

---

# **Analysis and Comment on Redirection of the NRC Document Control System**

M. L. Steele

Division of Technical Information and Document Control  
Office of Administration

March 1981

8104200577

CONTENTS

|  | <u>Page</u> |
|--|-------------|
| Introduction   | iii         |
| Response to Briefing Charts and Evidence to Support Findings                 | 1           |
| Briefing Chart 1 (p. 2 of Encl. A1)  | 1           |
| Briefing Chart 2 (p. 3 of Encl. A1)  | 1           |
| Briefing Chart 4 (p. 4 of Encl. A1)  | 6           |
| Briefing Chart 4 (p. 5 of Encl. A1)  | 7           |
| Evidence for Finding A.4 (from Encl. A2, p. 7)                               | 14          |
| Briefing Chart 5 (p. 6 of Encl. A1)  | 16          |
| Evidence for Finding B.2 of Briefing Chart 5 (from<br>(from Encl. A2, p. 11) | 18          |
| Briefing Chart 6 (p. 7 of Encl. A1)  | 20          |
| Evidence for Finding C.1 of Briefing Chart 6<br>(from Encl. A2, p. 18)       | 21          |
| Evidence for Finding C.4 of Briefing Chart 6<br>(from Encl. A2, p. 23)       | 26          |
| Evidence for Finding C.5 of Briefing Chart 6<br>(from Encl. A2, p. 24)       | 27          |
| Briefing Chart 7 (p. 8 of Encl. A1)  | 30          |
| Evidence for Finding D of Briefing Chart 7<br>(from Encl. A2, p. 26)         | 31          |
| Briefing Chart 8 (p. 9 of Encl. A1)  | 31          |
| Evidence for Finding E.1 of Briefing Chart 8<br>(from Encl. A2, p. 27-28)    | 31          |
| Related EDO-Directed Actions (Attach. 1 of<br>November 18, 1980 memorandum)  | 35          |
| Evidence for Finding E.2 of Briefing Chart 8<br>(from Encl. A2, p. 28)       | 37          |
| Briefing Chart 9 (p. 10 of Encl. A1)   | 37          |
| Evidence for Finding F.2 of Briefing Chart 9<br>(from Encl. A2, p. 34)       | 39          |
| Evidence for Finding F.3 of Briefing Chart 9<br>(from Encl. A2, p. 35)       | 42          |
| Evidence for Finding F.5 of Briefing Chart 9<br>(from Encl. A2, p. 37)       | 44          |
| Briefing Chart 10 (p. 11 of Encl. A1)  | 44          |
| Evidence for Finding G.2 of Briefing Chart 10<br>(from Encl. A2, p. 42)      | 45          |

Appendixes

- A. Memorandum, Donoghue to Cornell, June 5, 1980, "Document Control System"
- B. Letter, R.F. Fraley, Executive Director, ACRS, to William J. Dircks, EDO, NRC, October 6, 1980, "The TERA Corporation Retrieval System," and reply, November 24, 1980, "Unrestricted Access for ACRS to all Indexes and Records of NRC Staff and Program Offices."
- C. Memorandum, Donoghue to Triner, November 25, 1980, "Office of Administration's Request for Unobligated FY 80 Carryover Funds."
- D. Memorandum, Commissioner Gilinsky to Chairman Ahearne and Commissioners Hendrie and Bradford, October 6, 1980, "Year Four of the Document Control System Contract."

Index, Contents - 12

ANALYSIS AND COMMENT ON REDIRECTION  
OF THE  
NRC DOCUMENT CONTROL SYSTEM

by

Myrna L. Steele  
Deputy Director, TIDC

I N T R O D U C T I O N

The EDO memorandum of November 18, 1980 (attached) purports to relate to the major findings of the OMPA "... comprehensive review of the Document Control System (DCS)." The memorandum states that "The study results are presented in the form of a briefing package ..."; it then lists four so-called study results.

The memorandum also says that "Based on these findings, I have decided to make substantial changes in the DCS. ... A list of actions I have directed, with descriptions of each, is provided in Attachment 1 ..."

Before proceeding to the actual analysis of the content of the OMPA study, the OMPA briefing package, and the Actions directed by the EDO, it is germane to note that the office responsible for the contract (TIDC) was given, essentially, only six hours to look over the so-called briefing package and the so-called evidence. This time constraint allowed only for pointing out major errors. (For convenience, the briefing package and the evidence will be referred to with quotation marks in the rest of this paper because I cannot agree that the "evidence" is, in fact, evidence.)

At no time during the OMPA study was either a peer review or an outside review of the findings or the DRAFT report ever sought by OMPA.

The findings (1 through 4 of Dircks' memorandum) are not direct functions of the briefing package or the evidence. Further, the actions based on those findings cannot be correlated with the evidence or the comments of users of the DCS.

The allegation that the actions will improve the management of the DCS implies mismanagement without specifically alleging any wrongdoing, misjudgments, or poor management. Nowhere in either the briefing package (Enclosure A1) or the evidence (Enclosure A2) is there any information to support such innuendo.

The establishment of a DCS Policy Advisory Group reporting to the EDO and removal of the Contracting Officer Technical Representative responsibilities from the Division of Technical Information and Document Control without reason and without evidence for need to do so are incomprehensible. Those appointed to the DCS Policy Advisory Group, which consists of Deputy Directors of all major user Offices, have been kept fully informed at all times and their advice has been solicited and heeded. There is no evidence that they think there has been mismanagement. The continuing close day-to-day operations interface between TIDC and the contractor's operations personnel are not facilitated by a COTR who reports to the EDO.

The stated goal to "... reduce substantially the current \$11 million annual cost" has apparently been used as the sole justification for redirecting the DCS program, since the evidence does not provide a coherent argument for such redirection. Such could have been accomplished without time-consuming "studies" to justify these actions, along with the innuendoes and misstatements of fact.

back of Introduction - blank

RESPONSE TO BRIEFING CHARTS\* AND EVIDENCE\*\*  
TO SUPPORT FINDINGS

OMPA STUDY OF DCS

RESPONSE

BRIEFING CHART 1 (p. 2 of Encl. A1)

Purpose

- To evaluate the current NRC Document Control System
- To identify and analyze options that will allow NRC to meet its document control needs at the lowest possible cost
- To respond to various related topics that are of interest to NRC management

No reason is given why this evaluation is either necessary or desirable and the various related topics that are of interest to NRC management are not stated.\*\*\*

BRIEFING CHART 2 (p. 3 of Encl. A1)

General Background - DCS

In November 1975, a Document Management Task Force found that at NRC:

- Information retrieval takes too much staff time
- No sure or systematic means exists for locating all documents on a technical problem or public inquiry
- Information is not available to the public on a timely basis.

The chart titled "General Background" is interesting - not for what it says, BUT for what it leaves unsaid! Each point of the chart is discussed separately below.

The statements of this paragraph are correct.

\* Enclosure A1 of Memorandum, Dircks to Ahearne, Nov. 18, 1980

\*\* Enclosure A2 of Memorandum, Dircks to Ahearne, Nov. 18, 1980

\*\*\* Emphasis added

OMPA STUDY OF DCS

SECY 76-433 requested Commission approval to issue an RFP and estimated that the DCS contract would cost \$9 million (1976 \$) over two years to install and \$5M (1982 \$) per year after that. The accompanying cost-benefit analysis assumed a high level of savings and projected eventual net savings to NRC of over \$20M annually (1982 \$).

RESPONSE

The second paragraph: "SECY 76-433 requested Commission approval to issue an RFP ..."\* It did not request permission to grant a contract. Either this fact was lost on OMPA, or they chose to ignore it. The statement goes on to allude to an oversell on the part of the program office: "... The accompanying cost-benefit analysis assumed a high level of savings ..."\* Nowhere is it said that: (1) the cost-benefit analysis was, in fact, done by OMPA (the office doing the evaluation) and that these were very preliminary estimates; and (2) that the data were projections of best estimates. The preliminary nature of the data is made abundantly clear in SECY 76-433 in both the text of the paper, the list of Assumptions, and the Cost-Benefit Sensitivity Analysis which, incidentally, is missing from the OMPA study. It is included here as OMISSION 1 to show the types of information that were ignored by the OMPA study.

