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United States Nuclear Regulatory Commission
Division of Contracts
Washington, D.C. 20555

Attention: Ms. Theresa McLearen
AR-2223

Subject: Submittal of Proposal

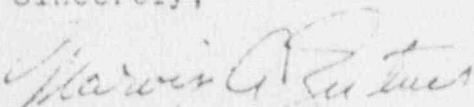
Reference: Request for Proposal No. RE-ORM-85-316
entitled "Automated Data Processing Systems
Maintenance" dated September 20, 1985

In response to your request as referenced above, Technassociates, Inc. is pleased to submit the technical and cost proposals. This proposal is based on an award of a cost plus fixed fee task order type contract and is valid for a period of sixty (60) days.

Technassociates has reviewed the Articles and General Provisions set forth in the solicitation and agree in principle with the provisions set forth therein. However, except for those provisions required by applicable Government law or statute, it is assumed that agreement as to the applicable Articles and General Provisions remain subject to final negotiation of any resulting contract.

Should you require any further information, please do not hesitate contact the undersigned at (301) 468-6191.

Sincerely,


Marvin A. Zentner
Executive Vice President

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INTRODUCTION

Technassociates, Inc. (TI) is pleased to submit this revised proposal entitled "Automated Data Processing Systems Maintenance" for all offices of the Nuclear Regulatory Commission (NRC) in response to the Request for Proposal RS-ORM-85-316 dated September 20, 1985.

TI has been providing support to the Offices of Resource Management (ORM) at NRC for the maintenance and improvement of systems for over five years. Our support staff to NRC has grown from an initial level of two people to well over twenty full-time professionals with various levels of experience and areas of expertise. The reliability of our employees and the quality of their work has remained consistently high. Without exception, our maintenance support has received favorable reviews from NRC project officers and system users. Our willingness to work evenings and weekends when necessary has softened the impact of multiple system problems over the years and enhanced the ability of ORM to successfully provide support to a large number of users.

Our support staff has maintained a low level of turnover and has therefore been able to provide historical perspective and a level of insight to NRC system maintenance which is difficult to replace. Many of our project personnel have been devoted specifically to the support of NRC systems for over three years.

Additionally, our extensive network of consultants has provided NRC with varied technical knowledge in order to solve specific problems or support new areas. Our willingness to enter into contractual agreements with other companies has also assisted in providing the right expertise without long delays.

Our flexible approach to system maintenance and improvement has proven quite successful over the past five years and is constantly being refined to provide the best support possible to NRC. We have developed a superior technical background in IBM and Data General as well as other operating environments. NRC is one of TI's most valued clients and we look forward to continuing this effort and expanding upon it in the future.

To facilitate NRC review of this document, we have organized the remainder of the Proposal into five sections including Appendix I and Appendix II which contain resumes of current and proposed staff members.

- o Section A: Personnel
- o Section B: Technical Approach/Understanding of the Requirements
- o Section C: Business Considerations
- o Appendix I: Resumes
- o Appendix II: Proposed Resumes

SECTION A: PERSONNEL

This section provides an in-depth discussion of how TI personnel satisfy the requirements for the proposed NRC Maintenance project in the areas of:

- c Technical Experience,
Managerial Experience, and
- c Education and Professional Development.

The Skills Matrix (Figure A.1-1) reflects current and proposed staff at all levels. The difference between the number of persons (in man-hours) in each labor category and the man-hours provided in the cost proposal represents new hires. Sample resumes for possible "new hire" candidates are provided in Appendix II.

The Skills Matrix has been revised to include availability, thereby eliminating the need for a separate availability chart. Availability can be assumed to be 100% except where noted on this figure. The manpower reflects the estimated level of effort specified in the RFP's Statement of Work.

TI has a sizable staff of well-qualified, competent professionals with expertise in a variety of software and hardware systems. Sub-section A.1 provides an overview of technical and analytical experience associated with TI's staff.

Sub-section A.2 provides a discussion of the requirements of management, as well as the proposed levels of managerial accountability and staffing assignments. Key managerial personnel are also identified within this section.

Sub-section A.3 discusses the educational background of TI's staff, as well as TI's policy of promoting further education and training for all employees. This section also presents ways in which professional development is encouraged and emphasized for all employees.

A.1 TECHNICAL EXPERIENCE

TI personnel have been providing a wide range of services to the Nuclear Regulatory Commission for over five years. These services have included requirements analyses, systems analyses, applications programming, systems programming, documentation, and user training. Our consistent performance of these services has enabled TI to develop an excellent reputation for providing high-quality work.

TI has successfully expanded the data processing maintenance support from a Data General RDOS environment to include Data General Eclipse and MV series minicomputers operating under AOS and AOS/VS, an IBM mainframe computer operating with a variety of software including the RAMIS II Data Base Management System, and the microcomputers applications developed for the IBM PC/XT.

Despite the difficult requirements for a wide variety of hardware and software backgrounds, TI has demonstrated the ability to provide experienced personnel on short notice and at a reasonable cost. TI's staff possess an unusually high level of expertise in software and hardware of particular interest to NRC, which can be difficult to obtain. These areas include RAMIS II, dBASE III, Data General and many others. The length of service to NRC has also allowed us to assemble a large staff consisting of both employees and consultants to meet any special needs which ORM may have.

The current TI staff supporting NRC is committed to providing continued service in the future. Our current NRC maintenance and systems support staff has well over 75 man-years of experience in the development and maintenance of Data General and IBM systems. This experience and familiarity with NRC systems provides NRC with a unique resource for high-quality and cost-effective systems maintenance.

TI maintains a professional staff of over 165 full-time professionals with a variety of backgrounds and experience levels. This staff of employees is supplemented by a large pool of consultants which may be utilized on short notice for projects ranging from only a few days in length to several years.

Although the NRC support contract would be contained in the Office of Information Resources Management (OIRM), the resources of the other offices within the firm can also be made available. The Personnel Skills Matrix, Figure A.1-1, provides a summary of the technical experience, education employment history, and management experience of TI's staff members for the NRC contract.

Specific resumes of current staff and additional personnel available at various levels for the NRC contract are included in the Appendices of this proposal. These resumes display the ability of TI to provide a high level of staffing for the support effort immediately after award, with little or no wasted effort for learning curves.

A.2 MANAGERIAL EXPERIENCE

This sub-section discusses specific managerial requirements which are the fundamental aspects of successfully meeting NRC's needs. Key managerial personnel are identified as well as the roles that they will serve in meeting the requirements.

A.2.1 Requirements of Management

Management in a task order environment serves a critical function. In order to meet the needs of multiple user groups and support many diverse data processing applications, strong management decision-making is of the utmost importance. Management serves the functions of:

- o Planning, staffing, and scheduling;
- o Distributing task order assignments, delegating responsibility for completion of task orders to technical personnel; and
- o Communicating with NRC in order to respond to user's needs, emergencies, changes in requirements, and to report the status of work in progress.

NRC Personnel Skills Matrix

| STAFF TITLE | RELEVANT HARDWARE | RELEVANT SOFTWARE | EDUCATION | EMPLOYMENT Years | | MANAGEMENT EXPERIENCE (yrs) | NRC SEC. CLEAR |
|---|---|---|--|------------------|--------------|-----------------------------|-----------------------|
| | | | | TI | Data Process | | |
| SALOMEA MICKA Director | IBM 7090, 360, 3032, CDC 3600, 7600 IBM-PC | FORTRAN, COBOL, System 2000, ADABAS, NATURAL, ALADIN, LOTUS, dBASE III | BA Physics Courses in Computer Languages Data Base Management Systems, and Manage- ment | 2 | 22 | 10 | No Access Badge |
| CORINNE GELLMAN Deputy Director/ Project Manager | IBM 370, DC/NOVA 1200 Data General Eclipse C/330 | IDEA, COBOL, SUPER- WYLBUR, TSO, OS/UTILI- TIES, OS/JCL, INPOS, AOS | BA Mathematics | 8 | 16 | 6 | L |
| PATTI TIEFF Project Administrator | IBM-PC, WANG OIS 50, OIS 140 WP, Wang- writer, Apple IIe, TI Home Computer | WordStar, LOTUS 1-2-3, Bankstreet Writer | Diploma The Stratford School | Less than 1 | 1 | 1 | No Access Badge |
| * LINDA LEWIS Task Manager/ Senior Systems Analyst | IBM 360/22, 40, 65, 370/125, 135, 158, 168, 3033, 3081, 3084QX IBM-XT, Televideo TPC11 | DOS, OS/MVT, HASP, VS2, MVS-JES2, JCL, TSO, APL, WYLBUR, System 2000, DISSPLA, FORTRAN, COBOL, PL/1, RPG, QM BASIC, MS-DOS, PC-DOS, dBASE III, LOTUS 1-2-3, WordStar, CalcStar, DataStar, Netware, Netware LAN (OS) | BA English Professional Courses Computer Program- ming Systems Analyst System 2000 Data Communications Novell Networking | 0 | 14 | 8 | L |
| NANCY MEISELMAN Task Manager/ Senior Systems Analyst | IBM 360, 370/165, 370/ 168, 3033 Data General C/150, C/350, C/330, M/600, NVBC-0 | COBOL, IDEA, DOS, DS/VS, AOS, OS/MVS, AOS/VS, JES2, JCL, TSO, System 2000, INPOS II, IDMS, CLI, WYLBUR, RAMIS II | BS Business Manage- ment RAMIS II Reporter RAMIS II Basic File Design & Records Management RAMIS II Advanced File Design & Records Management IDMS Data Base Design Data General AOS Systems Management System 2000 Natural Language | 2 | 8 | 2 | No Access Badge |

