

ATTACHMENT I

TOLEDO EDISON COMPANY

PERFORMANCE ENHANCEMENT  
PROGRAM

Report on Activities through July 1984  
and Plans for Program Continuation

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## I. INTRODUCTION

### A. Purpose and Scope

The purpose of this report is to provide a concise description of the Performance Enhancement Program (PEP) that is being conducted by Toledo Edison in support of the operation of Davis-Besse 1. As discussed in Section I.D., the formal PEP has been divided into three phases, with Phase I extending from March through mid-April, Phase II ending in mid-July 1984 and Phase III continuing from mid-July through 1985. Since this report is based on mid-July 1984 progress, it provides a retrospective view of Phases I and II and a perspective view of the activities that will be performed during Phase III.

The scope of PEP essentially spans all of the activities conducted in Toledo Edison's Nuclear Mission. In addition, some of the support activities conducted by the Corporate Planning and Administration Mission have been examined, including security, records management, human resources, and materials managements activities. A listing of the areas of activities examined during PEP is presented on Page 15.

### B. Strategic Objectives

A number of strategic objectives for the design and implementation of PEP were identified by Toledo Edison. These objectives are identified below.

- Proactive management involvement - It was deemed necessary and appropriate that Toledo Edison's management play a highly visible and substantive role in designing and implementing the PEP. In this regard, it was considered appropriate that the Senior Management of the Nuclear Mission operate as a coordinated Steering Group chaired by the Vice-President Nuclear and that the Steering Group report to the President of Toledo Edison. Senior Management planned to actively participate in PEP, as discussed subsequently, and their role was carefully constructed to maximize their affect on and contribution to the overall PEP activities.
- Broad ownership of PEP within Toledo Edison - It was determined that PEP should be implemented in a manner whereby a substantial number of people from a broad spectrum of organizational units horizontally and from a variety of management and non-management positions vertically were involved in PEP. This approach would help create a strong feeling of ownership of the PEP process and the results of PEP, and heighten the chances of significant long-term improvements resulting from PEP.

- Facilitation and design expertise - Toledo Edison determined that a program as substantial and complex as PEP required skilled attention during its design and implementation phases. It was decided to utilize outside consultants who had both process design and facilitation expertise to support Toledo Edison throughout the duration of PEP.
- Treatment of root causes vs. symptoms - Since in the past Toledo Edison had committed significant resources to correcting problems and that many of them continue to exist, it was apparent that the evaluation process used in the PEP had to address root causes as opposed to symptoms. Therefore, the PEP process was designed to ensure a high probability that root causes of problems would be identified and treated rather than just the "symptoms".
- Logical Design/Phases Implementation - The design of the PEP process had to provide a logical flow through the various problem-solving steps as well as a disciplined environment for those activities. It would also have to consist of several distinct and logical phases so that the results of the Program could be assessed at several intermediate points with only minimal impact on the momentum of the process.
- Interim actions to mitigate immediate problems - Because the PEP process would require several months to reach the point where any plans developed to resolve root causes could begin to be implemented, it was deemed necessary to provide a mechanism where necessary interim actions could be identified and implemented quickly to mitigate immediate problems. This led to the implementation of the Interim Action Program (see Sect. III).

Subsequent sections of this report detail how these strategic objectives were met in the design and implementation of PEP.

#### C. Background

During 1983 Toledo Edison personnel had a number of meetings with NRC Region III staff and management personnel to discuss performance at Davis-Besse. In addition, during this period a number of significant NRC audits (e.g. Appendix R) occurred and the most recent SALP was issued. Finally, during October an NRC Commissioner visited Davis-Besse and toured the facility.

While, in general, performance at Davis-Besse continued at an acceptable level, both Toledo Edison management and the NRC were identifying diminished performance in certain activities. As a result, during November 1983 an enforcement meeting with NRC Region III personnel was held at Davis-Besse. While the NRC did not direct Toledo Edison to take any specific corrective actions during this meeting, it seemed apparent that a coordinated and well-designed improvement program would be required to

address the NRC concerns as well as Toledo Edison's desire to operate the most effective nuclear program possible.

Following the November 1983 meeting, the Nuclear Mission management staff held a series of meetings to discuss Toledo Edison's performance and to identify areas where improvement appeared necessary. In addition, a survey was sent to a cross-section of the Nuclear Mission personnel soliciting input on potential problems, root-causes, etc. The results of these discussions, and the survey, formed the basis for identifying specific areas that required improvement. At this point (December 1983) sixteen "improvement categories" were identified. These categories encompass the specific areas the NRC was concerned about, as well as all of the additional improvement areas Toledo Edison identified. In addition, Toledo Edison decided that the overall improvement program should be designed as a Performance Enhancement Program. Based on this decision, the PEP was designed and implemented during early 1984, with formal activities beginning in March.

D. PEP Process Summary

D.1. PEP Management Organization

The management responsibility for the PEP has resided with the PEP Steering Group which reports to W. A. Johnson, President of Toledo Edison. The Steering Group is chaired by R. P. Crouse, Vice-President Nuclear, and consists of the six directors who report to Mr. Crouse (J. F. Helle, Engineering; T. J. Myers, Nuclear Services; T. D. Murray, Station Superintendent; C. E. McLain, Nuclear Projects; C. T. Daft, Quality Assurance; and L. A. Grime, Nuclear Safety) and R. F. Peters, Manager of Nuclear Licensing. The Steering Group has been responsible for making major decisions regarding the conceptual design and scheduling for PEP activities, including the general areas (e.g., personnel policies, quality assurance, etc.) of Nuclear Mission performance which PEP has examined, the membership of the teams that have been involved in PEP, and the review and approval of the output of these teams during the several phases of PEP.

Members of the Steering Group as individuals also played a second major role in PEP. They have served as sponsors of the teams. In this role, they have provided the primary link between the teams and the Steering Group. They have attended team meetings whenever appropriate and have presented issues and questions raised by the teams to the Steering Group.



Day-to-day administration and coordination efforts for PEP were the responsibility of the PEP Administrator, who was TED's Licensing Manager, a designated PEP Project Manager (consultant), and the Action Plan Coordinator (a TED individual from outside the Nuclear Mission).

Figure I-1 presents the PEP organization for the first two phases.

#### D.2. Involvement of Toledo Edison Personnel

A critical element in the design of the PEP process has been the very substantial involvement of large numbers of lower-level management personnel involved with the Davis-Besse Project. During Phase I, approximately 100 people served on the teams that comprised PEP. Following consolidation of the teams for Phase II, nearly 80 people remained active on the teams. Most of these people were from the Nuclear Mission, although about 15 percent were from other missions within Toledo Edison.