OMISSION 1:

Assumptions (from SECY 76-433)

1. Historical growth in workload
2. Zero inflation
3. Full-staff utilization of system
4. Goal remains consistent: To provide a systematic means of locating all available documents related to NRC activities; increased from present 300 documents per day to 2,000 documents per day.
5. Present systems discontinued as required
6. First-year impact on operating costs is essentially zero.

Cost/Benefit Sensitivity Analysis (from SECY 76-433)

To continue present manual approaches to the storage, retrieval and distribution of hard-copy documents, with the above assumptions, and would:

OMPA STUDY OF DCS

RESPONSE

1. Require annual increases in staffing proportionate to the accumulated volume and increased paper flow
2. Require an additional 44.5 man/yr. to meet add-on efforts
3. Require increased storage space on the order of 6,000 sq. ft., initially, and 1,500-2,000 sq. ft. per year to accommodate hard copies in multiple-user files
4. Require continued reliance on an ERDA-TIC document management service to NRC (approximately 21 man-years and \$483,000)
5. Perpetuate the document control deficiencies outlined in the 1975 ERC Document Management Task Force Report, such as:
  - a. Staff and public inability to locate NRC information rapidly. Manual processing and retrieval on occasion has required as much as a month before the information is available to the user. Two weeks is the typical time required.
  - b. Manual searches for information by staff are the most expensive item for the regulatory and technical NRC staff. Manual searches are 75% less efficient than the automated, indexed microfiche retrieval. The Task Force estimated that 20% of staff time is applied to some aspect of the information retrieval problem -- making copies, distributing copies, locating documents, searching for information, etc.
  - c. Continued duplication of indexing, storage and distribution of NRC documents.
  - d. Continued lack of integrity and reliability of NRC document files. The Task Force observed that because of the lack of common, coordinated and automated approaches to records management there is minimal interoffice, interagency, or general user knowledge of what information is available.



Implementation of Automated Retrieval System would:

1. Provide an automated microfiche storage and retrieval system for all NRC documents. The system will comprise off-the-shelf hardware and software and will reduce staff time involved in retrieval of 75% by providing simultaneous access to indexes and documents by multiple users at remote cathode-ray tube (CRT) terminals; accommodate bibliographic-citation listings and subject indexes specifically tailored to the needs of the NRC staff, complete with cross references; produce monthly issues of index and abstract journals, produce microfiche of NRC documents for public availability, as well as microfiche that are automatically retrievable for high-resolution viewing at remote terminals by NRC staff.
2. Replace present distribution of hard-copy documents by multiple users and reduce hard-copy production by at least 15%.
3. Reduce the present system of multiple, duplicate files; e.g., docket 50 material is stored in hard-copy form in at least 5 locations. An estimated savings of 50% of storage space is expected.
4. Eliminate the present system whereby distribution lists for NRC documents are maintained by every line organization -- the proper maintenance of one name requires one-man-hour per year. If the name is maintained by five organizations there is a lack of cost effectiveness. There are an estimated 25,000 recipients of NRC information.

OMISSION 2:

Further, the second paragraph treats the costs and benefits in overall terms, failing to differentiate between administrative, or document control, functions and technical information benefits. This is important because of the later links in the OMPA study to "technical information benefits" that the OMPA study says were promised.

RESPONSE

OMPA STUDY OF DCS

The initial DCS system concepts were that:

- Off-the-shelf components should be used.
- The system should be modular, providing flexibility to adapt to future NRC needs.
- User needs were not well defined but demand for system would increase as system capabilities were added.
- Staff views should be incorporated into implementation plans for each major step in the system development.
- There would be a cost-benefit analysis at the end of phase 1 (about 1 year).

MISSION 3:

SECY 78-67 was completely ignored. The third paragraph should have discussed SECY 78-67, which is the Commission paper that defined the Proposed Contract Award for the NRC Document Control System. This paper laid out in greater depth the approach that the program office was proposing. Further the paper showed that the concept sketched by SECY 78-67 had been examined and con-curred in by the Offices of Nuclear Regulatory Research, Inspection and Enforcement, Nuclear Materials Safety and Safeguards, Nuclear Reactor Regulation, Standards Development, Executive Legal Director, Administration and Controller. Unfortunately, it did not show that members of all these Offices, except Standards Development and Nuclear Materials Safety and Safeguards, had participated in the review of the proposals and that a mathematician (computer applications) from the Commission's Office of Policy Evaluation had played a major role in writing the total design scope of the project.

The Statement of Work transmitted with this paper clearly laid out the first two years of the total design scope published in the RFP and companion documents, and it provided the structure for adding details as required by the total design scope.

The fourth paragraph is essentially correct.

The fifth paragraph says: "SECY 79-649, ... No technical information retrieval benefits were realized at that time (Dec. 1980)." This is the first time that OMPA singled out technical information benefits. No reason, no differentiation between technical and other types of information, and no elucidation is given. Further, no followup on this point is contained in the briefing package. It is not possible, even for one who is extremely familiar with the project, to know where this came from or why it is here.

Original contract was for a two-year period (June, 1978 to June 2, 1980) at a price of \$10 million.

SECY 79-649, responding to the promised cost-benefit requirement, reported that the system as a whole was cost-effective because administrative support functions of DCS were cost-effective, since \$5M annual costs were replaced by DCS. No technical information retrieval benefits were yet realized at that time (Dec. 1979).

OMPA STUDY OF DCS

RESPONSE

Contract provided that the term could be extended for a third and fourth year at NRC's option. The third year option (June 80 to June 81) was exercised at a negotiated price of about \$11M.

Total contract price is now \$24M, including \$10M original two-year contract, \$3M docket backfit effort for year 2, and \$11M for year 3.

BRIEFING CHART 3 (p. 4 of Encl. A1)

OMISSION 4:

After the paragraph on SECY 79-649, the next major action, i.e., addition of a second shift, which is one-half of the size of the first shift, is completely ignored by the OMPA study! The justification for adding the extra half shift was included in the FY 80 Supplemental budget request and approved by the Congress. The justification was provided by NRR and the reason for the extra half shift was made abundantly clear. Also, at the time of preparation of the supplemental budget request, the fact that this backfit effort would last at least four years was made known to the Budget Review Group and to the Commission. It was approved.

This paragraph is misleading to the extent of being erroneous! The items that are referred to as contract "costs" are actually "ceilings." Through TIDC cost control efforts, brought about by budget limitations, the actual cost will be about \$2 million less than the ceiling of \$11M, or somewhat less than \$9M with all the scope of work being implemented.

Areas of Findings - This briefing chart includes seven "major areas": NRC's needs; DCS use; DCS benefits and savings; component costs of DCS; changes to reduce cost; management issues; and other issues.

These seven "areas" of findings do not, in any perceptible way, relate to the Dircks' memo. The seven findings bear no resemblance to the proposed "DCS Actions," Attachment 1 to the Dircks' memo. Further, the so-called "evidence package" (to be discussed later) bears absolutely no "evidence" to relate to either the "findings," the Dircks' memo, or the proposed DCS Actions.

For the reader's convenience I discuss these below in the order in which they appear in the "briefing package" and OMPA study.

OMPA STUDY OF DCS

RESPONSE

BRIEFING CHART 4 (p. 5 of Encl. A1)

A. Is the DCS meeting NRC's needs?

General Comment: Before discussing each "Finding" separately, some general information on this question is necessary. It appears that this information, although given to OMPA, was either ignored or not understood. Perhaps, because of its volume and the time necessary for understanding the nuclear licensing process, the amount of information was a prohibiting factor. At any rate, it was not included in the OMPA study. Since this material is necessary it is included here as Omission 5.

OMISSION 5:

The technical information needs of the licensing/regulatory staff have a long history. The documentation and studies on these needs start at least as early as 1967 and continue through 1980. The documentation and requirements analyses take many forms because they were done by many groups, including contractors, as well as internal technical and professional staff. These are listed in Table 1.

