the Board which is satisfactory to the Board, agrees—

(1) to establish a trust which forms part of an employee stock ownership plan meeting the requirements of subsection (c);

(2) to make employer contributions to such trust in accordance with such plan; and

(3) to issue additional shares of qualified common stock at such times as such shares are required to be contributed to such trust.

(b) No guarantee or commitment to guarantee any loan may be made under this Act after the close of the one hundred and eighty-day period beginning on the date of the enactment of this Act unless the Chrysler Corporation has established a trust which forms part of an employee stock ownership plan meeting the requirements of subsection (c).

(c) An employee stock ownership plan meets the requirements of this subsection only if—

(1) such plan is maintained by the Chrysler Corporation;

(2) such plan satisfies the requirements of section 4975(e)(7) of the Internal Revenue Code of 1954 (determined without regard to subparagraph (A) of section 410(b)(2) of such Code);

26 USC 4975.
26 USC 410.

(3) such plan provides that—

(A) employer contributions to the trust may be made only in accordance with requirements of subsection (d);

(B) each participant in the plan has a nonforfeitable right to the participant's accrued benefit under the plan;

(C) each employer contribution to the trust shall be allocated in equal amounts (to the extent not inconsistent with the requirements of section 415(c) of such Code) to the accounts of all participants in the plan; and

26 USC 415.

(D) distributions from the trust under the plan will be made in accordance with the requirements of section 401(k)(2)(B) of the Internal Revenue Code of 1954; and

26 USC 401.

(4) such plan benefits 90 percent or more of all employees of the Corporation, excluding the employees who have not satisfied the minimum wage and service requirements, if any, prescribed by the plan as a condition of participation.

Employer contributions.

(d)(1) Employer contributions meet the requirements of this subsection only if such contributions—

(A) will total not less than $162,500,000 before the close of the four-year period beginning not later than the one hundred and eightieth day after the date of the enactment of this Act;

(B) are made in such amounts and at such times that no time during such four-year period will the amount of employer contributions to the trust be less than the amount such contributions would have been if made in installments of $40,625,000 made at the end of each year in such period; and

(C) are made in the additional qualified common stock which the Chrysler Corporation issues by reason of subsection (a)(3).

(2)(A) In the case of a qualified loan to the trust for the purchase of qualified common stock the amount of such stock purchased with the proceeds of such loan shall be treated for purposes of paragraph (1) as an employer contribution to the trust made on the date such stock is so purchased.

(B) For purposes of subparagraph (A), the term "qualified loan" means any loan—

(i) which may be repaid only in substantially equal installments;

(ii) which has a term of not more than ten years; and

(iii) the proceeds of which are used only to purchase an amount of the additional qualified common stock which the Chrysler Corporation issues by reason of subsection (a)(3).

(e) For purposes of this section, the term "qualified common stock" means stock of the class of common stock of the Chrysler Corporation which is outstanding on October 17, 1979, and which is readily tradeable on an established securities market. "Qualified common stock."

(f) An amount equal to $162,500,000 of the additional qualified common stock issued by the Corporation by reason of subsection (a)(3) shall not be treated for purposes of this Act as assistance received by the Chrysler Corporation from other than the Federal Government pursuant to section 4(c).

LIMITATIONS ON GUARANTEE AUTHORITY

SEC. 8. (a) The authority of the Board to extend loan guarantees under this Act shall not at any time exceed $1,500,000,000 in the aggregate principal amount outstanding. 15 USC 1867.

(b) Subject to subsection (a), the total principal amount of loans which are guaranteed under this Act and which are outstanding at any time shall not exceed the amount of nonfederally guaranteed assistance under section 4(a) and the amount of concessions and contributions under section 6 which have accrued to the Corporation.

TERMS AND CONDITIONS OF LOAN GUARANTEES

SEC. 9. (a) Loans guaranteed under this Act shall be payable in full not later than December 31, 1990, and the terms and conditions of such loans shall provide that they cannot be amended, or any provision waived, without the Board's consent. 15 USC 1868.

(b)(1) Any commitment to issue guarantees entered into pursuant to this Act shall contain all the affirmative and negative covenants and other protective provisions that the Board determines are appropriate. The Board shall require security for the loans to be guaranteed under this Act at the time the commitment is made.