This extensive involvement of Toledo Edison people below middle-level management has been an essential ingredient in the formula of success for PEP for several reasons:

- This involvement has provided for a sense of ownership of the Action Plans that have been produced.
- It has improved communications between divisions within the Nuclear Mission and between missions within TED.
- It has provided the opportunity for a wide variety of perspectives to be brought to bear on the problems that exist at TED.

#### D.3. Role of Outside Consultants

In committing to PEP, TED realized that a significant amount of outside support would be required in the areas of process design and facilitation to assure that the teams functioned effectively. Thus, outside consultants were retained to provide support in designing and managing the Program as well as facilitating activities of the teams. Specifically, they worked with the Steering Group to aid in the design of the overall PEP process. They also provided administrative support to the Steering Group.

A facilitator was assigned to work with each team during its deliberation throughout the PEP. At the end of both Phases I and II, expert support was used to independently evaluate the output of the teams and to recommend appropriate courses of action for the continuation of PEP to the Steering Group. This support will continue during Phase III

in the form of facilitation, administrative assistance, and independent evaluation. In addition, as required, consultant support will also be used to provide technical expertise in support of the implementation of the Action Plans.

#### D.4. Use of Kepner-Tregoe Methodology

The PEP Steering Group directed that the PEP process employ the Kepner-Tregoe (K-T) problem solving and action planning methodology as rigorously as possible throughout the Program. The decision to use the K-T methodology was reached for several reasons:

- The K-T process forces problem solving to proceed in an organized and logical manner.
- The K-T process provides discipline for a group problem solving environment.
- The K-T process results in substantive documentation of the reasons why decisions were reached.
- The K-T process aids in identifying the root causes of problems rather than dwelling at a more superficial symptomatic level.

Thus, a Situation Appraisal (SA) was generally conducted by each team to identify problems in the areas of performance under its consideration. Problems so identified were prioritized in terms of their seriousness, urgency for action, and potential for growth. Starting with the highest priority problem and working down, a K-T Problem Analysis (PA) was conducted for each problem for which cause(s) remained unknown. Each PA identified one or more probable causes (PCs) and/or most probable causes (MPCs). This part of PEP, referred to as Phase I, is described more fully in Section III.

Related PCs and MPCs were grouped together and the K-T Decision Analysis (DA) process was used to identify the preferred choice of the several alternative actions considered to potentially eliminate these causes. Action plans subsequently developed were tested using the K-T Potential Problem Analysis (PPA) methodology in order to identify challenges to the successful implementation of the plans and develop both preventative and contingent actions. These parts of the K-T process were employed during Phase II, as described more fully in Section IV.

Most of the participants in PEP had received K-T training from Toledo Edison's in-house K-T trainers. Brief refresher sessions were conducted at the start of PEP for all participants. Throughout Phase I of PEP, specially-trained K-T process consultants drawn from across the Toledo Edison

organization met with the teams to aid them in their use of the K-T methodology. As required, some of these consultants participated in the Phase II activities.

#### D.5. PEP Phases

The formal PEP activities have been divided into three phases stretching over the period of March 6, 1984 through approximately June 30, 1985. These activities were supplemented by an Interim Action Program which began early in January, 1984. A flowchart depicting these phases and associated dates is shown in Fig. I-2. The Interim Action Program was conducted in order to identify and implement interim actions designed to affect at least a short-term improvement in certain key areas of performance. This program has continued to run in parallel to the other PEP activities since early March. The Interim Action Program is described more completely in Section II.

Phase I of PEP was conducted from March 6 through April 19, 1984. Sixteen Action Planning Teams (APTs)\* met from one-half day to three days per week over this period to conduct SAs, develop deviation statements, and complete PAs in their respective areas of concern. A brief interim period followed, during which the PCs and MPCs from Phase I were evaluated and assigned to reconstituted Action Planning Groups (APGs). During Phase II, which has extended from May 4 to July 13, the six APGs have developed alternative approaches to addressing the PCs and MPCs assigned to them. The K-T DA process has been used to select the preferable choice from among these alternatives; action plans have been developed to implement the various alternatives selected. Detailed discussions of the Phases I and II activities are contained in Section III and IV, respectively.

Phase III is scheduled to begin during the latter part of July and last through 1985. During this phase, Action Plans developed during Phase II will be carefully reviewed and prioritized by the Steering Group. Any Action Plan needing revision or more detail will be directed back to the APG that developed it for appropriate action. The Action Plans will then be integrated by the Steering Group through a process that resolves overlaps and inconsistencies and prioritizes them on the basis of benefits to be obtained, resources required, immediacy of impact, etc. They will then be scheduled for implementation by the Steering Group and implemented accordingly.

#### E. Report Format

The balance of this report is presented in four sections. Section II describes the Interim Action Program that Toledo Edison initiated concurrent with the start of PEP to identify and implement a set of corrective measures that could begin to

\*As noted in Section III, two of the APTs paused after completing their SAs for the balance of Phase I.



improve performance well before plans developed during PEP can be implemented. Sections III and IV describe the activities that were conducted during PEP Phases I and II, respectively. These two sequential phases carried PEP from its inception in early March 1984 through mid-July. Section V concludes the report with a description of the activities that will comprise Phase III of PEP.

## II. INTERIM ACTION PROGRAM

### A. Description of Prioritization Team Efforts

It was recognized in late December 1983 that a lengthy period of time would be required to design, prepare for, and conduct PEP through to the point where plans developed in PEP could begin to be effective. Thus, it was decided to implement an Interim Action Program to identify areas of performance where problems could be quickly mitigated by implementing some interim corrective measures. While it was expected that many interim actions would only address symptomatic problems, it was felt to be a necessary part of PEP. This program was designed to ensure that progress would continue to be made toward improving performance while the more indepth PEP problem evaluation and action plan development activities were being conducted.

The Interim Action Program was initiated by assembling a group of TED personnel and consultants during the week of January 9, 1984 to accomplish the following objectives:

1. To collect information on and develop a data base of known noncompliances and other problem areas;
2. To assign safety and regulatory significance "Priorities" to these items;
3. To validate the reasonableness of the actions currently being taken by TED to resolve the noncompliances;
4. As determined appropriate, to identify modified or new interim actions which should be taken.

The people assembled as part of this Prioritization Team (P-T) were selected to represent the pertinent organizational entities within the TED Nuclear Mission, including Nuclear Services, Nuclear Engineering, the Davis-Besse Station, Quality Assurance, and Nuclear Safety.

In addition, three people from outside the TED Nuclear Mission were brought in to provide specific supplementary resources. These were an experienced licensing specialist from Cleveland Electric Illuminating Co. and two outside consultants.

The P-T met in continuous group sessions on January 9, 10, 11 and 12. P-T report preparation and review took place over the period January 13 through January 20. A special meeting of the P-T to review the Integrated Living Schedule Program activities was held on January 19.