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Figure A.1-1

* Employment Probable
* * Employment Possible

NRC Personnel Skills Matrix

| STAFF TITLE | RELEVANT HARDWARE | RELEVANT SOFTWARE | EDUCATION | EMPLOYMENT Years | | MANAGEMENT EXPERIENCE (yrs) | NRC SIC CLEAR |
|--|---|---|--|------------------|--------------|-----------------------------|-----------------------|
| | | | | TI | Data Process | | |
| JOHN PERKINS Task Manager/ Senior Systems Analyst | IBM 1401, 360/65, IBM 370/168, 3033 (OS/ MVS) Data General C/330, C/350, MV8000 | COBOL, IDEA, AOS COBOL, AOS/VS COBOL, RDOS, INPOS, INPOS II, CLI, RDSOCE, IBM/ALC, PL/I, CICS/VS, IBM JCL, CLI, EXEC | BA Biology AA Biology Courses in Computer Languages Data Base Management Systems, and Manage- ment | 5 | 14 | 3 | L |
| ELLEN BARRETT Systems Analyst | Data General Eclipse C/330 IBM-PC | Data General (AOS, INPOS, AOS/VS, CLI), COBOL, PROXI, IDEA, LOTUS, DOS | BA Art History Computer Science Courses | 5 | 4 | None | No Access Badge |
| ANDREW BRADFORD Systems Analyst | IBM 360/30, 360/40, IBM 370/138, 370/158 Data General Eclipse C/330, C/350, J100 | COBOL, PL/I, FORTRAN IV, DOS JCL, OS JCL, UTILI- TIES, IDEA, IVPL, RDOS, AOS, MACRO, INQUIRE, QUERY, BASIC, SUPER- BASIC | AA Computer Science | 7 | 9 | 2 | L |
| ** JOHN HUNT Programmer/ Analyst | MV8000, Data General Eclipse, S/130, S/140, S/280 AMDAHL, IBM 4341 | AOS/VS, COBOL, SWAT, SED, RDOS, BASIC, MVS, TSO, JES2, VM/CMS, Pascal, EXEC2, REXX, WYLBUR | MS Candidate Computer Science BA Economics and Political Science | 0 | 4 | None | None |
| ** HANETTE ALLEN Senior Programmer | IBM 370, 380, 3033, 3084QX, 4341, 4331, DEC, VAX, PDP/11, Burroughs 1900 WANG | CICS, ICCF, CMS, DMS, PROMIS, JCL, OS/MVS, JES2, WYLBUR, TSO, COBOL, POP:TRAN, BASIC | BS Education Graduate Courses Computer Science Courses FORTRAN COBOL (I & II) IBM/DMS | 0 | 6 | None | None |
| GRACE BIVINS Senior Programmer | IBM 360/370, OS-VS, Data General Eclipse C/350, MV8000 IV Phase | COBOL, RAMIS II, System 2000, WYLBUR, TSO, IDMS, AOS, Inter- active COBOL, IDEA, OS/JCL, SCRIPT, AOS, CLI | Computer Programming & Operations RAMIS II Reporter | 1 | 5 | None | L Applied |

C-V

Figure A.1-1*

* Employment Probable

** Employment Pending

NRC Personnel Skills Matrix

| STATE TITLE | RELEVANT HARDWARE | RELEVANT SOFTWARE | EDUCATION | EMPLOYMENT Years | | MANAGEMENT EXPERIENCE (yrs) | NRC SEC CLEAR |
|--------------------------------------|---|--|--|------------------|--------------|-----------------------------|-----------------|
| | | | | TI | Data Process | | |
| MAI LUU Senior Programmer | IBM 370, 3033, 4341 | TSO, TSO/SPF, OS1, MVS, CICS, DMS, Clist, COBOL, RAMIS II | Bachelor of Law Computer Courses JCL IBM Utilities ANSI COBOL CICS Linkage Editor Os and MVS Concepts RAMIS II Courses | Less than 1 | 3 | 1 | None |
| MARY ANN MASLIN Senior Programmer | IBM 370, 3033, 3071, 3083 | COBOL, FORTRAN, DISPLA Graphics, OS/MVS, OS JCL, IBM Utilities, NIB Utilities, WYLBUR, TSO, PROMACS, UPU, NIBORR | AA Computer Science In progress Computer Courses BASIC COBOL Advanced COBOL FORTRAN IV Assembly Language DISPLA JCL ROSCOE PROMACS | Less than 1 | 5 | 0 | No Access Badge |
| * NO THI NGUYEN Programmer | IBM 370/158, 3084QX, 369 Honeywell 66/60 Data General IBM-PC; TRS-80 | COBOL, BASIC, ALG, WPC, FORTRAN, PL/1, Pascal, OS, MVS, OS/VS2, WYLBUR, TSO, BASIC IV | BS Computer Science | 0 | 3 | 0 | L |
| SUSAN PEARL-STOLLMAN Programmer | IBM-PC/XT, IBM 34, 4341 HP 2000 | dBASE II and III, LOTUS 1-2-3, WYLBUR, PC-DOS, TSO, COBOL, CROSSTALK | MA Human Resources & Organization Development BA Psychology Additional Courses dBASE II dBASE III LOTUS 1-2-3 COBOL I COBOL II Introduction to Data Processing BASIC Computer Operations Introduction to Business Computers | 2 | 2 | None | L |

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NRC Personnel Skills Matrix

| NAME TITLE | RELEVANT HARDWARE | RELEVANT SOFTWARE | EDUCATION | EMPLOYMENT Years | | MANAGEMENT EXPERIENCE (yrs) | RECORD OF ACHIEVEMENT |
|---|---|---|---|------------------|--------------|-----------------------------|-----------------------|
| | | | | TI | Data Process | | |
| SHELLEY BARKER Jr. Programmer | IBM 3031(370), IBM-PC, XT, AT | FORTRAN, COBOL, JCL, dBASE II & III, LOTUS, SYMPHONY, WordStar, CROSSTALK, ACL | AA Business Science Diploma Computer Learning Center | 1 | 2 | None | Applied |
| ELIZABETH DENTON Jr. Programmer | IBM 4341 Data General Eclipse C/330, C/350 IBM-PC/AT | COBOL, FORTRAN, JCL, CLI, INPOS II, CMS, SUPERCALC | BA Economics Diploma Computer Learning Center | 1 | 1 | None | None |
| * SCOTT NUMBERS Jr. Programmer | IBM 370, 3081, 3084QX, IBM-PC Televideo 1605, TPCII QUME QVT 103 | COBOL, Assembler, FORTRAN IV, MARK IV, WYLBUR, TSO, OS/VS2, OS/MVS-JES2, RAMIS II, BASIC, JCL, MUSIC, PC-DOS, MS-DOS, Tele- Write, TeleCalc, CROSSTALK | AAS Data Processing in progress | 0 | 1.5 | None | L |
| ** PAULETTE PHILLIPS Supervisor/Com- puter Technician | IBM 360, 370, 3033, 3081, 3084QX, IBM-PC Data General C/350 | WYLBUR, TSO, OS/VS2, OS/MVS-JES2, PC-DOS, LOTUS 1-2-3 | M.S. Diploma | 0 | 12 | 7 | L |
| * CONSUELLA DEBNAM Computer Techni- cian | IBM 360, 370, 3033, 3081, 3084 Data General C/350 | FORTRAN, RPG, ALC, COBOL, BASIC, TSO, WYLBUR, OS/VS2, OS/MVS-JES2 | Certificate Computer Programming Computer Technology Courses | 0 | 3 | None | L |
| * RITA GREENE Computer Techni- cian | IBM 360, 370, 3033, 3084 Data General C/350 | FORTRAN RPG, ALC, COBOL, BASIC, OS/VS2, OS/MVS-JES2, WYLBUR, TSO, JCL | Certificate Computer Programming/ Operations | 0 | 2 | None | L |
| ** MARGARET GROSSMAN Computer Techni- cian | IBM 360, 370, 3033, 3081, 3084QX | WYLBUR, TSO, JCL, JCL Utilities, OS/VS2, OS/MVS-JES2 | BA Art History | 0 | 6 | None | None |