INSPECTION OF DOCUMENTS; AUDIT BY THE GENERAL ACCOUNTING OFFICE

15 USC 1869.

SEC. 10. (a) At any time a request for a loan guarantee under this Act is pending or a loan guaranteed under this Act is outstanding, the Board is authorized to inspect and copy all accounts, books, records, memoranda, correspondence, and other documents and transactions of the Corporation and any other borrower requesting a guarantee under this Act.

(b) The General Accounting Office may make such audits as may be deemed appropriate by the Comptroller General of the United States of all accounts, books, records, memoranda, correspondence, and other documents and transactions of the Corporation and any other borrower. No guarantee may be made under this Act unless and until the Corporation and any other borrower agree, in writing, to allow the General Accounting Office to make such audits. The General Accounting Office shall report the results of all such audits to the Congress.

(c) The Board is empowered to investigate and shall investigate any allegations of fraud, dishonesty, incompetence, misconduct, or irregularity in the management of the affairs of the Corporation which are material to the Corporation's ability to repay the loans guaranteed under this Act.

PROTECTION OF GOVERNMENT'S INTEREST

15 USC 1870.

SEC. 11. (a) The Board shall take such action as may be appropriate to enforce any right accruing to the United States or any officer or agency thereof as a result of the commitment or issuance of guarantees under this Act.

(b) If the Corporation undertakes a sale of any asset having a value in excess of $5,000,000, and if the Board determines such sale is likely to impair the ability and capacity of the Corporation to repay the guaranteed loans as scheduled, or to impair the ability of the Corporation to continue as a going concern or to meet such other tests of viability as the Board shall prescribe, the Board shall not issue any further guarantees for loans under this Act, and all guaranteed loans made prior to such determination shall be due and payable in full.

(c) If the Corporation enters into any contract, including but not limited to future wage and benefit settlements, having an aggregate value of $10,000,000 or more, the Board shall determine and certify that the performance of the obligations of the Corporation pursuant to such contract will not reduce the ability of the Corporation to repay the guaranteed loans as scheduled, will not conflict with the Corporation's operating plan or financing plan as required under this Act, and will not impair the ability of the Corporation to continue as a going concern or to meet such other tests of viability as the Board shall prescribe. If in any case such determination and certification cannot be made, the Board shall not issue any further guarantees for loans under this Act until such certification can be made, and all loans guaranteed under this Act shall be due and payable in full.

(d) The Board shall be entitled to recover from the borrower, or from any other person liable therefor, the amount of all payments made pursuant to any guarantee entered into under this Act, and upon making any such payment, the Board shall be subrogated to all the rights of the recipient thereof.

(e) The remedies provided in this Act shall be cumulative and not in limitation of or substitution for any other remedy available to the Board or the United States.

Compliance, court action.

(f) The Board may bring action in any United States district court or any other appropriate court to enforce compliance with the provisions of the Act or any agreement related thereto and such court shall have jurisdiction to enforce such compliance and enter such orders as may be appropriate.

(g) A loan shall not be guaranteed under this Act if the income from such loan is excluded from gross income for purposes of chapter 1 of the Internal Revenue Code of 1954 or if the guarantee provides significant collateral or security to other obligations, the income from which is so excluded.

26 USC 1 *et seq.*

Invalidity of provisions.

(h) If any provision of this Act is held to be invalid or the application of such provision to any person or circumstance is held to be invalid by a court of competent jurisdiction, the remainder of this Act, or the application of such provision to persons or circumstances other than those as to which it is held invalid, shall not be affected thereby.

Debts due to United States.

(i)(1) Notwithstanding any other provision of law and subject to paragraphs (2), (3), and (4), whenever any person is indebted to the United States as a result of any loan guarantee issued under this Act and such person is insolvent or is a debtor in a case under title 11, United States Code, the debts due to the United States shall be satisfied first.

Waivers.

(2) Subject to paragraphs (3) and (4), the Board may waive the priority established in paragraph (1) if—

(A) the Board determines that the waiver of such priority is necessary to facilitate the ability of the Corporation or any borrower to obtain financing; and

(B) the Board determines that, despite such waiver, there is a reasonable prospect of repayment of the loans guaranteed under this Act.