The prioritization team worked with known noncompliances and other pertinent problem areas derived from a review of the following sources:

- Open Audit Findings Reports (AFR's)
- Open Corrective Action Requests (CAR's)
- Open Inspection Reports dating back to August, 1982
- Open INPO Findings
- Briefing Papers prepared by the PEP Steering Group members on specific problem areas.

The last source listed above was a series of briefing papers prepared by the responsible TED managers to describe the general topical areas which were to be addressed by the PEP. In most cases, these papers summarized both the issue and the interim actions being taken to address the issue.

The evaluation process utilized by the P-T is shown schematically in Figure II-1. As shown, items from the five sources listed above were subjected to an initial screening in which the person or people most familiar with each source of potential problem items determined whether or not each item should be considered by the P-T. Items which passed this initial screening were then reviewed by the P-T to ensure that both the items and their status were understood. Following this review each item (issue) was evaluated by the P-T to assess its regulatory and safety significance.

For all issues assigned a "high" safety or regulatory importance, the P-T made an assessment to determine whether the problem was understood and whether reasonable interim actions had already been defined, or could be readily defined. To be considered reasonable, an interim action had to satisfy the criteria below:

- It is needed to address either the perceived root-cause of the problem or to effectively deal with the symptoms.
- It was ongoing or could be implemented and begin to have an effect within about six months or would provide useful input to the PEP activity.

If either an existing or postulated effective interim action could be defined for an issue of either "high" safety or regulatory significance, then the action was recorded under the relevant issue. For issues considered to have both "low" safety and regulatory significance, only currently defined effective interim actions were compiled, unless the P-T felt that an ongoing action was inappropriate\*. By this means a listing of candidate issues for effective interim action was assembled.

Figure II-1 depicts three sources of inputs from the P-T activities to the PEP. These were:

- Issues that were eliminated from the P-T evaluation process as a result of the pre-evaluation screening;

\*In one case the P-T did recommend a new interim action for low/low issue because it felt the action would benefit the overall PEP activities and could be expeditiously implemented.

- Issues with both low safety and regulatory significance for which no interim actions were currently defined;
- Issues for which assessment by the P-T did not identify appropriate interim actions to resolve the problem. In some of these cases, the P-T may have identified additional data gathering interim actions that would subsequently support the PEP activities.

The process described above for evaluation of issues and compilation of interim actions was considered appropriate and reasonable for the following reasons:

- The process was initiated by compiling a data base of outstanding problem issues.
- Screening of issues prior to evaluation by the P-T was performed by people who were familiar with the issue.
- Issues not evaluated by the P-T were captured for treatment in the PEP.
- Safety and regulatory significance were determined based on a subjective evaluation of six knowledgeable and diverse people following a group discussion of the issue.
- Issues with either high safety or regulatory significance were evaluated further to assure the reasonableness of existing interim actions and to define possible additional actions.
- Issues without defined interim actions were evaluated to determine if any were appropriate. If none were identified the issue would be considered in detail as part of the PEP.
- The P-T had full access to all documentation and TED personnel associated with the issues being evaluated.

The Interim Action Program produced two primary sets of data: 1) a prioritization of outstanding issues, and 2) a compilation of interim actions which were recommended for implementation during the first two phases of PEP. Interim actions were primarily identified from the following sources:

- Actions which had been defined and were ongoing prior to the P-T meeting;
- Actions which were identified by the authors of the briefing papers prepared in support of the PEP;



- Actions which were identified as a result of discussions with Nuclear Mission personnel interviewed during P-T meetings;
- Actions which were identified by the P-T either resulting from insights produced in the group meeting or designed to develop data on the associated issue for input to the PEP.

A total of 135 interim actions were recommended by the P-T to the Steering Group. Approximately 40 of these were developed by the P-T. The Steering Group reviewed the proposed interim actions and ultimately adopted all of them as formal interim actions.

B. Interim Actions Program Management

The Vice-President, Nuclear, and the Vice-President Corporate Planning and Administration formally assigned department heads to be responsible for each Interim Action.

Each Interim Action had one individual identified for lead responsibility. This lead individual is at a department head level in Toledo Edison's Corporate organization. Although the department head may delegate responsibility for items to the appropriate level within the organization, the Steering Group looks to the identified department head for full responsibility for completing the assigned Interim Actions. It was recognized that completion of some items would require support from divisions outside the control of the responsible department head. Where appropriate, the department head or other individuals needed for support was also identified for each Interim Action.

The Nuclear Safety Director who reports directly to the Vice-President, Nuclear was appointed to the position of Program Manager for PEP Interim Actions.

Statusing the Interim Actions takes place semi-monthly in a conference between the responsible department head and/or his designee and the Program Manager. The program management details required that the department head be personally available or assured that his knowledgeable designee is available for such conferences. Written information has been used in lieu of a conference for some department heads with the Program Manager's concurrence. The current status and plans for all Interim Actions that are currently in progress, had been completed since the last report, scheduled for activity within the next four weeks and future items with potential problems are reviewed at each semi-monthly conference.

A report on PEP Interim Activity status is made semi-monthly to the Vice-President, Nuclear and Steering Group members. The report identifies Interim Actions that have had completion date revisions or have major difficulties identified and gives reasons for the difficulty. The reports also lists completed Interim Actions.

All changes to Interim Action Plans must be approved by the Program Manager and/or by the Steering Group. Changes to Interim Actions are also identified in the semi-monthly report.

The department head identified as having lead responsibility for each Interim Action formally documents closeout of those actions by a memo addressed to the Program Manager. Appropriate documentation to demonstrate the completion of the activity is attached for reference where appropriate. The Program Manager has the responsibility of reviewing the closeout memos to verify that the Interim Action has indeed been satisfactorily completed before reporting such an item as closed. The Program Manager also maintains documentation on all Interim Actions. The status of the Interim Actions as of June 22, 1984 is shown on Table II-1.

The PEP Interim Actions that are ongoing beyond 1984 will be merged with the PEP Actions Plans developed in Phase III of the PEP Program. Selected Interim Actions may be merged during 1984 with detailed PEP Action Plans when appropriate.

TABLE II-1: PEP INTERIM ACTIONS STATUS

	<u>2/2/84</u>	<u>CHANGE</u>	<u>6/22/84</u>
NUMBER OF IDENTIFIED INTERIM ACTIONS	135	+22	157
CLOSED INTERIM ACTIONS	35	+55	90

### III. PHASE I ACTIVITIES

#### A. Management Considerations

Management attention to PEP during Phase I focused on several areas: management oversight and planning, selection of participants, and daily administration and coordination. The organizational structure that was established to implement Phase I of PEP is shown in Fig. I-1. The Steering Group has had management oversight and planning responsibility during these phases. Steering Group members serving as Sponsors have provided a direct link between the Steering Group and the APTs.