From these studies the generic model for the System as a whole was constructed and disseminated to prospective contractors. During the proposal conference all participants were apprised of at least five file cabinet drawers full of references and special studies that were germane to System design. To assure responsiveness of the System design, the Source Evaluation Board (SEB) developed an approach tied to implementation plans with their focal point being deliverables for each task.

This approach required the Contractor to take the models laid out in the many staff studies and confirm these models, making changes where necessary. This approach of confirmation of past studies and changes should be obvious for even a casual reader of both the RFP and the Contract. Task 7 even defines the procedures by which interfaces are established.

One of the reasons why almost everyone outside the program office had difficulty understanding the implementation plans is that they have not taken the time to read the volumes of information available on past studies and histories. The System, and all its component subsystems are products of 10 to 14 years of study and work. No implementation plan or report from the Contractor is a stand-alone document! If that were the

Table I  
Chronological List of  
Studies of Technical Information Requirements of Licensing  
and Regulatory Staff

| <u>Date</u>  | <u>Description</u>   | <u>Comments</u>  |
|--------------|--|--|
| 1967         | Computer Handling of Reactor Data for Safety (CHORDS)  | System was overly ambitious and complicated. It died from lack of management and funds   |
| 1967         | Fiche Index to Nuclear Dockets (FIND)  | This system was replaced by DCS  |
| 1967-1969    | Indexing Studies   | Four major efforts during the 12-year period were undertaken, but none were useful to staff. DCS system evolved from these efforts   |
| 1969         | Reactor Operating Experience and Reactor Construction Experience   | The publications were terminated when person responsible for writing and managing was reassigned   |
| 1972         | Automation of Licensing Activities   | Plan not carried forward because no agreement on plan could be achieved  |
| 1972         | National Archives and Record Services (NARS) Study of NRC  | Cited need for automated information retrieval system.   |
| 1972         | Proposal for Collection of Operating History and Failure Data on U.S. Nuclear Power Plants                                   | This was the beginning of the current Systematic Evaluation Program that is now being supported by DCS.  |
| 1973         | Task Force Report to the Director of Regulation  | Report recognized information problem  |
| 1973-present | Nuclear Plant Reliability Data System (NPRDS)  | This commercial venture supported by the nuclear industry and NRC depends on voluntary input from utilities and vendors. It is therefore incomplete. Commission is considering future. |
| 1974         | LER Pilot Program  | Staff did not find this acceptable   |
| 1974         | Battelle-Pacific Northwest Laboratories Report on "A Review of Regulation's Management Information Systems and Requirements" | Study resulted in a very complicated, unmanageable system.   |
| 1975-1976    | Document Management Task Force Report  | Basis for NRC information management program.  |

OMPA STUDY OF DCS

RESPONSE

case, each of the documents would be multivolume and would take hundreds of manhours to write. Finally, there is adequate experience to convince the program office that even then, the documents could not stand alone.

Finally, this approach (i.e., implementation plan, technical staff approval where necessary, and program office approval) is the only way an integrated information system can be effectively installed. The management of the newly created NRC concluded not only that the staff could not be augmented (by 12 to 15 full-time staff for systems analysis and design) but NRC would probably not have need of these types of people on a sustained basis. Other manpower needs that could not be obtained by contract were overriding and immediate.

- A. 1. NRC chose not to conduct a systematic assessment of its specific user needs for information storage and retrieval either prior to or subsequent to the development of the DCS, because NRC intended the system to be flexible in meeting user needs as they became apparent.

While this statement is neither positive nor negative, it conveys a negative tone, primarily because of loaded words such as "systematic" and "specific." This negative tone, or implication, could have been avoided by simply reversing the order of the sentence; for example,

"Because NRC intended the system to be flexible in meeting needs ...," or

"NRC chose not to conduct an assessment of specific user needs ...,"

It is curious that this statement was even included because the so-called "evidence" does not support any type of conclusion.

From the "evidence" it is clear that:

- (a) The decision was made early by NRC to approach its information storage and retrieval problems in a manner that OMPA apparently finds objectionable, and the decision was made for numerous reasons. The reasons and the actual design were never explored by OMPA, although an exhaustive quantity of information was given to them, and the complete five file cabinet collection was opened to them. A total of

OMPA STUDY OF DCS

RESPONSE

532 hours was spent over about four months by the program and contract offices explaining the approach and what was available to be reviewed and trying to explain the many phases and complexities of the project (i.e., contract, work scope, process, and many others).

- (b) Numerous analyses and identifications of AEC/NRC problems exist in reports given to OMPA. However, it takes time and knowledge of the licensing approach that has been used historically to understand these reports. AEC and NRC had put hundreds of manyears and millions of dollars into studies from 1967 through 1975. Many of these reports were made available to the study group, but no indication is given that the reports were read or understood. The numbers of staff man-years that went into interviews, staff evaluations, and descriptions of problems appear to have gone unnoticed, despite TIDC's emphasis on these to each study member.

The "evidence" relating to the user needs is copious. It comprises a 10 to 15 year litany of information uses by the staff in the licensing and study evaluations of nuclear materials and applications. The confirming history of one failure after another is chronicled because the various information systems were defined to address one problem by one group on one subject. Further, each of these systems contributed to the protracting of the licensing process because they increased the isolation of one group from another. In short, the existing documentation is a history of numerous failures, seemingly endless studies and exorbitant amounts of money put into band-aid solutions for a gaping wound. AEC Regulatory and NRC information needs for an integrated system of information that everyone could use were clearly laid out time and time again. The requirements are overwhelming for an information system that can enhance communications between groups and offices and provide, for the first time in the history of the licensing process, an ability to link documentation on changes in plants, examine similar problems in either similar or separate plants, and to create a single data base from a very large file (about 3 million records) which can provide a reproducible set of data.

The validity of the licensing process requires that data and analyses be credible. The NRC technical and professional staff must be able to access licenses and staff data and examine the files for all plants of a similar design and, at a minimum, understand how the licensees' conclusions were derived. Before this System was in place and functioning,

OMPA STUDY OF DCS

RESPONSE

- A. 2. A number of general administrative and technical needs can be inferred from initial system proposals and limited experience with the system to date:
- a. Establish a systematic means of locating all documents on a particular topic
  - b. Reduce professional staff search and retrieval time
  - c. Enable NRC to meet statutory requirements and ensure timely notification of licensees and public of availability of NRC documents
  - d. Create a central file index and ensure file integrity
  - e. Eliminate duplication in storing and distributing documents

there was no chance that this could be done. For example, two years before preparations for this System were begun, AEC published three separate reports on plant availability by three different groups in Regulatory and arrived at three different results, within the same year. These data came from plant operating reports, but no two groups had the same collection.

In order to create reproducible results, any agency, or group, must have one central data set. For an agency whose uses are as different and diverse as the NRC's, that set of data must come from an integrated system. An integrated, on-line system is expensive and large.

Somehow the study group seems to have confused the goals or objectives for long-range orientation of the project and accomplishments and system implementation.

While item 2 is not wrong, it is not particularly relevant to anything in the "findings." The three pages of "evidence" devoted to supporting Finding A.2 (pp. 3-5 of Enc1. A2), are simply restatements of problems which are summarized by the "finding." All that can be even inferred from the "findings" is that NRC had a number of documentation and information retrieval problems.



OMPA STUDY OF DCS

- A. 3. Although the DCS was proposed and approved as a technical information retrieval system, it is not yet fully developed to serve this purpose.

RESPONSE

Another curious point in this study arises here. This, coming immediately after item A.2, above, tends to suggest that: either the study group knew that with an information problem as large as the NRC's there was no conceivable way that technical information needs could be serviced before administrative requirements for data base reliability (and, as a corollary, document control) were met; or this was intended by the OMPA staff as being positively supportive of the overall approach by the program office.