A-7

Figure A.1-1

* Employment Probable
** Employment Pending

NRC Personnel Skills Matrix

| STAFF TITLE | RELEVANT HARDWARE | RELEVANT SOFTWARE | EDUCATION | EMPLOYMENT Years | | MANAGEMENT EXPERIENCE (yrs) | NRC SEC. CLEAR |
|--|---|---|--|------------------|----------------|-----------------------------|-----------------|
| | | | | TI | Data Process | | |
| TAMMY ALLEN Data Entry Technician | IBM 3033 Data General Eclipse | WYLBUR, COBOL, Screen Applications | H.S. Diploma | Less than 1 | Less than 1 | None | None |
| DAVE BROWN (PT) Data Entry Technician | IBM 3033 Data General C/350 | WYLBUR, IDEA (via application program) | BS Mechanical Engineering (in progress) | 1 | 1 | None | No Access Badge |
| ANNETTE HALLMAN Data Entry Technician | IBM-PC IBM 3033, 5520 Apple IIe Data General C/350 | WYLBUR, COBOL and IDEA, Screen Applications Displaywrite III | H.S. Diploma | Less than 1 | Less than 1 | None | No Access Badge |
| DAWN MCVEIGH (PT) Data Entry Technician | IBM 3033 Data General C/350 IBM-PC/XT | WYLBUR, IDEA applications WordStar, WordPerfect, LOTUS 1-2-3 | H.S. Diploma | 1 | 1 | None | None |
| LENETTA PICKETT Data Entry Technician | Data General Dasher D3 | COBOL Screen Applications | H.S. Diploma BA Computer Management/Data Processing (in progress) | Less than 1 | 2 | None | No Access Badge |
| ROBERT PRATT (PT) Data Entry Technician | IBM 3033 Data General C/350 | WYLBUR, IDCA Applications | H.S. Diploma | 1 | 1 | None | No Access Badge |
| TERESA REAMS Data Entry Technician | IBM 3033, IBM-PC WANG GIS 50 PC PRS 80 | WYLBUR, COBOL Screen Applications | H.S. Diploma BS Information Systems (in progress) | Less than 1 | Less than 1 | None | No Access Badge |
| JOE TURNER Data Entry Technician | IBM 3033, IBM-PC Data General C/350 | WYLBUR, WordStar | H.S. Diploma | Less than 1 | Less than 1 | None | None |
| LAURIS ZIC (PT) Data Entry Technician | IBM 3033 IBM-XT | WYLBUR, Command Procedures, TSO LOTUS 1-2-3 | H.S. Diploma | 1.5 | 1.5 | None | No Access Badge |

Figure A.1-1

* Employment Probable
** Employment Pending

NRC Personnel Skills Matrix

| STAFF TITLE | RELEVANT HARDWARE | RELEVANT SOFTWARE | EDUCATION | EMPLOYMENT Years | | MANAGEMENT EXPERIENCE (yrs) | NRC SIC CLEAR |
|------------------------------------|---|--|---|------------------|--------------|-----------------------------|---------------|
| | | | | TI | Data Process | | |
| * DEBRA GREENE Technical Writer | IBM 360, 370, 3033, 3081, 3084QX IBM-PC, XT Victor 9000 | OS/VS2, OS/MVS-JES2, WYLBUR, TSO, MS-DOS, PC-DOS, CP/M 86, CP/M 80, WordStar, Super- Calc, VisiCalc, Calc- Star, Bench Mark, dBASE II & III, Multi- plan, LOTUS 1-2-3 | MS Counseling and Guidance Psychology BA Psychology | 0 | 5 | 3 | None |
| LEON BARBER Consultant | IBM 3081, 3033, 370/ 168-158 Univac 1108 | RAMIS II, COBOL, ALC, FORTRAN, OS/MVS, VM 370, TSO, SPF, Clist, OS JCL, Librar- ian, Alpha | AA Computer Technology Computer Courses RAMIS II Records Management RAMIS II PSH Reporter Efficiency CARE REIATE | 0 | 12 | 5 | None |
| ED HAYES Consultant | IBM 308X, 370 | OS/MVS, TSO/SPF, VM/CMS, OS/VF, RAMIS, FOCUS, NOMAD, ADABASE, NATURAL, COBOL, EASY- TRIEVE | BS Mathematics RAMIS/FOCUS Trainer | 1 | 15 | 5 | None |
| ED MICKA Consultant | IBM 1401, 7090, 1410, 360, 370, 3032 IBM-PC/XT Displaywriter | FORTRAN, COBOL, PL/I, BASIC, CROSSTALK, LOTUS, dBASE III, DISPLAYWRITER, System 2000, ADABAS | BA Physics | 2 | 20 | 18 | L |

Figure A.1-1

* Employment Probable
** Employment Pending

NRC has a wide variety of computer application systems which require staff with knowledge of different hardware, software and data base management systems. TI's management is successfully able to plan and schedule staff in a way that matches experience, level of ability, time and effort required, and desired due date in order to provide timely completion of each task request. Task order assignments, once made, must be monitored by management to insure that they are on-time and in line with what is actually needed. This type of quality assurance has always been the underlying theme in TI's management philosophy.

Communication with the user community is also a crucial aspect of TI's managerial responsibility. Users are always encouraged to contribute ideas and needs, and are often encouraged to participate in the analysis and design phases of tasks.

Management must bridge the gap between the user community and the technical staff. TI's management has developed an excellent rapport with NRC system users, and it is this working relationship that aids in our continued success.

A.2.2 Managerial Experience

This sub-section discusses TI's experience and specific management personnel involved in satisfying those requirements. The NRC contract would fall within the responsibilities of the Office of Information Resources Management (OIRM), formerly the Office of Financial Management Systems (OFMS). This office is currently providing ADP maintenance support to NRC.

The OIRM staff consists of skilled managerial and technically proficient individuals who have a proven track record in the ADP maintenance environment. TI feels that this continuity in management is a tremendous asset to NRC. Management is extremely familiar with NRC application systems, users, and with officials from the ORM who provide technical direction. An excellent working relationship has developed in the many years of working with NRC.

The highest managerial position within OIRM is the director, Salomea S. Micka. Ms. Micka has been successfully directing efforts on several major government and commercial contracts,

including the NRC Maintenance contract for the past two years. She has over twenty years of experience in data processing, over ten years of that at the managerial level.

Ms. Micka will be responsible for ensuring the smooth operation of the contract. Her vast technical experience, particularly in data base management systems, provides the OIRM staff with an excellent resource where this expertise is required. Her experience with the Federal Government provides particular insight which is invaluable in dealing with the NRC.

The next level of OIRM management is the Deputy Director. This position is held by Corinne Gellman, who has been the Project Manager for the NRC maintenance contract for the last five years and is the current Project Manager for the NRC Systems Support contract. Ms. Gellman has over fifteen years of total experience in the data processing field. During the last year and a half, she has also managed the completion and implementation of the "core" IFMIS system, an integrated financial management information system developed for the NRC using Data General, AOS, and interactive COBOL software. This experience enables her to effectively manage the maintenance and improvement of the NRC systems in the future. As Project Manager, Ms. Gellman can uniquely provide the necessary continuity of management, plus technical and managerial skills which are critical to this effort.

Ms. Micka and Ms. Gellman will hold primary responsibility for the overall contract and project management functions. In order to provide a close working relationship with the user groups for each application system, Task Managers will be designated.