The Steering Group had the responsibility of selecting and assigning APT members. An elaborate process was developed for this selection effort. This was done because of the several competing forces that were present.

- For each APT to be as effective as possible, it was desirable to place an experienced person from each of the organizational units that had an involvement in the areas of concern of the APT.
- With sixteen teams to be staffed for Phase I and with each team's areas of concern being of interest to several organizational units, it was a substantial challenge to identify enough experienced people to fill all of the slots on the teams. As a result, a number of people were named to serve on more than one team.
- A third competing force arose from the need to ensure that the demands of PEP did not draw so heavily on experienced people in key organizational units that the ongoing business of the Nuclear Mission would be jeopardized.

The selection process used is shown schematically in Figure III-1. Using this process, the Steering Group selected approximately 100 Toledo Edison people, primarily from the Nuclear Mission, to serve on the APTs.

Seven facilitators provided support to the APTs to aid them in functioning effectively in their meetings. Ten K-T process consultants, three from the Nuclear Mission and the balance from elsewhere in the Toledo Edison organization, were available to support the use of the K-T process in the meetings.

#### B. Areas of Performance Addressed

The Steering Group selected specific areas of Nuclear Mission performance for which APTs were to identify issues and problems that required attention, to perform a PA on each issue, to



determine the most probable cause(s), and present the results of their efforts to the Steering Group for approval. The 16 areas chosen for investigation during Phase I are listed below:

<u>APT. No.</u>	<u>APT Area</u>
1	Personnel Policies and Staffing
2	Organization
3	Management Oversight
4	Safety Management
5	Station Operations
6	Maintenance
7	Training
8	Quality Assurance
9	Nuclear Licensing
10	Engineering
11	Configuration Management
12	Project Management/Integrated Living Schedule Program
13	Fire Protection
14	Productivity and Quality
15	Security
16	Records Management

C. Description of Activities

Phase I activities began with a 3-day training session for facilitator and K-T process consultants during the week of February 27 - March 2. A 3-day orientation session for all PEP participants was held on March 6-8. The agenda for the orientation period included a statement of the goals of PEP; clarification of the roles of participants; and review of the procedural and logistical aspects of Phase I. Refresher training on use of the K-T process was also provided. The APTs held their initial meetings, selected leaders, developed their meeting rules and schedules, identified team objectives, and began work by March 8.

The APTs met from one-half day to three days per week for the six-week period from March 12 through April 20. Each APT was supported by a facilitator and a K-T process consultant and interfaced with its Steering Group sponsor as required. The APT generally followed a three-step process to perform their Phase I activities. The first step was to conduct a focused SA covering the team's areas of concern. The purpose of this SA was to systematically identify the major issues and problems related to these areas which warranted team attention. Input to this SA process primarily came from the following four different sources: 1) The PEP Interim Action Program; 2) a survey which polled selected members of the Nuclear Mission that was conducted in November 1983 to obtain information on a preliminary set of identified issues; 3) an extensive Safety Management Assessment conducted by Delian Corporation for Toledo Edison in late 1983; and 4) the experience base of the members of the APT.

In addition, forms were made available to all employees of the Nuclear Mission on which problems and issues could be identified and submitted to the appropriate APTs. Finally, APTs that identified important issues and problems during the SA process that lay outside their areas of focus directed those issues and problems to the APTs considering them.

Working from the prioritized list of issues and utilizing the K-T PA methodology, the APTs formulated deviation statements which concisely defined the issues. The third step in the Phase I process was the completion of the PA process on each deviation statement. This resulted in the identification of an MPC or MPCs for each issue being treated.

D. Results from Phase I

A total of 121 PAs were completed in Phase I. These led to the identification of 336 MPCs and PCs for consideration during Phase II. Approximately 1,100 mandays were spent in APT meetings during Phase I. The extent of progress made by each APT during Phase I varied depending on factors such as the complexity of issues and availability of resources. However, in all cases, the teams completed treatment of their high priority issues. At the direction of the Steering Group, the Management Oversight and Organization APTs completed only their SAs during Phase I. This was done because many of the other APTs were identifying issues that were closely related to those being considered by these two APTs. As a result, the Steering Group decided that it would be best to collect all such issues and assign them to a combined Management Oversight/Organization APT during Phase II.

Any issues or PAs that were not fully evaluated and completed during Phase I were recorded and held for assignment and treatment during Phase III.

#### IV. PHASE II ACTIVITIES

##### A. Transition from Phase I

The transition from Phase I to Phase II took place over the period of April 23 through May 11. It consisted of three major activities:

- Evaluation of PCs and MPCs to determine how best to group them for consideration in Phase II.
- Reformulation of the APTs to provide the most suitable group structure and representation for conducting DAs and developing action plans, given the grouping of the PCs and MPCs.
- Orientation of the reformulated teams on the DA and Action Plan preparation process to be used by them during Phase II.

The evaluation of the PC's and MPC's led to the conclusion that they could be divided into six general groups: management leadership concerns; human resource development and utilization concerns; safety and licensing management concerns; concerns with the performance of organizational units in the Davis-Besse station; concerns with the performance of the organizations that provide technical support to the station; and inadequacies in the existing records management system and the lack of a formal configuration management system.

The PCs and MPCs comprising each group tended to come primarily from PAs conducted by the APTs that investigated the areas of performance that would have to be improved to eliminate these underlying causes. These grouped PCs and MPCs were often interrelated with one another in complex ways. This observation led to the concept of combining the people in these APTs into an Action Planning Group or APG for the purpose of collectively conducting DAs on how best to alleviate the causes and subsequently developing compatible action plans. The APTs that were merged into each APG are shown in Table IV-1.

TABLE IV-1 Grouping of APTs into APGs

<u>Action Planning Group</u>	<u>Action Planning Teams</u>
Management Leadership	Management Oversight/Organization
Human Resources Development	Personnel Policy and Staffing Productivity and Quality Training
Information/Decision Support Systems	Configuration Management Records Management

Action Planning Group

Action Planning Teams

Safety/Licensing Management

Safety Management  
Licensing  
Fire Protection  
Quality Assurance

Station Performance

Station Operations  
Maintenance  
Security

Technical Support System Performance

Engineering  
Project Management/ILSP

The Steering Group reviewed and approved the grouping of PCs and MPCs into six groups and the creation of APGs through the merger of APTs. It was recognized that full participation by all of the APT members would result in APGs that would be larger than required in most cases. The Steering Group took this opportunity to reduce the impact of PEP on the day-to-day operation of the Nuclear Mission by making some personnel changes on the APGs. Personnel changes were made utilizing the following criteria:

- No individual was permanently assigned to more than one APG for Phase II.
- An appropriate number of people with the key content skills required for Phase II activities were placed on each APG. This necessitated adding certain people who had not been involved in PEP during Phase I.
- Where possible, people whose skills were critically needed back in their job area were released from active PEP participation. This was done only if the APG could function effectively without that person.
- When appropriate, specific people were identified as technical resources available to the APGs on an ad hoc basis as determined by the APGs.