(3) Subject to paragraph (4), waivers under paragraph (2) may only be issued—

(A) with respect to any State or local government;

(B) with respect to a supplier of the Corporation, except that no supplier of the Corporation may receive waivers under paragraph (2) with respect to claims of such supplier in an amount of more than $100,000; and

(C) with respect to loans made after October 17, 1979, by any creditor of the Corporation up to a total of $400,000,000.

(4) A waiver under paragraph (2) with respect to a supplier of the Corporation or any creditor of the Corporation under paragraph (3)(C) may not by its terms subordinate the claims of the United States under this Act to those of any other creditor of the Corporation or of any borrower.

Dividend payment.

(j) The Corporation may not pay any dividend on its common or preferred stock during the period beginning on the date of the enactment of this Act and ending on the date on which loan guarantees issued under this Act are no longer outstanding.

LONG-TERM PLANNING STUDY

Submittal to Board and Congress.
15 USC 1871.

SEC. 12. (a) The Secretary of Transportation, after consultation with the Secretary of Energy and the Secretary of Labor, shall submit to the Board and to the Congress as soon as practicable, but not later than six months after the date of enactment of this Act, an assess-

ment of the long-term viability of the Corporation's involvement in the automobile industry. The study shall assess the impact of likely energy trends and events on the automobile industry, including long-term capital requirements, productivity growth rate, rate of technological change, shifting market characteristics, the capability of the industry as a whole to respond to the requirements of the 1980's, and shall evaluate the adequacy of the industry's existing structure to make necessary technological and corporate adjustments. The study shall include an examination of the Corporation's capability to produce for sale an automobile similar to those vehicles developed under the research safety vehicle program of the National Highway Traffic Safety Administration. The study shall consider government procurement as one means of establishing a market for this automobile.

Annual comprehensive assessments to Congress.

(b) The Secretary of Transportation shall prepare and transmit to the Congress annual comprehensive assessments of the state of the automobile industry and its interaction in an integrated economy. Each annual assessment shall include, but not be limited to, issues pertaining to personal mobility, capital and material requirements and availability, national and regional employment, productivity growth rate, trade and the balance of payments, the industry's competitive structure, and the effects of utilization of other modes of transportation.

(c) The Board shall take the results of the study and each annual assessment into account when examining and evaluating the Corporation's financing plan and operating plan.

Economic and employment trends.

(d) In the study and assessments required by subsection (a) and (b), the Secretary in consultation with appropriate agencies and departments shall identify any adverse effects on the economy of or on employment in the United States or any region thereof and shall make recommendations for dealing with the adverse economic and employment trends identified in such study and for proposed programs or structural or modifications of existing programs, as well as funding requirements, in such areas as economic development, community development, job retraining, and worker relocation. In addition, the Secretary may make any additional recommendations he deems appropriate to address the long term national and regional impact of reduced activity of the Corporation or of the automobile industry.

PROHIBITION ON USE OF THE FEDERAL FINANCING BANK

15 USC 1872.

SEC. 13. Notwithstanding the provisions of section 6 of the Federal Financing Bank Act of 1973 (12 U.S.C. 2285) or any other provision of law, none of the loans guaranteed or committed to be guaranteed under this Act shall be eligible for purchase by, or commitment to purchase by, or sale or issuance to, the Federal Financing Bank or any other Federal agency or department or entity owned in whole or in part by the United States.

REPORTS TO CONGRESS

15 USC 1873.

SEC. 14. (a) The Board shall submit to the Congress semiannually a full report of its activities under this Act during fiscal years 1980 and 1981, and annually thereafter so long as any loan guaranteed under this Act is outstanding. The final report for 1981 shall include an evaluation of the long-term economic implications of the Chrysler loan guarantee program, with findings, conclusions, and recommen-

Future Federal loan guarantees.

dations for legislative and administrative actions considered appropriate to future Federal loan guarantee programs. The study shall also consider for inclusion in any guidelines covering future assistance to corporations the following factors:

(1) the prospective economic environment at the time the assistance would have its intended effect, and the impact that either the granting or denial of assistance will have on the environment,

(2) the importance, in terms of size and in terms of goods and services rendered, or the corporation or business entity to the national economy,

(3) the appropriateness of aggregate limits for such Federal assistance per fiscal year,

(4) the order of preference for specific types of assistance, and

(5) the degree to which assisted corporations or business entities should be required to adhere to other governmental policies as a condition for the assistance.