Each Task Manager is a senior level staff member with sufficient experience and familiarity with NRC ADP applications. Task Managers will hold responsibility for completion of task orders on many different systems and will supervise the efforts of the technical personnel assigned to them. The Task Managers will report directly to the Project Manager. This type of delegation of responsibility is essential to smooth operation in a task order environment. It also serves to provide NRC users with contact points who are well versed in their applications.

A.3 EDUCATION AND PROFESSIONAL DEVELOPMENT

TI has always placed emphasis on an educational background and on further professional development for all its employees. This section discusses this emphasis, particularly as it is demonstrated through company benefits, policies, and on-the-job training opportunities.

Sub-section A.3.1 provides information concerning the overall educational background associated with the TI staff. Sub-section A.3.2 discusses several specific opportunities for professional development available for employees.

A.3.1 Educational Level of TI's Staff

TI has always sought degreed candidates when hiring new professional personnel. Indeed, the overall educational background for technical staff includes a large majority of individuals with a Baccalaureate degree or higher. Figure A.3.1-1 illustrates the percentage of professional employees with degrees in different areas.

Within OIRM, the majority of staff members have degrees. Resumes for each staff member are in Appendix I and II of this document and contain specific information concerning educational level, major emphasis of study, and other course programs.

A.3.2 Programs for Professional Development

TI policies and benefits help to encourage employees to further their professional development. These include:

- o Educational Benefits. Reimbursement for tuition and course materials are provided for employees who take college credit courses related to their occupations.
- o Computer Related Courses. Many employees are sent to technical courses during working hours to learn and improve proficiency with software.

- o In-house Training. TI owns several software packages to help staff members to learn and use the IBM PC/XT. More experienced technical personnel often conduct special seminars during non-working hours to help improve the overall skill levels of other employees.

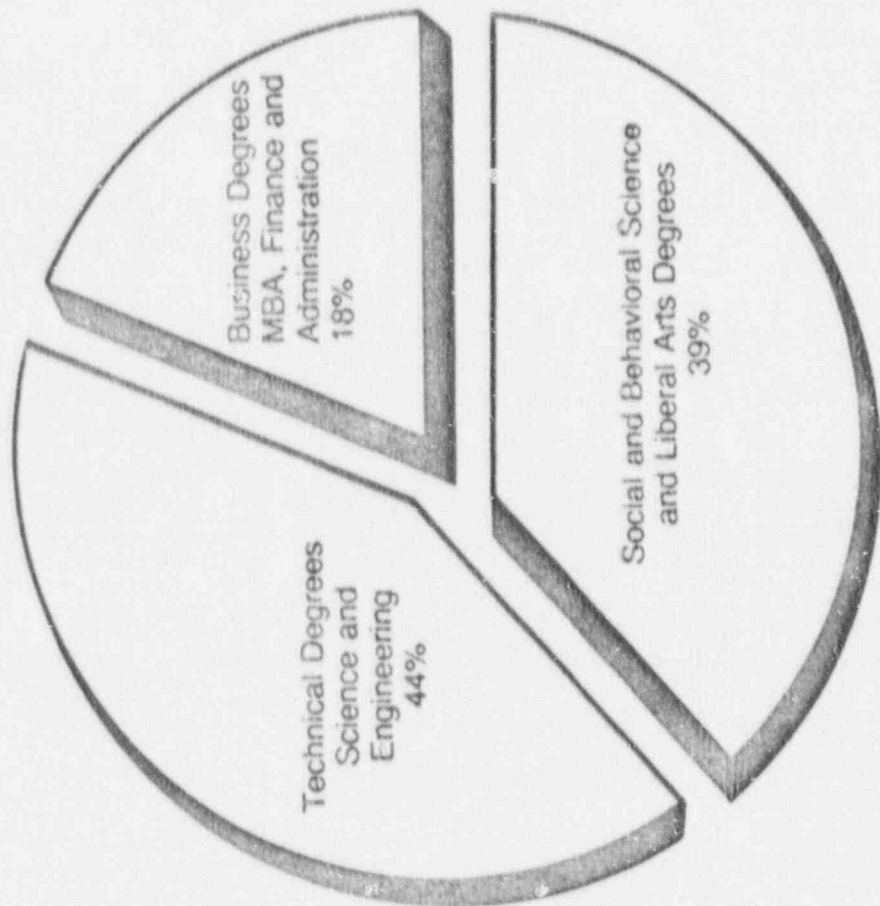
- o On-the-Job Training. TI management uses several strategies to build more versatility in the employees' overall skill base. In many cases, people are paired or teamed together so that an experienced staff member works closely with less experienced personnel. This strategy of pairing people of varying skill levels provides TI with the benefit of a constantly growing overall competence level.

In general, TI's policies and benefits towards professional development provide an asset to NRC as well as other clients. By improving our personnel, we also improve our ability to respond to the needs of our customers in an effective and timely manner.

Data processing is an ever-changing field. In this volatile environment with new software and hardware constantly becoming available, we feel strongly that the employees, our greatest asset, must keep their skills up-to-date.



TFC ASSOCIATES, INCORPORATED
EDUCATIONAL BACKGROUND



PROFESSIONAL STAFF
97% Baccalaureate Degrees
21% Advanced Degrees

EMPLOYEES
September 1985: 165

Figure A.3.1-1

SECTION B:

TECHNICAL APPROACH AND UNDERSTANDING OF THE REQUIREMENT

This section discusses TI's experience with NRC maintenance support; work definition, assignment, and planning; strategies for reducing maintenance costs; and other pertinent information such as access to NRC offices, courier service, and recruiting capabilities.

B.1 EXPERIENCE SUPPORTING AND IMPROVING SYSTEMS

TI has complete understanding of the needs and requirements of NRC. This understanding is based on six years of experience working with and for the agency.

Since June 1979, Technassociates, Inc. (TI) has been providing the necessary personnel to maintain and improve, on a task order basis, automated information systems. These systems are being maintained by ORM for all offices of the NRC. The support and improvement of NRC systems has required a variety of skills including systems analysis, preparation of systems specifications, preparation of program specifications, program development, testing, training, documentation, data entry, and preparation of user and system manuals.

There are over 3000 computer programs of varying sizes, complexity, and languages on different computers and operating systems. Future and immediate plans indicate a further divergence in languages and operating systems. The systems are written mostly in COBOL and are resident on a variety of computers, including Data General MV and Eclipse minicomputers, the IBM 3033 mainframe, and the IBM personal computers.

The contract is a task or work order arrangement whereby tasks are distributed through the Project Manager to TI staff. TI has developed a reputation for quick response to system problems and high-quality work.

Our close proximity to the NRC site has further enhanced our response time to NRC requirements. In addition, a satellite office in the Bethesda area is planned. The staff has grown from two to over twenty since TI began providing support and will be expanded further to meet the new requirement specified in the Statement of Work. The technical staff consists of Senior Systems Analysts, Systems Analysts, various levels of Programmers, Computer Technicians, Data Entry Technicians, and consultants.

TI has been involved in the following activities under this contract:

- o Conversion of the Payroll System from an IBM 370 to a Data General minicomputer.
- o Conversion of COBOL and screen programs from RDOS to the AOS operating system.
- o Support of a large number of production systems resident on an IBM 3033 and Data General minicomputers.
- o Preparation of test plans, user manuals, operation manuals and program maintenance manuals.
- o Development of requirements analyses and ADP studies as requested by NRC.
- o Support of RAMIS II systems on the IBM 3033.
- o Development of dBASE III and LOTUS systems on an IBM PC/XT.

On many occasions, TI has demonstrated the willingness to respond to emergency situations which have called for action above and beyond the normal level of effort. In these situations, our staff has frequently worked evenings and weekends in order to lessen the impact of problems on production users. This dedication by the entire TI staff has improved the response capability of the Office of Resource Management. We feel it is this dedication that provides NRC with an excellent support staff.

This effort will be continued in the future, thus providing NRC the confidence that their systems will remain on-line and their user community will be served.

B.2 WORK TASK/FUNCTIONS

This section discusses the assignment of projects to Task Managers as well as the distribution of programming and other technical staff within the OIRM structure. Task Managers carry the responsibility for the technical management of all designated projects. This responsibility includes distribution of work, monitoring performance, and ensuring the quality of all work. Figure B.2-1 depicts project assignments by Task Manager within the OIRM structure. As noted on the figure, projects are grouped into two categories: (1) systems requiring a minimum of one man-year of effort and (2) systems which require less than a man-year of effort.