The System had been operational only five months when the TMI-2 accident occurred. Had the accident not required so many different functions of the System in such a short period of time, it would have had far more extensive tests performed on it in a more routine manner. However, the TMI-2 shock produced major perturbation within NRC, and every effort had to be expended to accommodate information requirements of Congressional Committees, Presidential Commissions, NRC's own investigations and public and FOIA requests, plus numerous letters and information requests from private citizens.

It is significant to note that during and subsequent to the accident, NRC received absolutely no complaints about either its response to information requests or about the integrity of the file. It is also significant to note that a "normal" Docket 50 file comprises an average of about 6000 documents, not including applicable issues. The TMI-2 file, at the end of 1980, included some 20,000 documents.

Throughout all this document processing and handling (in the time interval of about six months), baseline data were taken whenever time could be found. Nonessential documentation and tasks originally specified in the Contract were postponed. TMI-2, in fact, cost NRC about eight months in terms of System schedules and implementation, although the Contractor met all his deliverables.

All of this is ignored - or simply not understood - in Finding A.3 of the OMPA report.

One further point on Finding A.3 is germane to this discussion - that of the Subject Index implementation. The OMPA study group apparently does

OMPA STUDY OF DCS

RESPONSE

not understand that installing a System such as this is a highly-complex, multiphase process. For instance, implementing a subject-search capability requires that the users reach a simultaneous agreement on terminology and search process. These are not independent functions and are, in fact, made easier or more difficult depending on the relative organizational cohesion in any agency or company. In NRC, agreement has been difficult to achieve.

Some terminology and search strategies were agreed to at the outset by the majority of the staff. This agreement and utility was based on what the AEC's Technical Information Center had done since 1968 for the AEC's Directorate of Regulation. Also, these descriptive cataloging processes are the subject of ANSI standards and are relatively well defined. These functions, then, could proceed rather quickly. This agreed-upon terminology and the search strategies included things such as Docket Number, Author, Recipient, Corporate Source, etc.

The problem area is, and will continue to be for some time, the Subject Terms and Subject Search. The office in charge of the Contract was fully aware of the problem areas and, in fact, briefed all parties, including the Commission, that this was a problem area. Concurrence on terminology, alone, is difficult. Subject search strategies will proceed even more slowly.

These are some (but not all) of the reasons that NRC originally laid out the philosophy that the System would be implemented on a modular basis. By November 1979, NRC and the responsible program office had negotiated adequate agreement among most of the technical/professional staff to direct the Contractor to lay out in three logical steps the production of an interactive, on-line subject index. As the Contractor finished each of a series of documents (these are not, and were not intended to be, stand-alone documents), he has begun work on the corresponding software module.

OMPA STUDY OF DCS

RESPONSE

Once reasonable agreement was obtained from a majority of staff as to what type of index they needed, work was begun on the first module for the Boolean capability. The design specification was delivered to NRC December 12, 1980, and targets the spring of 1981 for getting this operational on the processors.

The staff has requested that this capability be available on-line, interactively at their terminals. It was the intent of TIDC to perform additional cost analyses of this option and submit this to the users and to the Office Directors. This systematic process should be followed, and decisions as to whether to make this capability fully operational should be based on the collective responses.

A. 4. The DCS satisfies some, but not all, of NRC's administrative and technical document control needs.

This is another of those curious and mysterious findings. It is totally irrelevant.

The four pieces of "evidence" in the study are almost nonsequiturs. The lists of administrative services and technical services are correct.

Evidence for Finding A.4 (from Encl. A2, p. 7)

Point 1 - The following is a list of the major administrative services and products provided by DCS:

- Daily Accession List of documents added to DCS data base
- Title List of Documents Made Publicly Available (NUREG-0540)
- FOIA Responses
- LPDR Accession List
- List of documents sent to Central Files
- Congressional Correspondence Report
- Regulatory Information Distribution System (RIDS)
- SECY Chronological Docket List
- DCS Data Base Tapes for PDR
- "Public Only" tub of microfiche for PDR
- NTIS Service (1 copy of docket material to NTIS)

OMPA STUDY OF DCS

RESPONSE

Point 4 - The following is a list of major technical information services and products provided by DCS:

- IE Bulletins, Notices and Circulars Listings
- Incident Response Center Drawings Index
- IE Internal Filing Systems Subject Codes
- State Emergency Plans Microfiche
- Licensing Board Notifications and Generic Technical Issues Printouts
- Antitrust Document Indexes
- ELD Subject Codes and Legal Summaries
- SD Codes and Standards Reports
- NMSS Internal File Codes
- Special Reports on TMI, Licensee Event Reports, Inspection Reports, cumulative listings of certain classes of documents such as NUREGs, Commission Papers, Research Information Letters, and State Emergency Plans

Point 3 - In the Technical Proposal to NRC, TERA indicated that the Automated Records Management System (ARMS) would satisfy NRC's administrative document control needs [identified in Finding A.2, see page 3] in the following ways:

- enable rapid access to documents
- provide accurate retrieval
- ensure file integrity
- eliminate need for duplicate files among staff members
- reduce document handling time
- provide user-oriented document access
- enable compliance with statutory requirements

(TERA Technical Proposal, p. iii-iv)

What relation do Points 1 and 4 have on Point 3 (see following)? This third piece of "evidence" is nothing more than a reflection by a proposer of NRC's original objectives.

## OMPA STUDY OF DCS

Point 2 - Of the three administrative needs identified in Finding A.2 --

- elimination of duplication in storage and distribution
- file integrity for documents in data base, and
- central file index

DCS is completely satisfying only one -- file integrity.

The inability of DCS to satisfy NRC's need to reduce the volume of hard-copy files is discussed in Finding C.5

It is not possible for DCS to prepare a central file index because not all documents generated by NRC are routinely sent to TERA for processing.

(Survey of File Center Supervisors)

BRIEFING CHART 5 (p. 6 of Encl. A1)

B. To what extent has the DCS been used to date? What usage can be anticipated?

## RESPONSE

Of "evidence" Point 2, the System was never designed nor intended to replace the filing systems used in NRC's office. It was designed to replace filing centers.

During the six hours that the program office had to review ("go over") the study that OMPA took four months to prepare before it was sent to Chairman Ahearn, the finding C.5 that is referenced here was found to be totally incorrect. As a result the finding C.5 to which this refers was deleted before the report was sent down to the Chairman, but deleting this reference to it was overlooked.

This could have been one of the most useful products of this whole exercise. However, the approach, particularly with the surveys, really causes question of why the report, as a whole, was done.

For example, the use of two totally different surveys raises several questions: (1) Why were two surveys done? (2) When where they done? (3) Why are the two not correlatable?

In fact, the two surveys are not clearly identified. Consequently, very careful reading is required to find out that two studies exist. The "findings" use the two almost interchangeably, although they are different. At best, considerable confusion is the result. For example, on the basis of the "briefing package," Finding B. 1 seems almost to contradict Findings B. 4 and B. 5. When the "evidence package" is consulted, only one survey is footnoted, and the reader is referred to one survey. Upon consulting the Appendix (as the footnote says to do) the reader finds what appears to be two explanations of a survey. Close

OMPA STUDY OF DCS

RESPONSE

scrutiny of these two: (1) Methodology for Survey of Identified DCS Users, and (2) Methodology for MPA Random Survey of Potential DCS Users, yields two different surveys. Interesting!

Despite the fact that no dates are shown as to when the surveys were conducted, a little scouting among NRC staff gives: Survey 1, "about" July 6, 1980; Survey 2, "sometime in September 1980." This causes the reader to question: Why was the second survey performed? No indication is given that the first one was faulty. Did the second survey include the "identified users" from the first? How could they be sure that the second "survey" included potential users, as it says.

Survey No. 1 is well explained, analyzed, and presented so that the reader can tell what was done and why. Survey No. 2 looks like a "quick-and-dirty" piece of work.

And yet "Finding B.1," and half of "Finding B.2," use Survey No. 2 as their only pieces of evidence.

- B. 1. About a fourth of all potential users are currently using the system. Only about a third of these use the system daily.