(b) Not less than fifteen days before the issuance of any loan guarantee under this Act, the Board shall transmit to the appropriate committees of the Congress a written report containing—

(1) the details of such loan guarantee;

(2) the specific assurances received by the Board under the provisions of sections 4 and 5; and

(3) the specific determinations made by the Board under the provisions of sections 4 and 5.

(c) The Board shall have the power to require the Secretary of Transportation to complete, within six months of such request, an assessment of the economic impact on the automobile industry of Federal regulatory requirements and the necessity thereof. Federal regulatory requirements, economic impact assessment.

AUTHORIZATION OF APPROPRIATIONS

SEC. 15. (a) There are authorized to be appropriated beginning October 1, 1979, and to remain available without fiscal year limitation, such sums as may be necessary to carry out the provisions of this Act. 15 USC 1874.

(b) Notwithstanding any other provision of this Act, the authority of the Board to make any loan guarantee under this Act shall be limited to the extent such amounts are provided in advance in appropriation Acts.

TERMINATION

SEC. 16. The authority of the Board to make commitments to guarantee or to issue guarantees under this Act expires on December 31, 1983. 15 USC 1875.

ASSISTANCE TO AUTOMOBILE DEALERS

SEC. 17. (a) The Congress finds that— 15 USC 631 note.

(1) automobile dealerships are, for the most part, small businesses, and

(2) current economic conditions have adversely affected automobile dealers to an unusual extent.

(b) The Administrator of the Small Business Administration (hereinafter in this section referred to as the "Administrator") shall investigate the financial problems faced by small business automobile dealers and determine what assistance through loans and loan guarantees may be needed and can be made available to SBA investigation.

Report to Congress.

alleviate such problems. The Administrator shall report the results of such investigation to the Senate and the House of Representatives not later than sixty days after the date of the enactment of this Act.

ELECTRIC AND HYBRID VEHICLE RESEARCH, DEVELOPMENT, AND DEMONSTRATION ACT AMENDMENTS

SEC. 18. Section 13(c) of the Electric and Hybrid Vehicle Research, Development, and Demonstration Act of 1976 (15 U.S.C. 2512(c)) is amended by adding the following new subparagraphs:

Evaluation program.

"(1) The Secretary of Energy in consultation with the Secretary of Transportation and the Administrator of the Environmental Protection Agency is authorized and directed to conduct a seven-year evaluation program of the inclusion of electric vehicles, as defined in section 512(b)(2) of the Motor Vehicle Information and Cost Savings Act (15 U.S.C. 2012(b)(2)), in the calculation of average fuel economy pursuant to section 503(a) (1) and (2) of the Motor Vehicle Information and Cost Savings Act (15 U.S.C. 2003(a) (1) and (2)) to determine the value and implications of such inclusion as an incentive for the early initiation of industrial engineering development and initial commercialization of electric vehicles in the United States. The evaluation program shall be conducted in parallel with the research and development activities of section 6 and demonstration activities of section 7 (15 U.S.C. 2505 and 2506) to provide all necessary information no later than January 1, 1987, for the private sector and Federal, State and local officials to make required decisions for the full commercialization of electric vehicles in the United States.

Regulations.

"(2) The Administrator of the Environmental Protection Agency, in consultation with the Secretary of Energy and the Secretary of Transportation, shall implement immediately the evaluation program by promulgating, within sixty days of enactment of the Act, regulations to include electric vehicles in average fuel economy calculations under section 503(a) (1) and (2) of the Motor Vehicle Information and Cost Savings Act. The Motor Vehicle Information and Cost Savings Act (15 U.S.C. 2003), as amended, is further amended by adding a new section 503(a)(3) (15 U.S.C. 2003(a)(3)), which reads as follows:

Average fuel economy, calculation procedures.