These changes resulted in approximately a 25% reduction in the number of people actively participating in Phase II of PEP.

All of the participants in PEP met on May 9 and were briefed on the transition from Phase I to Phase II and the process to be used by the APGs during Phase II. The APGs then proceeded to meet and organize for their Phase II activities.

B. Description of Phase II Activities

Each APG began its efforts by carefully reviewing all of the PCs and MPCs assigned to it and then collecting the identical and similar causes into sets. This was an important step because



identical or similar causes were frequently identified by separate APTs as being the cause(s) of problems in the areas of performance being examined by them. Also, several APTs identified a single cause or a small number of causes as being the source of several seemingly different concerns.

Having created these sets of like or related causes, each APG proceeded to identify an appropriate group of people from within its ranks to perform the DAs required to select the best alternative for solving each set of causes and to develop the action plan necessary to implement the selected approach. This appropriate group could be the entire APG or a subgroup, which in turn could be the members of the APG who came from a single APT or any other combination. Action plans developed by a subgroup were to be reviewed by the entire APG before being submitted to the Steering Group.

The period from May 14 through July 13 was devoted to the performance of DAs and the development of action plans by the APGs. As each DA was completed, it was submitted to the Steering Group for their review. The Steering Group then authorized the APG to develop an action plan. This Steering Group review and approval step was implemented to allow the Steering Group to provide input to the APGs prior to the start of action plan development activity to reduce the probability of false starts on action plans by the APGs. In most cases, the Steering Group has approved the results of the DA without modification; in a few cases, however, they asked APGs to consider some modification to the approach selected by the APG to assure consistency between DA results from different APGs and, where appropriate, consistency with Toledo Edison policy. The Steering Group sponsors played an important role in this process by communicating the intent of the APGs to the Steering Group. This reduced the number of iterations required to obtain final Steering Group approval.

#### C. Results from Phase II

Phase II was scheduled to be completed on July 13. As of July 20, 53 DAs have been completed and submitted to the Steering Group. Most of the DAs have been reviewed and sent back to the APGs for preparation of action plans. It is currently expected that approximately 50 action plans will be completed and submitted to the Steering Group for review and approval as a result of the Phase II activities. As noted in the following section, any DAs or action plans remaining to be completed at the end of Phase II will be treated during Phase III concurrently with the completed action plan implementation activities.

## V. PHASE III ACTIVITIES

### A. Management Considerations

Phase III of PEP is scheduled to last until approximately mid-1985. The Steering Group will continue to function in its planning and oversight roles. The PEP administrator and PEP Coordinator, with the support of outside consultants, will have day-to-day administrative responsibility for PEP activities. They will form the Administrative Group. One of the Administrative Group's responsibilities will be to support the Steering Group. These responsibilities will include keeping the Steering Group advised of overall and individual progress in action plan implementation. Additional responsibilities will include transmitting Steering Group decisions regarding PEP activities in support of the Steering Group sponsors. They will also inform other organizational units of needed actions based upon Steering Group decisions.

The complexity of Phase III activities, as discussed in succeeding sections, will impose additional burdens on the Administrative Group. Phase I and Phase II PEP efforts involved discrete, distinct steps. In the Phase III the efforts will include all previous PEP activities in a non-discrete, continuous effort. This situation will demand the development of an effective conceptual management system to support the complex efforts of the program. The Administrative Group will devote a substantial amount of effort to the development and implementation of this management system. Two computerized data bases will be created as a part of this management system. The first data base will track the handling of issues through the SA, PA, DA and Action Plan development steps. All issues identified during Phase I will be loaded into this data base; any new issues raised during Phase III will be added. The second data base will be an Action Plan scheduling data base; it will be used to track Action Plan implementation progress.

It is further envisioned that PEP activities will require some centralized coordinated efforts to keep management and Nuclear Mission personnel informed as to the continuing efforts. As part of the management system mentioned above, the Administrative Group will incorporate a monitoring and reporting system which produces periodic reports of the progress, problems, and necessary actions associated with the ongoing PEP activities.

As mentioned above, a number of activities will be underway simultaneously during Phase III of PEP. These activities are as follows:

- Implementation of Phase II action plans.
- Completion of DA/action plan development on remaining high priority issues.

- Resolution of issues remaining untreated at end of Phase I.
- Conduct of K-T analyses on new issues that may arise.
- Integration of Interim Actions into final action plans.

These activities are described in the balance of this section.

B. Implementation of Action Plans

The line management within the Nuclear Mission will be responsible for the final planning and implementation of action plans resulting from Phase II activities. Specific implementing steps will have to be developed for each task or group of related tasks in the Action Plans. Management responsibility will have to be assigned for each implementation step, resource requirements identified and allocated, and the integrated schedule developed for all of the implementation steps. These activities will be completed by early September 1984 for those Action Plans which can be implemented in 1984; Action Plans scheduled for implementation in 1985 which require new resources will be submitted through the TED Corporate Budget process in September. Implementation in 1985 is contingent upon Board of Director approval of the Budget. The Administrative Group will assist line management by providing centralized tracking and reporting services. The Administrative Group will develop and maintain a centralized program that identifies the integrated action planning effort and monitors on a continuous basis the satisfactory completion of identified milestones.

C. Additional Decision Analysis/Action Planning Activities

While many of the high priority issues will have been treated during the Phase II, not all of these deviation statements and associated causes will be completed. The purpose of this Phase III activity will be to complete the Decision Analysis/action planning effort on the unfinished items from Phase II. The current Action Planning Groups will once again be revised to accommodate personnel availability constraints and provide appropriate content skills for the type of issues to be addressed. The revised groups will complete the K-T DA and action planning activities for the uncompleted Phase II items. The Administrative Group will assist in these efforts by coordinating group membership and maintaining a master status list of decisions and action plans. In addition, the Administrative Group will provide for facilitation of group meetings to ensure the best utilization of key Toledo Edison employee's efforts.