Who are OMPA's "potential" users? The "evidence package" has as its sole piece of "evidence" the "Random Survey." Now - is that Survey 1 or 2? After deciding that Survey 2 is the "Random Survey," the reader finds that 25 of the 35 people questioned who have taken the training are System users. Of these 25, eight use the System daily, five more use it several times each week, and four use it at least once weekly. That means that 17 of the 25 trained people who were surveyed use the System once or more each week. This means that 68%, or more than two-thirds, of the people trained use the System more than once each week.

OMISSION 6:

What the study does not say is even more significant. By the end of July 1980 - about the time these studies were done - only 487 people, out of a staff of more than 2200 had been through the training; i.e., only 22% of the staff had had any formal training. That training had been introductory in nature but was somewhat more advanced than instructions on how to turn on the terminal.

OMPA STUDY OF DCS

RESPONSE

OMISSION 7:

These surveys - BOTH - made no mention of "other services"; for example, hard-copy reports that the staff probably does not realize are products of the System or of expedited services from the central file areas because the user "used" the System indirectly. These surveys related only to direct use of terminals by the staff. This implied an on-line, interactive system. No consideration was given to anything else.

Thus, the OMPA study group appears to have chosen to overlook two crucial results from the data: (1) System usage is directly related to training and (2) System usage is not solely confined to an on-line use of terminals.

One sees immediately NO connection between "Finding B.2" and the two "evidence" points. Further, the assertion of "about equally" apparently comes from the parenthetical sentence in Point 1. Apparently, OMPA also chose, this time, to ignore its "Random Survey" because this works out as closer to 70% than 50%. The "Random Survey" (Survey 2) findings do not support this. They say 68% of the use is technical. This "finding" in the "evidence" package cites this, but one can only surmise that these were ignored and the use statistics, reported monthly by the Contractor, were the only reliable source of data.

But, if the "Random Survey" is ignored at this point, why then was it relied upon for the sole source of confirmation for "Findings B.1"? And why was the apparently unsupported "Finding B.1" put first - unless that's all the majority are supposed to read?

B. 2. system use is about equally divided between administrative and technical uses.

Evidence for Finding B.2 of Briefing Chart 5 (from Encl. A.2, p. 11)

Point 1 - TERA supplied MPA with document search statistics for the period March-August 1980. The data indicate the number of terminals per office and the number of searches for those terminals. (MPA inferred technical or administrative use from the location of the terminals.) The MPA analysis of this data indicates that there are more individual technical users and that these technical users generally perform single searches; whereas, there are fewer administrative users, but they generally conduct multiple searches. See Table B-2: "Document Searches by Office for Period March-August 1980," for specific information.

(Terminal Use Statistics)

Point 2 - Responses to Question 6 in the MPA Random Survey of Potential Users, "For what work activities do you use the DCS? --- administrative? technical? or other professional?" indicate that 68% use the system for technical purposes.

(Random Survey)

OMPA STUDY OF DCS

- B. 3. NRR and IE account for nearly all use of the DCS by the major program offices.

- B. 4. There are a number of system limitations that inhibit use of the DCS. Primary limitations are lack of a subject search capability and an incomplete data base. Lesser factors that may inhibit DCS use are data base accuracy, hours of operation, number and type of terminals and their locations, and user skills in operating the system.

RESPONSE

Current terminal locations were selected to assure that a preponderance of users for at least the initial System were in NRR and IE. In fact, during the Document Management Task Force activities and the RFP writing and Source Evaluation Board (SEB) activities, NRR and IE volunteered to be the first users of terminals. As a result, the first cost analysis relating specifically to the System (summarized in Appendix M to SECY 79-649) was based on Docket 50 (and related nuclear plant information).

OMISSION 8:

The OMPA study fails to record that, in fact, 22 of the 44 user terminals are in the three-building complex that houses NRR and seven are in the file unit for that building. So, essentially, 29 of the 44 terminals are used in NRR. Further, eight of the other 19 are either in IE Headquarters or Regional Offices. The study also fails to note that these two offices account for about 63% of the available user terminals and Table B-2 (p. 12 of Encl. A.2) represents an arbitrary breakout referred to by OMPA as "inferred," "technical/professional" searches and "administrative" searches.

This is the only substantive "finding" in the whole of "Finding B." This is also the first time the reader can infer a "User Survey," which he must surmise, by now, is Survey 1.

OMISSION 9:

No mention is made of the subject indexing of documents already being done or of the tailoring and design of software to be implemented during the spring of 1981. This serious omission is all the more difficult to account for because all the documents pertaining to the



OMPA STUDY OF DCS

RESPONSE

- B. 5. System use would increase if these limitations (Finding B.4) were removed; however, in the absence of a clear understanding of user needs, it is difficult to project how great this use might be.

subject indexing and search strategies were made available to the study group, and the scheduling charts were explained in detail.

The OMPA "evidence package" speaks for itself and the user speaks strongly.

This "finding" along with Finding B.4, constitutes about the only supported (by the "evidence") allegations in all of Section B.

However, it should be noted here that both Findings B. 4 and B. 5 - supported by the responses from the Offices - are directly opposite to the "Actions" ordered by Dircks' memorandum of November 18, 1980. These are directly countermanded by Actions 1, 3, 5, 10, and 11 and conflict directly with mandated Actions 4 and 5 (Attachment 1 of the memorandum). Once again, the challenge to logic between "findings" and mandated actions proves formidable.

BRIEFING CHART 6 (p. 7 of Encl. A1)

- C. To what extent has the DCS provided benefits and savings to NRC?

NOTE: OMPA failed to include any reference, background, or chronology of NRC staff and contractor analyses of NRC's information retrieval problems, although these staff-prepared analyses and studies dating from 1967 are still valid with regard to information retrieval problems. Because of the lack of background or reference material the reader is left to question: What is the purpose of the System and, consequently, the basis of this question? When were the savings projected to have accrued by the staff? Or were any savings projected? What form(s) do these benefits and/or savings take?

The OMPA study assumes, or appears to assume, that the reader knows all the answers to these questions and knows all the salient features of the background of the System. Also, it appears to assume that the "Findings" are self-evident and noncontradictory. Even on the face of the "Findings," contradictions are apparent (and will be discussed later), and when the

OMPA STUDY OF DCS

RESPONSE

- C. 1. The two primary areas in which savings or benefits can be realized (and the 1982 dollar values associated with each) are:
- a. Savings in technical staff time that otherwise would be spent searching for and retrieving documents (0 to \$20 million savings possible), and
  - b. Costs that NRC would otherwise incur to perform certain core administrative functions (\$4 to \$6 million).

Evidence for Finding C.1 of Briefing Chart 6 (from Encl. A.2, p. 18)

Point 1 - "Increased efficiency and responsiveness to the staff and public are the major benefits of the automated system; however, the cost/benefit analysis (Table C-1, p.22) also indicates a cost savings of \$50.1 million over the next five years."

(SECY 76-433, p. 2)

"evidence" is examined, the five "Findings" under major "Finding C" are a set of logically contradictory statements not supported by the "evidence."

This is a peculiar "finding" which becomes downright curious when one examines the "evidence" used to support it.

As was discussed earlier in this paper, SECY 76-433 and its cost/benefit analyses were prepared for an entire information management program. The DCS, as it now stands, and the whole System, as it was envisioned, do NOT comprise the whole information management program. The use of the DCS and a contractor to provide services allowed TIDC to free personnel from some positions and retrain them for others. This represents a cost avoidance to the agency that was not even considered in SECY 76-433. OMPA's continued reliance on SECY 76-433 instead of SECY 78-67 represents either willful intent to mislead the reader or misleading of the reader because of failure to grasp the complexities of information management.