"'(3) In the event that a manufacturer manufactures electric vehicles, as defined in section 512(b)(2) (15 U.S.C. 2012(b)(2)), the average fuel economy will be calculated under 503(a) (1) and (2) to include equivalent petroleum based fuel economy values for various classes of electric vehicles in the following manner:

"'(A) The Secretary of Energy will determine equivalent petroleum based fuel economy values for various classes of electric vehicles. Determination of these fuel economy values will take into account the following parameters:

"'(i) the approximate electrical energy efficiency of the vehicles considering the vehicle type, mission, and weight;

"'(ii) the national average electricity generation and transmission efficiencies;

"'(iii) the need of the Nation to conserve all forms of energy, and the relative scarcity and value to the Nation of all fuel used to generate electricity;

"'(iv) the specific driving patterns of electric vehicles as compared with those of petroleum fueled vehicles.

"'(B) The Secretary of Energy will propose equivalent petroleum based fuel economy values within four months of enactment of the Act. Final promulgation of the values is required no later than six months after the proposal of the values.

"'(C) The Secretary of Energy will review these values on an annual basis and will propose revisions, if necessary.'. Review.

"(3) The Secretary of Energy, in consultation with the Secretary of Transportation and the Administrator of the Environmental Protection Agency, shall include a full discussion of this evaluation program in the annual report required by section 14 (15 U.S.C. 2513) in each year after promulgation of the regulations under paragraph (2). The Secretary of Energy, in consultation with the Secretary of Transportation and the Administrator of the Environmental Protection Agency, shall submit to the Congress on January 1, 1987, a final report on the results of the evaluation program and any recommendations regarding the continued inclusion of electric vehicles in the average fuel economy calculations under the Motor Vehicle Information and Cost Savings Act.". Results, final report to Congress.

15 USC 1901 note.

Approved January 7, 1980.

LEGISLATIVE HISTORY:

HOUSE REPORTS: No. 96-690 (Comm. on Banking, Finance, and Urban Affairs) and No. 96-730 (Comm. of Conference).
SENATE REPORT No. 96-463 accompanying S. 2094 (Comm. on Banking, Housing, and Urban Affairs.)
CONGRESSIONAL RECORD, Vol. 125 (1979):
Dec. 17, S. 2094 considered in Senate.
Dec. 18, S. 2094 considered in Senate; H.R. 5860 considered and passed House.
Dec. 19, H.R. 5860 considered and passed Senate, amended, in lieu of S. 2094.
Dec. 20, House and Senate agreed to conference report.
WEEKLY COMPILATION OF PRESIDENTIAL DOCUMENTS, Vol. 16, No. 1:
Jan. 7, Presidential statement.

APPENDIX I

CHRONOLOGY OF EVENTS RELATING TO THE
CHRYSLER LOAN GUARANTEE ACT OF 1979

| | |
|---|---|
| 1979 | |
| July 24 | Chrysler Corporation outlined its preliminary proposal for financial aid to Treasury Department. |
| July 31 | Treasury Department announced that it had been monitoring Chrysler's financial situation and would make a comprehensive study of the company's finances and operations. |
| August 1 | Chrysler Corporation announced the largest quarterly loss in its history and stated it had asked the Federal government to provide up to $1 billion in cash over the next 18 months. |
| August 9 | Secretary of the Treasury G. William Miller at a press conference rejected Chrysler's request for tax credits. He said the Administration would explore assistance in form of loan guarantees dependent on submission of acceptable operating and financing plans by Chrysler. |
| September 15 | Chrysler submitted its preliminary plan for financial assistance; Secretary Miller asked for revisions. |
| October 17 | Chrysler submitted its revised request for "up to $750 million" in Federal loan guarantees. |
| October 17 to November 1 | Treasury reviewed Chrysler's proposal. |
| November 1 | Treasury sent a draft bill, "Chrysler Corporation Loan Guarantee Act of 1979," to Congress. |
| November 7 | Secretary Miller testified on Chrysler Corporation before House Committee on Banking, Finance and Urban Affairs. |
| December 21 | Congress passed Chrysler Corporation Loan Guarantee Act of 1979. |
| 1980 | |
| January 7 | President Carter signed P.L. 96-185, Chrysler Corporation Loan Guarantee Act of 1979. |
| January to April 29 | Chrysler Loan Guarantee Board organized; Office of Chrysler Finance established in the Treasury; Chrysler submits and revises plans and other information to meet the requirements of the Act. |