D. Resolution of Remaining Phase I Issues

Phase II of PEP considered the high priority issues from the list generated in Phase I. It will be the purpose of this activity to resolve the untreated issues which remain from Phase I. As the groups complete the decision analysis/action planning

activities from Phase II, they will review the untreated issues list, update it based upon decisions already made, and begin the analysis of the remaining issues. It is expected that some of the untreated issues will have been resolved by the decisions from Phase II. Other untreated issues will be resolved by consideration within the objectives of the Nuclear Mission. The remaining issues will be submitted to the formal K-T PA and DA processes. The Administrative Group will assist the groups in this effort by maintaining and providing an updated issue list for each group. Additionally, as the efforts progress, the Administrative Group will track, record, and report progress of all issues. Issues will be tracked from Problem Analysis through Decision Analysis into action planning and implementation. In addition to providing for facilitation of meetings, the Administrative Group will arrange for K-T consultation as necessary for each group.

E. Treatment of New Issues

As new issues are identified for inclusion in the PEP effort, the groups will add the new issues into their queue and prioritize them. The issues will then be treated along with the previously untreated issues in accordance with their assigned priority. The Administrative Group will be the focal point for assigning new issues to APGs and monitoring the progress of these issues in the individual groups.

F. Integration of Interim Actions

A part of the activities in Phase II has consisted of integrating the Interim Actions into the decision and Action Plan recommendations from the groups. It was the original intention that the final action plans consider the Interim Actions and incorporate or change those actions as appropriate. That original intent remains. As the groups recommend decisions and actions for their assigned areas, they must do so with a understanding of the Interim Actions in progress. The Administrative Group will assist the teams by tracking each Interim Action as it is considered and either incorporated into the final plan or is replaced by more appropriate action.



PEP ORGANIZATION

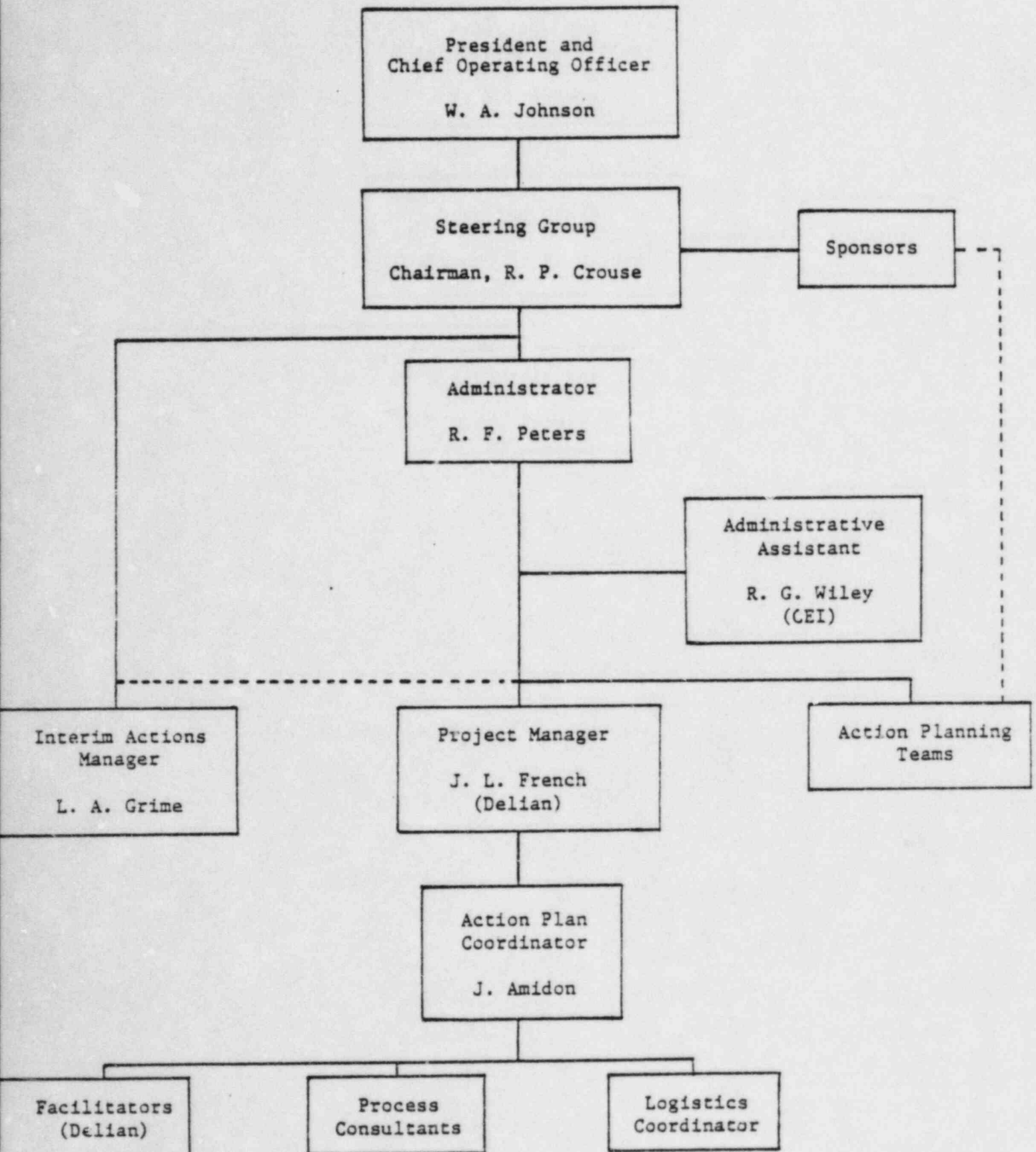


Figure I-1 PEP Organization for Phases I & II

Toledo Edison Company  
Performance Enhancement Program (PEP)