OMISSION 10:

Further, although OMPA knew that their own (OMPA) staff had prepared the table in SECY 76-433, that significant fact was not included. TIDC gave the input to OMPA and requested a cost/benefit analysis. The results of that request are referred to by OMPA as Table C-1 (which is Appendix E, SECY 76-433)

TABLE C.1

## APPENDIX E - CONSERVATIVE COST/BENEFIT ANALYSIS FOR DOCUMENT CONTROL SYSTEM

| PRESENT SYSTEM<br>(5 Years)  |                      | PROPOSED SYSTEM<br>(5 Years)  |   |
|--|----------------------|-------------------------------|---|
| Operating costs (\$19,434,000 x 5 yr.) <sup>1</sup>  | \$ 97,170,000        | \$ 9,160,000                  | Est. developmental costs <sup>4</sup>   |
| Historical increase in workload costs (\$1,100,000 x 5 yrs.) <sup>2</sup>                  | 5,500,000            | 33,560,000                    | Est. NRC operating costs begin FY 77 costs (\$8,390,000 x 4 yr.) <sup>5</sup> |
| Add-on operating costs to meet established requirements (\$2,672,000 x 5 yr.) <sup>3</sup> | <u>13,360,000</u>    | <u>23,206,000</u>             | Est. cost on continuing present system for initial year                       |
|  | <u>\$116,030,000</u> | <u>\$ 65,926,000</u>          |   |
| Annual cost display  |                      |                               | Annual Cost display <sup>6</sup>  |
|  | FY 77 - 23,206,000   | 35,796,000 - FY <sub>77</sub> |   |
|  | 78 - 23,206,000      | 13,350,000 - 78               |   |
|  | 79 - 23,206,000      | 8,390,000 - 79                |   |
|  | 80 - 23,206,000      | 8,390,000 - 80                |   |
|  | 81 - 23,206,000      | 8,390,000 - 81                |   |

<sup>1</sup> Includes direct NRC costs for document management: copying at \$1,310,000, storage at \$624,000, distribution at \$1,400,000; 21 man/yr. (85 functional positions) and reimbursable costs of ERDA support \$483,000; required staff time to search and retrieve information at \$15,617,000.

<sup>2</sup> Experience at NRC indicates a cost of \$.25 per page of documentation with an annual internal volume increase of about 4.5 million pages per year.

<sup>3</sup> TIC contract meets program requirements for apx. 10% of NRC documents, additional 44.5 man/yr. are required to meet remainder.

<sup>4</sup> Provided by contract over 2-yr. period.

<sup>5</sup> Proposed system will have the following cost impacts:

- Reduce retrieval costs by 75%
- Reduce hard-copy requirements by 15%
- Reduce storage space costs by 50%
- Reduce distribution costs by 30%
- Eliminate costs to replace 10% loss of user file copies annually.
- Generate improved NRC document services to all users of information.

<sup>6</sup> Proposed system generates savings of \$50.1 million over a 5-yr. period.

<sup>7</sup> Proposed system returns developmental costs in second year.

OMPA STUDY OF DCS

RESPONSE

In all the SECY papers relating to the System as a discrete entity, TIDC did its own cost/benefit analyses.

OMISSION 11:

No mention was made of the fact that SECY 76-433 was a very preliminary estimate to look at the potential of setting up an information system. The paper was prepared to request Commission permission to issue a request for proposal (RFP) to see if contractor assistance of the type required by the NRC, as a whole, could be found.

The meaning of all of this is that the above "evidence" is irrelevant.

Point 2 - Appendix K of SECY 79-649 indicates an estimated annual savings in the cost of performing certain administrative functions to be \$5.3 million, broken down as follows:

- "(a) The projected annual cost to the NRC of having DOE/TIC produce this document (title list journal) through the former program arrangement was about \$4.2 million. ...
- (b) The computer time share cost per year to produce this listing (daily accession list) was estimated to exceed \$1 million.
- (c) The computer time-share cost to perform this function (RIDS) was estimated to be \$120 thousand."

(SECY 79-649, Appendix k)

Point two is an applicable, pertinent point. The same is true for Point 3. Point 4 is only a reference to other findings.

OMPA STUDY OF DCS

RESPONSE

Point 3 - "The NRC has a basic operation cost of about \$2.5 - \$3.0 million in computer or time-sharing costs to process the volume of documents that it makes publicly available."

(Memo Donoghue to Cornell, 6/10/80)

Point 4 - See Findings C.2 and C.3 on page 21 for detail on anticipated savings in technical staff time.

Point 5 - The dollar value of annual savings in technical staff time can vary substantially as a function of (1) the percent of their time that staff members spend searching for documents and (2) the percent of search time that is saved by using the DCS. The effects of these factors on savings, assuming a \$50,000 cost (salary and benefits) for each technical DCS user, is shown in Figure C-1.

Point 5 is based on a table that I have previously shown did not specifically pertain to the System; additionally, a number of omissions were identified that render the table useless. However, the OMPA point is valid that "The dollar value of annual savings in technical staff time can vary substantially as a function of ... the percent of search time that is saved by using the DCS."

OMISSION 12:

While the general thought presented by this is partially correct (i.e., the thoughts in (1) and (2) of Point 5), the point fails to complete its thought because it omits the importance of all the "old" documents; i.e., the so-called backfit of documents. To be correct Point 5 should read:

"The dollar value of annual savings in technical staff time can vary substantially as a function of (1) the percent of their time that staff members spend searching for documents, (2) the percent of search time that is saved by using the DCS, (3) the number of required documents available to the staff via the System, and (4) the number of terminals available to staff or use."\*

\* Emphasis added

OMPA STUDY OF DCS

RESPONSE

- C. 2. The DCS has not yet provided the substantial potential staff time savings that were cited in the original justification for the system; this shortfall is explained in part by the fact that planned systems capabilities are not currently scheduled to be fully developed and implemented until 1983. The DCS may help NRC meet its safety responsibilities more effectively.
- C. 3. The limited capability of the DCS to "locate all documents on a particular subject" has permitted technical staff time savings of approximately 12 staff years.

OMISSION 13:

Further Fig. C-1, to which Point 5 refers, is based on the cost/benefits for an overall operating System, as presented in SECY 76-433, and not the specifically tailored, phased approach specified by SECY 78-67, the RFP, and the contract.

As pointed out above, SECY 76-433 was a best-estimate analysis done on an information program. The System as described in SECY 78-67 and subsequent documents, comprises an integral subset of the whole program.

Although negative in tone ("The DCS has not yet provided the substantial savings ..."),\* this briefing point appears to be fundamentally positive. However, the reader finds himself puzzled as to what it really means.

The "evidence package" again uses the SECY 76-433 paper, with its MPA produced cost/benefit analyses, which are, as discussed above, not applicable to the System. Once again, the 1980 OMPA study is trying to compare a whole program (SECY 76-433) with a sub-set of that program!

The OMPA estimate in "Finding C.3" is based on the best available current data and is a reasonable estimate of manpower avoidance based on System use in 1980.

OMISSION 14:

OMPA estimated a 12 staff-year time saving based on use statistics for the period March through September 1980. This period is the last half of FY 80. OMPA failed to note that the data in SECY 79-649, cited by OMPA, referred to the whole of FY 81, and not to the last six months of FY 80. Thus the OMPA findings show that the 12 staff-year time saving actually occurred a year earlier than was anticipated by SECY 79-649 and thus the time saving is double that expected.

OMPA STUDY OF DCS

RESPONSE

- C. 4. Unanticipated benefits for the technical staff have resulted from the development of specialized reports not identified in the original DCS contract.

A casual perusal of the Statement of Work (SOW) for the original request for proposal and the contract itself reveals discussions of "other reports as required." Estimated delivery dates in fact were tentatively established. How, then, can these requirements be referred to as "un-anticipated"?

Evidence for Finding C.4 of Briefing Chart 6 (from Encl. A.2, p. 23)

Point 1 - "The Three Mile Island, Unit 2 ... Special Title Lists, ... complete with 30 full sets of titled microfiche, were provided on short notice with an accuracy that would not have been possible had the DCS not been in existence."

(SECY 79-649, p. 2)

This "evidence package" leaves one thunderstruck! And MPA is correct. The program office did, in fact, not anticipate TMI-2 - nor the aftermath of TMI-2.