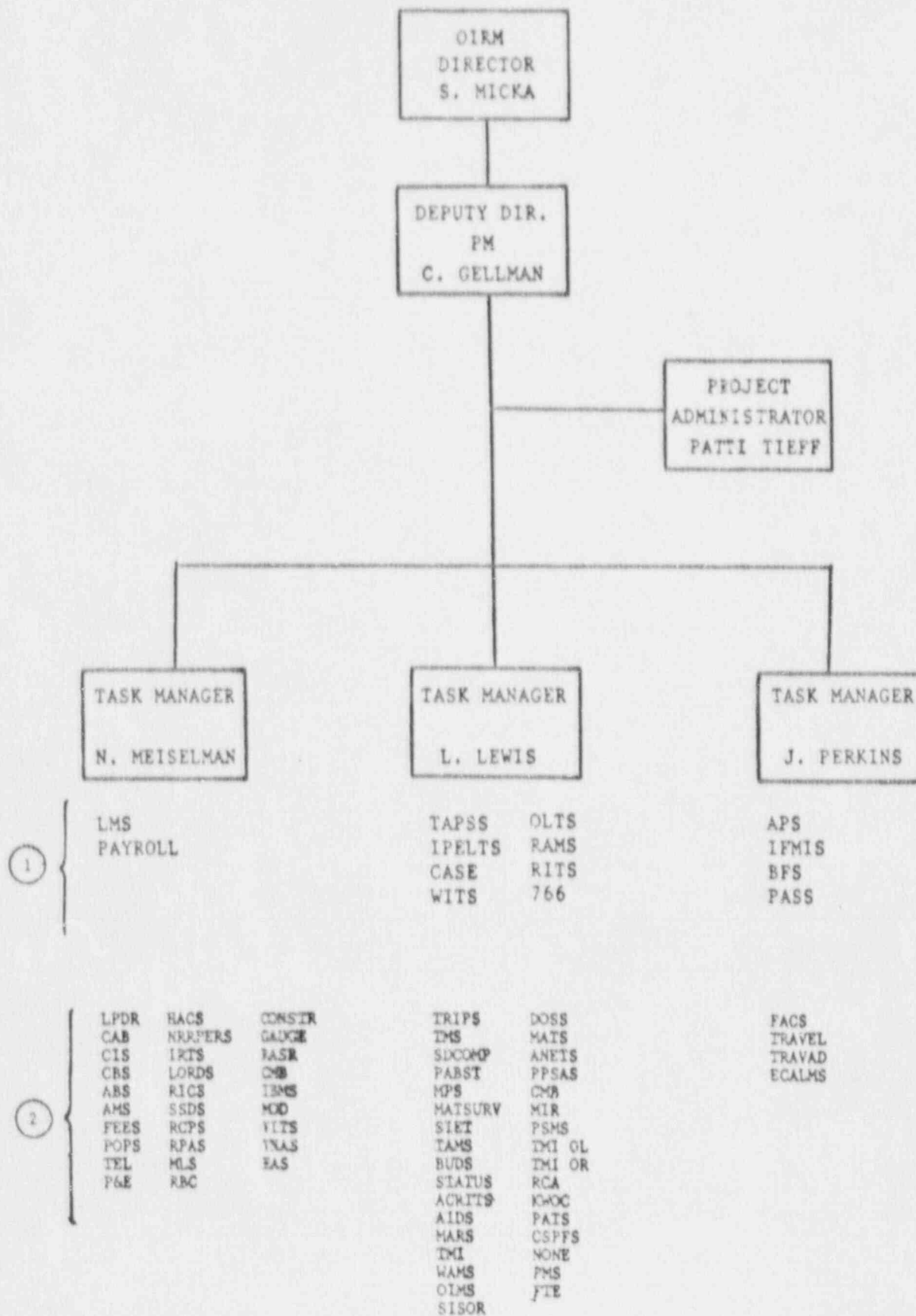
Figures B.2-2, B.2-3, and B.2-4 show specific staff assignment by Task Manager. It should be noted that two of the Task Managers, Nancy Meiselman and John Perkins, will be working from the TI Rockville office; whereas Task Manager Linda Lewis will be managing assignments from the new TI satellite office which will be located within walking distance of the Phillips building in Bethesda.

It should also be noted that in Figure B.2-3 all computer technicians as well as data entry personnel will report to Paulette Phillips under the task management of Linda Lewis.

B.3 STRATEGIES FOR REDUCING MAINTENANCE COSTS

There are two aspects involved in reducing application system maintenance costs at NRC. The first aspect concerns quality assurance techniques employed toward the resolution of user problems, system modifications and enhancements. This can be considered within the current context of the task order environment. The second aspect concerns the evolving Corporate Data Network, and the relationship between enhanced information processing and application maintenance.