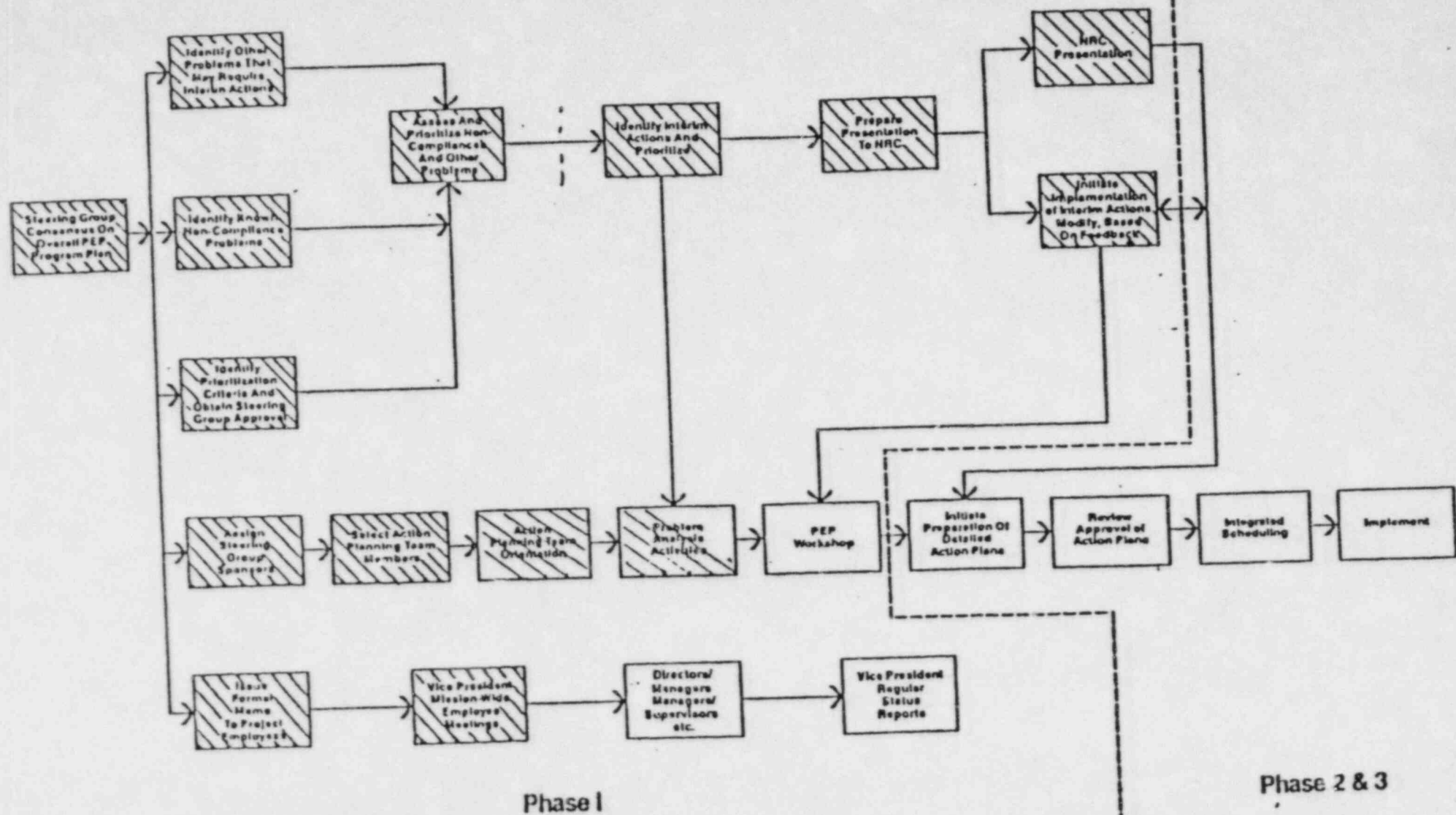


Figure I-2 Flowchart of PEP Activities

# Performance Enhancement Program (PEP)

## Phase I - Identification of Interim Action

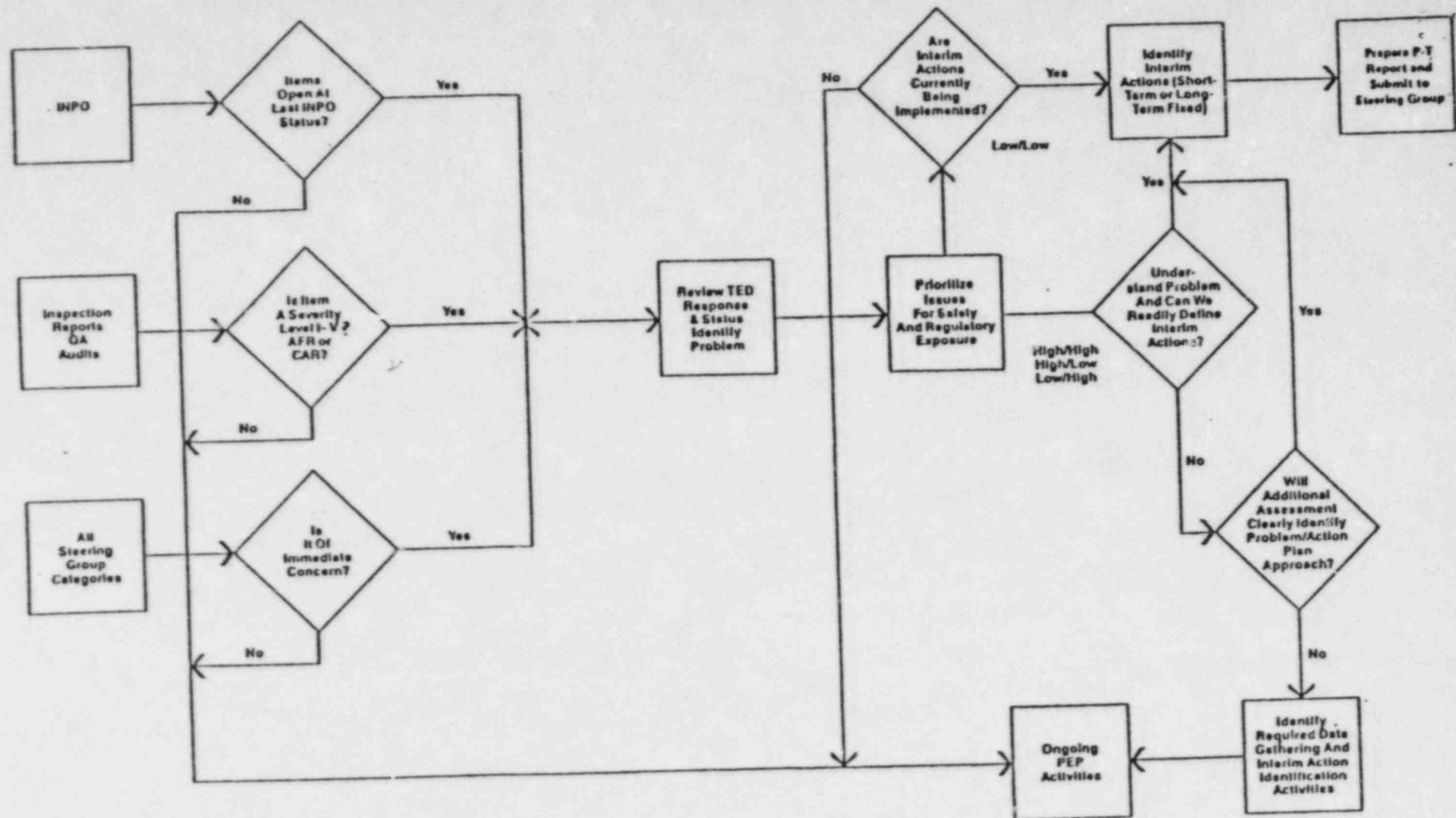


Figure II-1 Prioritization Team Evaluation Process