Point 2 - ELD has indicated that they have received considerable benefit from the file established by TERA to track the Stanislaus Antitrust activities and the ELD Special Subject Index File.

Also, the program office did not foresee the need for the antitrust file. MPA is correct here. However, the second half of this point is NOT correct (see Omission 15).

"It is estimated that if the automated systems were not available, an additional three staff years of effort would be required to perform this function manually."

IE has cited the LER Tracking System as a benefit of the DCS that was not specifically identified in the original contract.

"We have begun to use the DCS as a method of tracking all documents related to each licensee event report. Termination of the DCS would eliminate such tracking systems."

(Office Director Comments)

OMISSION 15:

One of the original bases and justifications for technical use of the System was the cross-correlation of all information and data related to a topic, document, or special file. A second reason was for the collection of all operating-reactor data, including LERS, inspection reports, special license-submitted reports, IE investigation reports and operating reports. The original design bases, including some representative samples of reports, were given to OMPA early in June 1980. All these samples and design bases described users and applications of operating data and discussed ways to retrieve and utilize evaluated information files. Other uses of the System, as originally described to NRC senior staff and Commissioners and to prospective proposers, was reviewed with additional, different OMPA staff in July 1980. The program office assumed that all this material and information was being transmitted to the person who would write the reports. Much of this information is, however, missing either

OMPA STUDY OF DCS

RESPONSE

Point 3 - Since the contract was awarded, numerous offices have requested additional services specific to their particular needs. The services TERA has provided include:

Antitrust Secure Data Record (ELD)  
Supplementary legal subject code and description (ELD)  
Licensing Board Notifications (NRR)  
Generic Technical Issues Report List (NRR)  
Docket Data Base (NRR)  
Meteorology/hydrology Data Base (NRR)  
Systematic Evaluation Program (SEP) Status Report (NRR)  
LER Quarterly Monitoring Report (IE)  
Periodic Listing of Bulletins, Notices, and Circulars (IE)  
Incident Response Center Drawing Library (IE)  
LER and Bulletin Response Tracking (IE)

" ... An average of two requests for special reports [one time only] are received and processed [by TERA] each day." (p. 15)

(DCS Services Report)

C. 5. The total cost of performing a number of related administrative functions using the DCS is probably less than the cost of performing these functions under separate contracts.

Evidence for Finding C.5 of Briefing Chart 6 (from Encl. A2, p. 24)

Point 1 - "It is estimated that these tasks (Title List, daily accession list, distribution sheets) would have cost the NRC about \$5.3 million [\$4.2 million, \$1 million, \$120,000, respectively] in the first year of the DCS contract if they were continued to be done by outside contractors, whereas, the total DCS contract for the first year was \$4.5 million."

SECY 79-649, p. 1)

as reference material or as "evidence." There is no indication that the seven different people who participated in the study over five months communicated among themselves.

This point is especially interesting. Nowhere in this list of "special services" does the Congressional Tracking Report, which is prepared for OMPA, appear and yet it is one of the larger consumers of contractor manpower. AND it IS referenced in the DCS Services Report.

Also, the manpower required by these so-called "special services" was reported in each of the three scheduled Design Reviews. Copies of the reports of each Design Review were given to the OMPA study group at the beginning (in June 1980) of their study, but the reports do not appear as either references or "evidence."

NOTE: This is a relatively cautious way of stating an opinion in a "briefing package." When the "evidence package" is consulted, it is clear why it could not be stated directly.

Point 1 of the "evidence" is correct. However, Points 2, 3, 4, and 5 indicate that either fractional pieces of information were submitted by the Office of Administration (ADM) in its "Office Director Comments" or that OMPA either could not or did not compile the information. Further, the ADM "Office Director Comments" raise questions as to who in ADM has responsibility for this type of information.



OMPA STUDY OF DCS

RESPONSE

Point 2 - ADM estimated that the DCS replaced functions that they would have had to pay about \$8 million for during the two years the contract has been operational (ADM did not provide a breakdown). Examples that were provided by some of the branches in ADM of functions which may cost more under separate contracts are:

- An additional \$360K per year in timesharing costs for a locator system to locate submittals and respond to staff and licensee queries regarding their status.
- An additional \$10-15K per month in timesharing costs to maintain the PDR Accession List.
- An additional \$250K per year for production of Docket 50 microforms.
- Record management function now performed by DCS would require 5-8 people if done in-house.

(Office Director Comments)

Point 3 - Historical growth in file storage has been in excess of 10% annually. The DCS has allowed more than 34,000 cubic feet of hardcopy storage to be eliminated and at least 12,000 precluded, for a net reduction of 46,000. This has been largely nonrecord material because of the lack of a National Archives approved record retention schedule for NRC. Once NARS approves the NRC retention schedule (planned for completion in mid-1981), more than 75% of NRC record material will be approved for maintenance in microform.

(Meeting with TIDC 11/17/80)

Point 3 cites TIDC (ADM) as saying that 34,000 cubic feet of hardcopy storage has been eliminated. Point 5 says "ADM ... indicated a savings of about 145 cubic feet ..." and quotes IE as saying "We have begun to remove selected hardcopies of documents ... for destruction ..."  
Question: Is all this additive? What is the real number? How does this relate to Point 2 above?

OMPA STUDY OF DCS

RESPONSE

Point 4 - A significant portion of the task of distributing incoming documents has been taken over by the DCS. The cost of this service, if done separately, is estimated at \$1.1 million.

(Meeting with TIDC 11/17/80)

Point 5 - None of the offices indicated that they have discarded any of their hardcopy files. IE has begun to remove their files but has not yet discarded them. ADM, however, indicated a savings of about 145 cubic feet of hardcopy storage space by converting Commission Papers and Vendors Topical Reports to microfiche.

ADM - "A survey earlier this year indicated that approximately one-half of the LPDRs will run out of space in the next year and would have to be moved if microfiche is not available."

(RIDS) - "Conversion to a manned effort, assuming NRC requires the present turnaround time, would require an additional 10 or 11 persons and an additional 800 square feet or more of additional space."

"As of today, a total of 5,482 Commission Papers have been converted to microfiche to free approximately 50 cubic feet of space. A total of 3,842 Vendors Topical Reports have been converted to microfiche freeing up approximately 95 cubic feet of space."

IE - "We have also begun to remove selected hardcopies of documents from the IE files for destruction on the basis that the documents are available in DCS." (Note: IE plans to destroy these files when they receive formal authorization.)

(Office Director Comments)

How is file space (and associated dollar value) related to the System? Is this really part of the cost saved by the System? Finally, the reader must question why this information was obtained so late, if in fact the study was begun in June (dates appear in citations).

Once again, the reader is left confused. This appears to be only tantalizing tidbits, and almost extraneous.

OMPA STUDY OF DCS

RESPONSE

Point 6 - Slightly less than half of the users surveyed indicated that they were using their hardcopy files less frequently than they had in the past. The remaining users said they used hardcopy files with about the same frequency as they had before DCS. All users were reluctant to throw away their hardcopy files in favor of the DCS. (User Survey)

Point six contains the implicit suggestion, especially with the context of the previous point in mind, that the staff has always had to do safety analyses of nuclear plants with the assurance of only the files in their own offices. (... The remaining users (about 56%) said they used their hard copy files with about the same frequency as before DCS.)

Is the apparent NRC staff habit of relying on information piled on the office floor the reason for the last sentence of "Finding C.2"? Since no supporting information is included for this statement, one can only guess as to its intent.