PROJECT ASSIGNMENTS WITHIN THE OIRM STRUCTURE

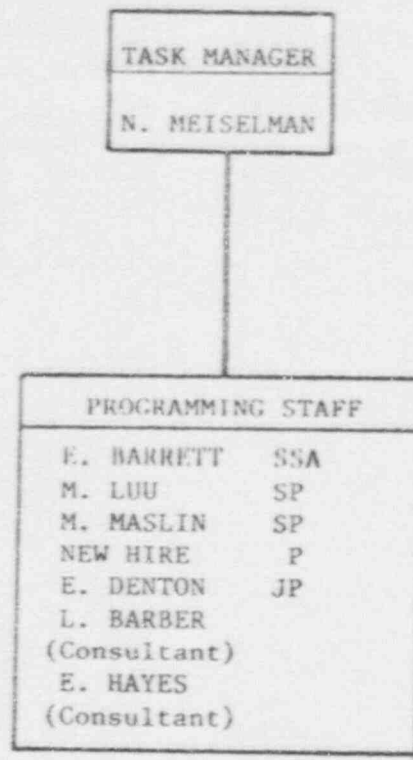


¹ Systems requiring a minimum of one man-year of effort

² Systems requiring less than one man-year of effort

Figure B.2-1

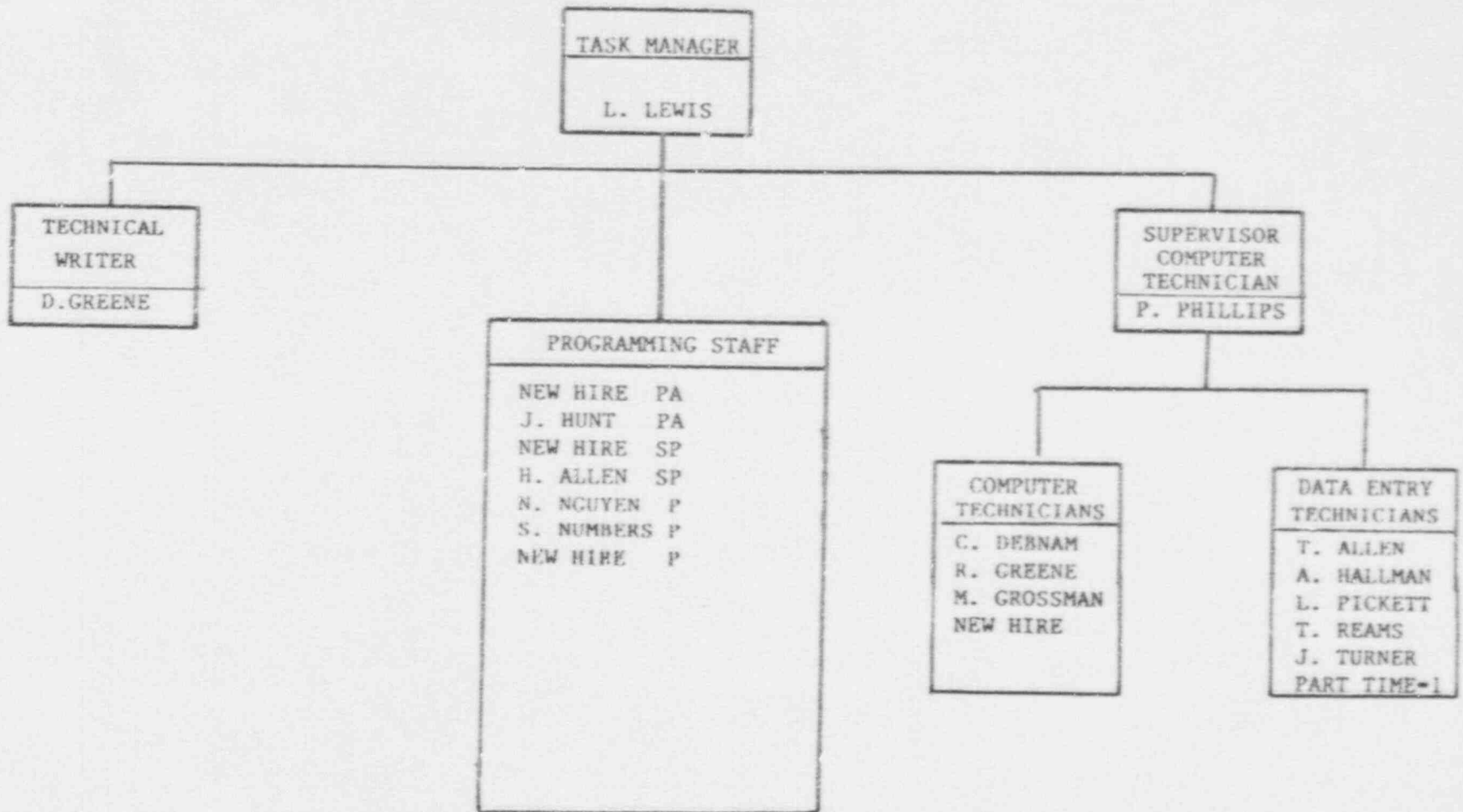
STAFF ASSIGNMENTS BY TASK MANAGER



B-5

Figure B.7-2

STAFF ASSIGNMENTS BY TASK MANAGER

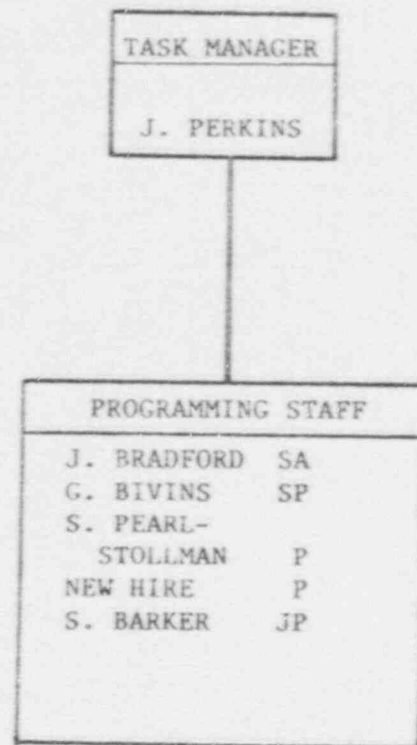


9-8

Note: This figure represents the staff located at the Satellite Office

Figure B.2-3

STAFF ASSIGNMENTS BY TASK MANAGER



B-7

Figure B.2-4

B.3.1 Reduced Maintenance Cost Through Quality Assurance

The NRC task order arrangement provides the framework for effective standards for quality assurance. TI's emphasis on providing high quality deliverables within established task order budgets is the cornerstone of reduced project maintenance costs.

B.3.1.1 Project Quality Assurance Reviews

TI has been using a quality assurance program for its projects from the company's inception. With both formal and informal components, this program covers all aspects of our operations, including: analysis, design, system development, maintenance, integration, installation, and testing. These procedures, followed on all of TI's contracts, have contributed significantly to long-lasting, satisfied customer relationships.

B.3.1.2 Contingency Planning and Corrective Action

Project scheduling and contingency planning will ensure completion of the project tasks within the performance period.

Systematic contract performance monitoring will:

- o Ensure that technical progress is commensurate with the detailed work plan and consistent with resource expenditures;
- o Provide current cost/schedule/technical information to management;
- o Provide cost/schedule information on a periodic and cumulative basis; and
- o Provide the information in a timely manner and format that allows management to act on potential problem areas.

Ms. Micka will hold periodic project reviews with the TI project manager. The reviews will focus on the determination of the project's status as compared with the planned progress. Work to be done during the next time period (which will be determined at each review) will be reviewed and potential problems identified.

When a problem has been identified, corrective action will include one or more of the following:

- o Recovery Plan - A plan is developed to correct an unfavorable condition. TI resources can be drawn on for the development of replacement plans, and the preparation of alternative methods and solutions.
- o Identification as Critical - Items so classified are identified and tracked as part of the upper management project review process. Critical is defined as an item that is impeding TI from meeting its project objectives. Such an item will be brought to the immediate attention of the NRC Project Technical Office by the TI Project Manager, and a corrective action plan will be coordinated.
- o Action Items - Corrective tasks to deal with specific problems for resolution by the Project Manager.
- o Stand-up Meetings - These are intensified (usually daily) reviews on specific problems where management wants current and rapid visibility.

B.3.1.3 Change Control

All modifications, changes, and enhancements made to NRC systems will undergo a rigorous review process by the TI project team to ensure that they are made in an efficient and effective manner to best meet the needs of NRC.

Any change which significantly alters the fundamental elements of the proposed system will be integrated into revised documentation and reprocessed through the management review process.

To further guarantee that all changes are applied in a structured, thorough manner the following quality assurance procedures are enforced:

- o Review project deliverables for completeness and adequacy of presentation;
- o Conduct TI Quality Assurance Program actions;
- o Review and finalize all reports (deliverables);
- o Control contract correspondence and work files;
- o Provide administrative support;
- o Utilize uniform NRC documentation standards.

B.3.1.4 User Participation

Our approach is built on user participation in all phases of the project. Our personnel are trained in application system maintenance and improvement techniques as well as systems implementation. Our team will be responsible for gaining an understanding of system requirements from the users and developing recommendations. This partnership between users and systems designers ensures a project staff responsive to the NRC's requirements both on a practical and theoretical basis.

This type of user involvement is necessary to maintain systems that meet user requirements and to continue user acceptance and support for the system.

B.3.2 Reduced Maintenance Costs Through the Evolving Corporate Data Network and Enhanced User Processing

The NRC's Corporate Data Network (CDN) presents an interesting set of opportunities for an enhanced user operating environment. TI envisions a continuing emphasis on increased end-user participation in the generation of output products, applying state-of-the-art fourth generation mainframe facilities and micro-to-mainframe connections. TI will actively participate in activities associated with the conceptualization, operation and

maintenance of new user facilities. As the features of the CDN are refined and expanded, TI will note areas where we feel that enhanced user participation would lend itself to reducing the cost of programming maintenance assignments.

TI anticipates becoming actively involved in the migration of application functions to the new environment as well as monitoring and implementing changes to existing systems brought about by the CDN.

In this regard it is expected that certain features of existing systems would be superseded by functions in the new environment, whereas other system features would benefit from participation in the new technologies. As an example, a process designed to be included in the full IFMIS implementation involves handling data in a spreadsheet-like manner. Incorporating such a process in a microcomputer application, where the user would benefit from the increased flexibility of micro-spreadsheet software with uploading capability to the main application would actually lower overhead and remove the need for custom programming and maintenance support on the resident system.

The new CDN environment with accompanying new technology will afford many possibilities for enhanced processing capabilities.

TI will keep abreast of development in the CDN implementation, and will advise NRC when an area for improvement in maintenance or user support makes itself known.

B.4 ANTICIPATED WORKLOAD AND SKILL MIX CHANGES

As the CDN implementation evolves, it will be necessary for TI to monitor this progress so as to effectively map personnel requirements to assignments as the need arises. TI will provide a staff fully capable of supporting existing system requirements as well as providing a smooth transition into new system applications.

The evolution of system requirements is perceived to slowly and steadily shift emphasis from existing applications to the new environment. TI will implement a monitoring methodology whereby personnel requirements are constantly tracked against the realities of current and new system requirements.

As the non-CDN workload diminishes, so will the non-CDN support; this will occur at a rate sufficient to guarantee phase out support for old systems and proper staffing support for new systems.

Such a methodology would include a detailed plan for providing future personnel support, based on information gained from tracking the CDN effort.

Due to the depth of the TI staff, such a mapping scheme of personnel support to applications can be accomplished with minimal interruption to any task. As a supplementary feature to enhance the required new system support, TI will provide on-going training to staff members in relevant areas of the new CDN environment.

Such training would include features applicable to microcomputer software and protocol, data base implementation and operations, and characteristics of the telecommunication network facilities. Training will be scheduled according to the projected future needs of personnel support, based on the monitoring methodology employed.