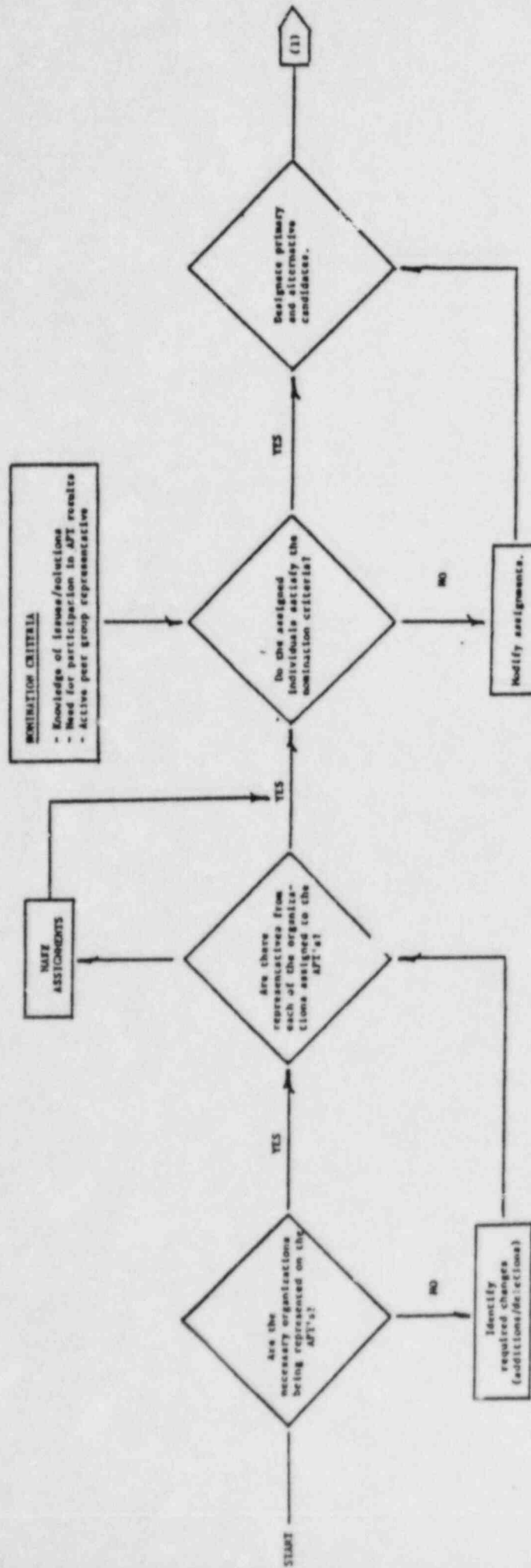


Figure III-1 Process for Selection of Participants in PEP  
Page 1



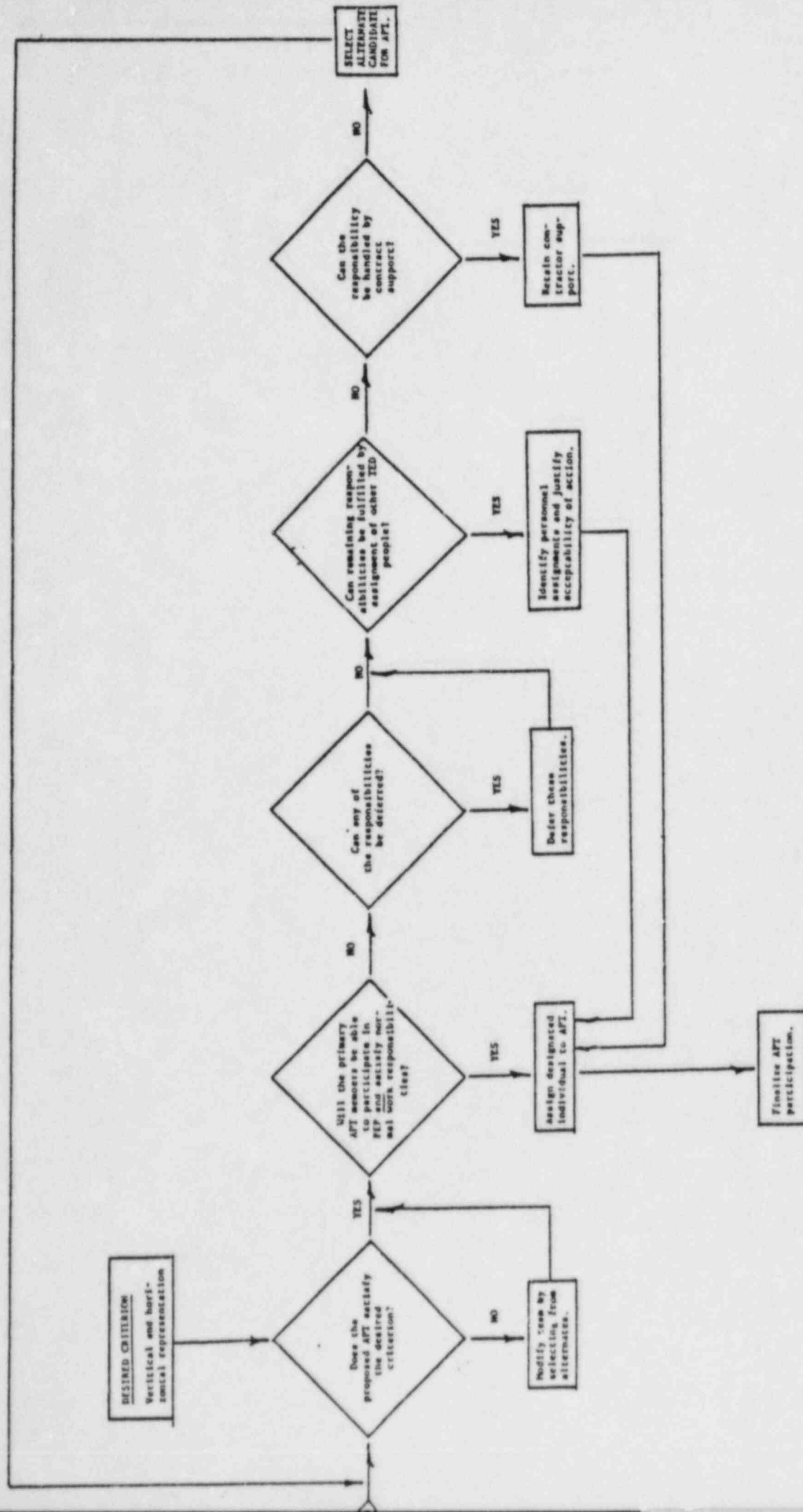


Figure III-1 Process for Selection of Participants in PEP (Cont'd)