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|---|---|
| April 29 | Meeting of the Chrysler Corporation Loan Guarantee Board to begin consideration of issuing commitments for $1.5 billion in loan guarantees. |

# Ninety-sixth Congress of the United States of America

## AT THE SECOND SESSION

*Begun and held at the City of Washington on Thursday, the third day of January, one thousand nine hundred and eighty*



## An Act

To authorize the Department of Energy to carry out a high-level liquid nuclear waste management demonstration project at the Western New York Service Center in West Valley, New York.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

SECTION 1. This Act may be cited as the "West Valley Demonstration Project Act".

SEC. 2. (a) The Secretary shall carry out, in accordance with this Act, a high level radioactive waste management demonstration project at the Western New York Service Center in West Valley, New York, for the purpose of demonstrating solidification techniques which can be used for preparing high level radioactive waste for disposal. Under the project the Secretary shall carry out the following activities:

(1) The Secretary shall solidify, in a form suitable for transportation and disposal, the high level radioactive waste at the Center by vitrification or by such other technology which the Secretary determines to be the most effective for solidification.

(2) The Secretary shall develop containers suitable for the permanent disposal of the high level radioactive waste solidified at the Center.

(3) The Secretary shall, as soon as feasible, transport, in accordance with applicable provisions of law, the waste solidified at the Center to an appropriate Federal repository for permanent disposal.

(4) The Secretary shall, in accordance with applicable licensing requirements, dispose of low level radioactive waste and transuranic waste produced by the solidification of the high level radioactive waste under the project.

(5) The Secretary shall decontaminate and decommission—

(A) the tanks and other facilities of the Center in which the high level radioactive waste solidified under the project was stored,

(B) the facilities used in the solidification of the waste, and

(C) any material and hardware used in connection with the project,

in accordance with such requirements as the Commission may prescribe.

(b) Before undertaking the project and during the fiscal year ending September 30, 1981, the Secretary shall carry out the following:

(1) The Secretary shall hold in the vicinity of the Center public hearings to inform the residents of the area in which the Center is located of the activities proposed to be undertaken under the project and to receive their comments on the project.

(2) The Secretary shall consider the various technologies available for the solidification and handling of high level radioactive waste taking into account the unique characteristics of such waste at the Center.

(3) The Secretary shall—

(A) undertake detailed engineering and cost estimates for the project,

(B) prepare a plan for the safe removal of the high level radioactive waste at the Center for the purposes of solidification and include in the plan provisions respecting the safe breaching of the tanks in which the waste is stored, operating equipment to accomplish the removal, and sluicing techniques,

(C) conduct appropriate safety analyses of the project, and

(D) prepare required environmental impact analyses of the project.

(4) The Secretary shall enter into a cooperative agreement with the State in accordance with the Federal Grant and Cooperative Agreement Act of 1977 under which the State will carry out the following:

(A) The State will make available to the Secretary the facilities of the Center and the high level radioactive waste at the Center which are necessary for the completion of the project. The facilities and the waste shall be made available without the transfer of title and for such period as may be required for completion of the project.

(B) The Secretary shall provide technical assistance in securing required license amendments.

(C) The State shall pay 10 per centum of the costs of the project, as determined by the Secretary. In determining the costs of the project, the Secretary shall consider the value of the use of the Center for the project. The State may not use Federal funds to pay its share of the cost of the project, but may use the perpetual care fund to pay such share.

(D) Submission jointly by the Department of Energy and the State of New York of an application for a licensing amendment as soon as possible with the Nuclear Regulatory Commission providing for the demonstration.