B.5 WORK DEFINITION AND PLANNING

TI has extensive experience in task management from involvement in the NRC support contract and similar maintenance contracts. The goals of task management are to complete tasks on time, within budget, and to provide high-quality products which meet user needs and provide flexibility for change. The procedures for task management which have been successfully implemented include planning, scheduling, reviewing and controlling.

B.5.1 Planning

During the initial stage of each task order, TI develops a detailed work plan. Depending on the scope of the task order, work is organized into logically controllable segments of sufficient detail to guarantee that all aspects of the required work have been defined and coordinated.

As a result of this analysis, skill requirements are identified, and appropriate personnel can be assigned to each individual step and substep necessary to complete the task.

The detailed work plan becomes the basis for administering the scope, activities and completion of the task order.

B.5.2 Scheduling

The task order scheduling process involves the forecasting of work schedules, monitoring of staff time within a schedule, preparing and monitoring interim milestones and maintaining close contact with NRC throughout the life of the task order. Scheduling techniques of sufficient detail are applied as deemed necessary in order to effectively manage the progress toward completion of the task order.

Unforeseen activities that arise are assessed based on their impact on the project's personnel resources, timetable and cost. These are brought to the attention of NRC for consideration prior to undertaking the activities.

B.5.3 Reviewing and Controlling

The review process incorporates formal staff meetings, status reporting, consistent technical review activities by the task leader, measurements of technical progress and actual costs against projected milestones and costs, and the rapid identification of problem areas. These activities comprise a comprehensive approach toward task and project management.

The project team meets periodically to discuss the current status of outstanding task orders. These meetings enhance the effectiveness of the project team by coordinating project activities.

The Project Manager sees that all meetings have an agenda that identifies the amount of time to be spent on each topic. Only appropriate personnel attend these meetings.

Estimated completion dates and the associated responsible individuals are documented for future follow-up.

Other project team meetings are held as necessary to handle specific problem areas. A high-level action plan with responsibility assignments and target dates is established to handle the problem. It is a primary goal of the plan to evaluate and execute alternatives to scheduled completion dates, when the need arises. Follow-up meetings are held to review the status of the action plan until the problem is resolved. This procedure assures the quality of contractual deliverables.

B.6 OTHER PERTINENT INFORMATION

This section includes discussions on proximity access to NRC offices, and courier pickup and delivery service, and recruiting new personnel.

B.6.1 Ability to Physically Access NRC HQ Offices

TI has proven its ability to respond quickly and effectively to emergency problems while supporting NRC for the past five years. Our office is conveniently located in Rockville, Maryland, within 15 minutes of NRC sites in Bethesda.

Many of our employees work at NRC sites to be more accessible to NRC staff and will continue to do so in the future. In addition a satellite office located in the Bethesda area is planned.

B.6.2 Daily Pickup and Delivery

TI has provided a daily courier service between TI headquarters and NRC to speed up the transfer of documents. This service will be increased to a minimum of twice daily for the new contract.

Courier service will also be provided on an as-needed basis to supplement this routine schedule.

B.6.3 Recruiting New Personnel

TI now employs a full-time recruiter who is actively seeking qualified personnel for this contract. The resumes provided in Appendix II reflect possible candidates who have been screened by our recruiter. TI intends to continue to utilize the recruiter's services to provide full staffing with the necessary skills in order to effectively meet NRC's needs.

It is TI's philosophy to provide full-time employees for all positions whenever possible. Consultants with special expertise are used, but we are continuously seeking to replace them with employees. As of November 25, 1985 we will be adding Mai Luu to our staff as a RAMIS II Senior Programmer. We will continue efforts in this area so as to cut down on the use of consultants. Consultants will be used for quick response on short-term assignments.

SECTION C: BUSINESS CONSIDERATIONS

C.1 PROJECT ORGANIZATION

This section will provide a description of the project organization and the capabilities and experience of key NRC support team members.

The NRC contract falls within the responsibilities of the Office of Information Resources Management (OIRM). Salomea S. Micka is the director of the Office of Information Resources Management. She oversees the performance of Project Managers and the quality of products produced within the Division. Ms. Micka holds periodic meetings with TI Corporate management to review all current OIRM projects. These meetings provide a direct line to management personnel to expedite contract agreements, problem resolution, and personnel resources.

C.1.1 Project Manager

Corinne Gellman will continue to serve as Project Manager for the NRC maintenance contract. Ms. Gellman will perform frequent management reviews of the project to ensure that all of the task orders are proceeding as planned and to bring top management attention to any problems or potential problems that may exist. Her daily responsibilities include the following items:

- o Review technical progress against the project plan;
- o Review projected costs against the actual costs;
- o Identify potential technical problems and possible approaches to resolving these problems through discussions with the lead analysts;
- o Plan activities for the subsequent reporting period;

- o Estimate manpower assignments and workloads for future reporting periods; and
- o Meet with NRC staff on an as-needed basis to discuss the current and future task order workload.

A single generic fixed price task (see Schedule 1 of the Cos' Proposal) covers the following items: direct labor for the Project Manager, Project Administrator, and Courier; equipment; travel expenses; materials and reproduction.

Project Manager: The cost proposal shows a yearly total of 1720 hours for the Project Manager. Some specific duties during a sample week would be as follows:

| | |
|--|---------|
| Review of current task orders with the task managers: | 12 hrs. |
| Estimates for new work (with the task managers): | 5 hrs. |
| Meetings with users: | 10 hrs. |
| Discussions with the NRC Project Officer and NRC Project Managers (by phone and in person): | 10 hrs. |

Project Administrator: The cost proposal shows a yearly total of 1920 hours for the Project Administrator. Some specific duties during a sample week are as follows:

| | |
|--|---------|
| Preparation of status reports: <u>Reporting Period</u> | 4 hrs. |
| Time sheets and attachments: 2 | 4 hrs. |
| Updating task order books and spread sheets: | 8 hrs. |
| Personnel actions: | 4 hrs. |
| Coordination with Task Managers: | 16 hrs. |
| Updating documentation manuals: | 4 hrs. |

Courier: In order to maintain close contact and to facilitate paper flow between the NRC Bethesda buildings and the TI Rockville office, there will be two pickups daily by the courier. This is reflected in the fixed price task order at a rate of two hours per day for a yearly total of 520 hours.

Equipment: The equipment is shown under ODC's with two options - (1) lease or (2) purchase. Modems, telephones, and copier machines are shown as lease only since it is our understanding that NRC does not wish to purchase these items. The telephones are

required for the "Defender" package which is currently installed on the APS computer and is planned for all NRC Data General systems. Software packages are shown only as purchases.

Travel: Based upon a survey of trips taken during the previous month, it is indeed estimated that the TI staff will be making approximately twenty trips per week between the Rockville office and NRC. These trips are taken for many reasons including: emergency trips to the computer site, trips to the computer site for demonstration purposes, meetings with the user, meetings with the NRC Project Officer, and meetings with NRC Project Managers.

Materials and Reproduction: Materials include both computer and letter-quality paper. Reproduction charges are based on paper usage.

C.1.2 Task Managers

TI's objective will be 100 percent successful completion of each task order. A key factor in meeting this goal through effective project management is to make sure there is assigned accountability for each task.

The staff is organized into task groups to address specific areas and NRC systems. Authority is delegated to the Task Managers with responsibilities that include acting as a liaison to appropriate NRC personnel and supervising task performance and staff. The Task Managers will keep in close contact with the NRC Project Managers to ensure that the tasks under their direction proceed smoothly. They will also be responsible for providing the technical expertise and first level of leadership for the task as well as assigning work and providing technical guidance for other team members. The Task Managers will be accountable for each NRC work order. Each of these Task Managers reports directly to Corinne Gellman.

Task leadership will be required for a variety of work orders; large and small, long and short term. The task orders will involve a multiplicity of computer equipment and software environments. TI is particularly fortunate in having individuals with the long-term involvement in NRC systems that is needed to provide task management for the contract.

As the resumes in Appendix I show, TI has senior level people who have worked on the APS, FACS, PASS, PAYROLL, Travel, and IFMIS systems among others. Most of the proposed senior level people are able to operate comfortably in the Data General, IBM Mainframe, and Personal Computer environments.

TI employees have in-depth exposure to Data General's AOS, INFOS, IDEA and COBOL. On the IBM Mainframe they have expertise with OS, COBOL, SAS, TSO, WYLBUR and RAMIS II.

It is anticipated that Nancy Meiselman, John Perkins, and Linda Lewis will function as Task Managers on this contract.