(c) Within one year from the date of the enactment of this Act, the Secretary shall enter into an agreement with the Commission to establish arrangements for review and consultation by the Commission with respect to the project: *Provided*, That review and consultation by the Commission pursuant to this subsection shall be conducted informally by the Commission and shall not include nor require formal procedures or actions by the Commission pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974, as amended, or any other law. The agreement shall provide for the following:

(1) The Secretary shall submit to the Commission, for its review and comment, a plan for the solidification of the high level radioactive waste at the Center, the removal of the waste for purposes of its solidification, the preparation of the waste for disposal, and the decontamination of the facilities to be used in solidifying the waste. In preparing its comments on the plan, the Commission shall specify with precision its objections to any provision of the plan. Upon submission of a plan to the Commission, the Secretary shall publish a notice in the Federal Register of the submission of the plan and of its availability for public inspection, and, upon receipt of the comments of the Commission respecting a plan, the Secretary shall publish a notice in the Federal Register of the receipt of the comments and of the availability of the comments for public inspection. If the Secre-

tary does not revise the plan to meet objections specified in the comments of the Commission, the Secretary shall publish in the Federal Register a detailed statement for not so revising the plan.

(2) The Secretary shall consult with the Commission with respect to the form in which the high level radioactive waste at the Center shall be solidified and the containers to be used in the permanent disposal of such waste.

(3) The Secretary shall submit to the Commission safety analysis reports and such other information as the Commission may require to identify any danger to the public health and safety which may be presented by the project.

(4) The Secretary shall afford the Commission access to the Center to enable the Commission to monitor the activities under the project for the purpose of assuring the public health and safety.

(d) In carrying out the project, the Secretary shall consult with the Administrator of the Environmental Protection Agency, the Secretary of Transportation, the Director of the Geological Survey, and the commercial operator of the Center.

SEC. 3. (a) There are authorized to be appropriated to the Secretary for the project not more than $5,000,000 for the fiscal year ending September 30, 1981.

(b) The total amount obligated for the project by the Secretary shall be 90 per centum of the costs of the project.

(c) The authority of the Secretary to enter into contracts under this Act shall be effective for any fiscal year only to such extent or in such amounts as are provided in advance by appropriation Acts.

SEC. 4. Not later than February 1, 1981, and on February 1 of each calendar year thereafter during the term of the project, the Secretary shall transmit to the Speaker of the House of Representatives and the President pro tempore of the Senate an up-to-date report containing a detailed description of the activities of the Secretary in carrying out the project, including agreements entered into and the costs incurred during the period reported on and the activities to be undertaken in the next fiscal year and the estimated costs thereof.

SEC 5. (a) Other than the costs and responsibilities established by this Act for the project, nothing in this Act shall be construed as affecting any rights, obligations, or liabilities of the commercial operator of the Center, the State, or any person, as is appropriate, arising under the Atomic Energy Act of 1954 or under any other law, contract, or agreement for the operation, maintenance, or decontamination of any facility or property at the Center or for any wastes at the Center. Nothing in this Act shall be construed as affecting any applicable licensing requirement of the Atomic Energy Act of 1954 or the Energy Reorganization Act of 1974. This Act shall not apply or be extended to any facility or property at the Center which is not used in conducting the project. This Act may not be construed to expand or diminish the rights of the Federal Government.

(b) This Act does not authorize the Federal Government to acquire title to any high level radioactive waste at the Center or to the Center or any portion thereof.

SEC. 6. For purposes of this Act:

(1) The term "Secretary" means the Secretary of Energy.

(2) The term "Commission" means the Nuclear Regulatory Commission.

(3) The term "State" means the State of New York.

(4) The term "high level radioactive waste" means the high level radioactive waste which was produced by the reprocessing at the Center of spent nuclear fuel. Such term includes both liquid wastes which are produced directly in reprocessing, dry solid material derived from such liquid waste, and such other material as the Commission designates as high level radioactive waste for purposes of protecting the public health and safety.

(5) The term "transuranic waste" means material contaminated with elements which have an atomic number greater than 92, including neptunium, plutonium, americium, and curium, and which are in concentrations greater than 10 nanocuries per gram, or in such other concentrations as the Commission may prescribe to protect the public health and safety.

(6) The term "low level radioactive waste" means radioactive waste not classified as high level radioactive waste, transuranic waste, or byproduct material as defined in section 11 e. (2) of the Atomic Energy Act of 1954.

(7) The term "project" means the project prescribed by section 2(a).

(8) The term "Center" means the Western New York Service Center in West Valley, New York.

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*Speaker of the House of Representatives.*

*Vice President of the United States and*
*President of the Senate.*

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