A full-time Project Administrator is assigned to this contract with responsibilities that include maintaining time sheets, hour and cost records, and status reports. All equipment and supply procurements in behalf of this contract whose acquisition has been approved by the Nuclear Regulatory Commission can be arranged by this Project Administrator. With this decentralization approach, purchases can be made that are most responsive to the needs of the contract.

C.2 PERSONNEL MANAGEMENT PLAN

TI has consistently supplied quality system support services to the NRC through our large and stable data processing staff. TI's approach has always been to initially hire only qualified individuals whose background includes relevant training and experience in application and system software applicable to the needs of NRC's processing environments. Task Managers have always provided training and personal support to staff members who require exposure to items of special importance to a particular application. These operating considerations have resulted in a pool of personnel talents and consistent, reliable service to NRC projects.

C.2.1 Sources of Personnel

A primary requirement of instituting an effective personnel staffing and management plan is to have the necessary resources available when needed. TI's ability to respond quickly and

effectively to task order requirements and critical special problems is due in part to the immediate availability of a number of qualified individuals.

These persons either work on-site at NRC offices or at TI corporate headquarters. They possess the requisite background in IBM mainframe and microcomputer environments as well as all aspects of the Data General application environments. The majority of our staff is conversant with a variety of NRC systems and will provide back-up support to the primary personnel when needed. Additionally, TI has a number of consultants available who have provided effective, specialized service to NRC projects.

The Project Manager will review the optimum skills required for the task order performance, availability of qualified personnel, projected staff requirements for anticipated task orders, and directly related experience of candidate personnel. The primary goal of the evaluation will be to ensure that NRC receives the highest level of support possible. The TI Project Manager will structure and manage any consulting or subcontracting arrangement so that it will be virtually transparent to NRC.

C.2.2 Staff Preparedness and Availability

An effective personnel management plan addresses the sources of personnel resources, and the mutual issues of staff preparedness and availability for task assignment. Employee preparedness involves relevant background education, training, and experience, as well as management response to handling current training requirements.

TI's NRC support staff possesses a high degree of education and training directly applicable to the requirements of the maintenance project, and possesses a high level of motivation toward furthering professional standing. The staff's experience in similar environments as well as direct experience with supporting and improving NRC systems is well established.

Assuring an adequate availability of staff resources is dependent on the sources and quality of those resources. Beyond this, project management must effectively monitor current task assignments, and forecast future needs with a relatively high degree of accuracy. This requirement for "forward planning" is a product of the very nature of the task order environment - an environment that TI has grown quite accustomed to during our commitment at NRC.

Staff requirements are monitored at a very detailed level by the Task Manager. Actual decisions regarding staff assignments are made at the Project Manager level. Interaction between the project and task management is required to provide a comprehensive approach to keeping all current tasks on track while providing the necessary support for upcoming assignments.

C.2.3 Personnel Management Capabilities

Personnel management must address the issues of responding to changing project workloads, managing and evaluating personnel performance, corrective action for activity failures, and monitoring work in progress.

Coping with Changing Workloads

TI will continue to maintain close contact with NRC staff to provide an effective utilization of resources. The TI staff possesses a varied background which enables them to support several NRC systems simultaneously. For the past five years, TI has effectively managed its personnel to provide effective support to NRC under all situations. Since a large portion of our staff has extensive experience with NRC systems, the problem of coping with changing workloads will be relatively easy to solve.

Managing and Evaluating Personnel Performance

The inherent structure of the NRC project team facilitates frequent reviews of project personnel by the Task Managers. The Task Managers have the main responsibility for managing and evaluating the programming staff on the project. Any problems or

potential problems are dealt with as early as possible to avoid any disruption of the project. Feedback is also encouraged from NRC Project Managers and users to assist in the evaluation and improvement of the TI staff.

Corrective Action for Activity Failures

The Task Manager closely monitors all activity performed on a given task order. When a problem occurs, it is evaluated in terms of its level of severity. In the case of isolated errors, usually a team member can immediately respond. More serious problems may require the intervention of the Task Manager in order to prioritize items to complete for that task order; or higher still, the Project Manager may call a meeting in order to review current task order priorities and determine if any adjustments to scheduling must be taken on the task order level.

Activity failures outside the realm of a particular task, such as a sudden program failure or data base crash require immediate attention. An NRC user will call to inform the Task Manager that a program error or termination has occurred. Terminations and crashes are serious and are handled immediately regardless of current assignments. Other problems are evaluated in terms of their importance to the user and their effect on current staff assignments. A decision will be made to assign one or more team members to the problem after an analysis has been made to determine any impact to task order performance schedules. The alternative chosen will have the least impact on existing work schedules, while maintaining an adequate response to the user.

Monitoring Work in Progress

In the absence of unpredictable intervening problems, work proceeds day-by-day on a task order basis, as specified by the prioritized schedule of activities. Each Task Manager monitors daily progress toward the task order's required objectives. Multiple task orders under the same Task Manager are prioritized and monitored on a daily basis to ensure that conflicts do not arise.

The emphasis is to produce quality products on time and within budget. The Project Manager monitors project-wide activity in terms of each task's overall progress toward completion. At this level, problems regarding individual tasks are evaluated in terms of their impact on the progression of other tasks. The Project

Manager maintains time and cost schedules for all tasks individually, as well as schedules which measure task performance as compared to the entire project. Task Manager input is vital when making decisions on the project level. Such input, reflecting specific technical factors as well as task team and user concerns, is evaluated as part of the action plan meeting.

C.3 MANAGEMENT SYSTEMS

Technassociates applies its expertise in office automation techniques to its own management practices. These practices pervade all facets of project supervision, including microcomputer project planning and monitoring, financial record keeping and automated invoicing, and the use of spreadsheets for modeling the implications of alternative management strategies and for automatic generation of status report attachments. All correspondence and documentation is currently done on microcomputers using word processing software for easy retrieval and modification. Microcomputer packages currently being used internally include WordStar, Word Perfect, dBASE III, LOTUS, Harvard Total Project Manager, and PC Draw.

A P P E N D I X I - T A B L E O F C O N T E N T S

| | |
|-------------------------------------|------|
| DIRECTOR | |
| Salomea Micka..... | I-1 |
| PROJECT MANAGER | |
| Corinne Gellman..... | I-5 |
| PROJECT ADMINISTRATOR | |
| Patti Tieff..... | I-10 |
| TASK MANAGER/SENIOR SYSTEMS ANALYST | |
| Linda Henshaw Lewis..... | I-12 |
| Nancy J. Meiselman..... | I-16 |
| John R. Perkins..... | I-21 |
| SYSTEMS ANALYST | |
| Ellen Barrett..... | I-24 |
| Andrew J. Bradford..... | I-26 |
| PROGRAMMER/ANALYST | |
| John Hunt..... | I-30 |
| SENIOR PROGRAMMER | |
| Hannette Allen..... | I-32 |
| Grace Bivins..... | I-34 |
| Mai Luu..... | I-37 |
| Mary Ann Maslin..... | I-39 |
| PROGRAMMER | |
| No Thi Nguyen..... | I-41 |
| Susan Pearl-Stollman..... | I-42 |
| JUNIOR PROGRAMMER | |
| Shelley L. Barker..... | I-44 |
| Elizabeth Denton..... | I-46 |
| Scott Numbers..... | I-47 |
| SUPERVISOR/COMPUTER TECHNICIAN | |
| Paulette Phillips..... | I-49 |

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COMPUTER TECHNICIAN

| | |
|------------------------|------|
| Consuella Debnam..... | I-51 |
| Rita Greene..... | I-53 |
| Margaret Grossman..... | I-55 |

TECHNICAL WRITER

| | |
|--------------------|------|
| Debbie Greene..... | I-67 |
|--------------------|------|

DATA ENTRY OPERATOR

| | |
|----------------------|------|
| Tammy Allen..... | I-58 |
| Dave Brown..... | I-59 |
| Annette Hallman..... | I-60 |
| Dawn McVeigh..... | I-61 |
| Lenetta Pickett..... | I-62 |
| Robert Pratt..... | I-63 |
| Teresa Reans..... | I-64 |
| Joe Turner..... | I-65 |
| Lauris Zic..... | I-66 |

CONSULTANTS

| | |
|------------------|------|
| Leon Barber..... | I-69 |
| Ed Hayes..... | I-72 |
| Ed Micka..... | I-75 |