BRIEFING CHART 7 (p. 8 of Encl. A1)

D. What are the major components of the \$10.9M cost of the DCS for the third year?

| FUNCTION               | CONTRACTUAL COMPONENT |                       |                                      |
|------------------------|-----------------------|-----------------------|--------------------------------------|
|                        | Labor (\$M)           | Equipment Lease (\$M) | Reimbursable Costs & Fixed Fee (\$M) |
| Coding                 | 3.2                   | -                     | -                                    |
| Data Entry & QC        | 0.7                   | 0.1                   | -                                    |
| Control & Distribution | 0.3                   | -                     | -                                    |
| Filming                | 0.3                   | 0.3                   | -                                    |
| Search & Retrieval     | -                     | 0.2                   | -                                    |
| System Oper. & Maint.  | 2.1                   | 1.6                   | -                                    |
| System Management      | 0.8                   | -                     | -                                    |
| Travel & Supplies      | -                     | -                     | 0.9                                  |
| Space                  | -                     | -                     | 0.3                                  |
| Fixed Fee              | -                     | -                     | 0.1                                  |
| TOTAL \$10.9M          | 7.4                   | 2.2                   | 1.3                                  |

The table in D was included in the "briefing package" and represents a reasonable breakout of costs. However, it contains no indications of some pertinent facts that bear directly on it, such as impacts from the TMI-2 accident.

OMISSION 16:

The study group did not make it clear that these labor costs represent 1 1/2 full shift negotiated for Year 3 as opposed to the single shift negotiated for Years 1 and 2, and that this extra half shift was required because of TMI-2 and followon activities.

Also, the cost of space and equipment for data base growth and storage increased because of the increased rate of input resulting from TMI-2 and from the ongoing accelerated backfit.

OMPA STUDY OF DCS

RESPONSE

Evidence for Finding D of Briefing Chart 7 (from Encl. A2, p. 26)

Total contract costs are covered in Modification 8 of the TERA contract (covering year 3). Functional cost information is contained in TERA's "Critical Design Review" (pages 61-65).

BRIEFING CHART 8 (p. 9 of Encl. A1)

E. What changes could be made now that would reduce DCS costs or increase system benefits?

NOTE: This item appears to be mandated and it appears that this was what OMPA was given as an order. How is that conclusion reached? By the existence of a memorandum dated May 19, 1980, Cornell (DEDO) to Donoghue (OADM) which states:

"Pursuant to our discussion on the NRC Document Control System, please provide options for limiting expenditures for FYs 1980 and 1981. It would be helpful if you could provide at least three options by June 2, 1980, which would reduce expenditures by approximately one-third, one-half, and two-thirds."

The reply is reproduced in Appendix A.

Evidence for Finding E.1 of Briefing Chart 8 (from Encl. A2, p. 27-28)

OMPA STUDY OF DCS

RESPONSE

E. 1. Changes that would reduce costs are:

|   | Maximum<br>Annual Contract<br>Cost Reduction | Net Annual<br>Saving<br>After Off-<br>setting NRC<br>Cost Increase |
|---|--|--|
| a. Reduce the rate of backfit effort                            | \$2 $\frac{1}{4}$ million                    | \$2 million  |
| b. Reduce labor billing rates                                   | \$1  | \$1  |
| c. Limit system content to Docket 50<br>and PDR documents       | \$ $\frac{1}{2}$                             | ?  |
| d. Substantially reduce contractor<br>coding and abstracting    | \$3  | \$1 $\frac{1}{2}$ to 2   |
| e. Eliminate subject index<br>development                       | \$1 $\frac{1}{4}$ *                          | \$ $\frac{1}{4}$ *   |
| f. Eliminate video portion<br>of DCS                            | \$ $\frac{1}{2}$                             | \$ $\frac{1}{2}$   |
| g. Reduce contractor planning<br>and interface with NRC         | \$ $\frac{1}{2}$                             | \$ $\frac{1}{4}$ to $\frac{1}{2}$                                  |
| h. Eliminate processing of duplicate<br>documents by contractor | \$ $\frac{1}{2}$                             | 0 to \$ $\frac{1}{2}$  |
| i. Reduce equipment lease costs<br>by purchasing equipment      | \$2  | \$2**  |
| j. Eliminate contract "special<br>handling" process             | \$ $\frac{1}{2}$                             | \$ $\frac{1}{4}$   |
| k. Provide Government-furnished<br>space to contractor          | \$ $\frac{1}{4}$                             | 0  |

\* One-time cost.

\*\* One-time purchase cost of about \$2 $\frac{1}{4}$ M not included.

Whatever the intent of this "Finding," the "Briefing Package" has no support from the "Evidence Package." Although on every other "Finding" in the "Briefing Package" there is a one-to-one correlation between "Findings" and the so-called evidence, in "Finding E" there is no such correlation.

The only place where there is agreement, or similarity, is between the "Findings" and the EDO-directed "Actions" (see below). Ironically, these two packages are the only places that the "Actions" appear and the whole set of "Findings" do not support these "Actions."

Table E shows billing data for the 13 TERA occupational groups. The first column of numbers shows the "negotiated billing rates" for each of the occupational groups. These rates are the salaries, in dollars per hour, that NRC actually pays for the services of each person in a particular group (during the third contract year). The negotiated billing rates include all non-salary factors such as overhead (51.1%), fringe benefits and other similar factors called "labor additive" (57.9%), general and administrative expenses (14.36%), and profit (10%).

The product of these four components (collectively called the "burden rate") is 3.0. (The calculation is:  $1.511 \times 1.579 \times 1.1436 \times 1.10 = 3.0$ ) This means that NRC is billed by TERA at rates that are three times what TERA salaries are supposed to be. The table shows, however, that the actual salaries paid to the TERA employees are different from the estimated rates that were the basis for the billing rates that NRC negotiated. In six of the thirteen labor categories (numbers 8 through 13), the negotiated billing rate is more than three times the actual salaries paid to the TERA employees. Significantly, several of these categories (Chief Tech Coder/Abstracter, Tech Coder/Abstracter, and Term Operator) are those in which the greatest total labor costs and labor hours are concentrated).

NRC is being billed for nearly \$700,000 more than would be the case if the burden rate were 3.0 for all labor categories. Column 3 shows, for each of the labor categories, the extent to which the contract cost is influenced by burden rates varying from the nominal 3.0 level. Numbers in parentheses reflect contract savings that are attributable to burden rates less than 3.0; numbers without parentheses indicate "excess" costs attributable to burden rates greater than 3.0.

The Office of Administration points out that the Defense Contract Audit Agency has performed an audit of and approved the components of TERA's burden rates. Moreover, ADM points out that it is difficult to compare the burden rates of TERA with other particular consulting firms because the nature of the work and other factors are significantly different. The Division of Contracts has not provided examples of other firms against which we might compare or "benchmark" the TERA burden rates. Nonetheless, our limited experience and intuition suggests\* that even a burden factor of 3.0 may be high for the type of work being done by TERA. Informal discussions with representatives of various consulting firms, albeit not a scientific or necessarily representative sample, suggests that burden rates of approximately 2.5 may be more typical for work involving large numbers of low-salaried employees. The last column on the table shows that NRC billings for year three are about \$1.8 million more than they would be if NRC were billed at a rate of 2.5 times annual salary for each of the 13 labor categories.

The use of intuition as a basis for a conclusion is certainly peculiar in a technically oriented organization such as NRC.

\* Emphasis added

OMPA STUDY OF DCS

Table E: Year 3 Billing Data for TERA Occupational Groups

| Occupational Group             | Negotiated Billing Rate (\$/hr) | Burden Rate* | Total Billings in Excess of: |                        |
|--------------------------------|---------------------------------|--------------|------------------------------|------------------------|
|                                |                                 |              | 3.0 Burden Rate              | 2.5 Burden Rate        |
| 1. Program Management          | 113                             | 2.04         | (67,840)                     | (32,288)               |
| 2. Project Management          | 76                              | 2.88         | (17,280)                     | 58,320                 |
| 3. Principal Engineer          | 68                              | 2.88         | (40,320)                     | 120,960                |
| 4. Senior Engineer             | 65                              | 3.01         | 0                            | 85,248                 |
| 5. Project Engineer            | 54                              | 2.95         | (5,760)                      | 47,808                 |
| 6. Engineer                    | 44                              | 2.94         | (3,840)                      | 25,056                 |
| 7. Programmer                  | 40                              | 2.64         | (19,200)                     | 8,160                  |
| 8. Engineer Coder/Abstractor   | 39                              | 3.22         | 34,560                       | 100,224                |
| 9. Chief Tech Coder/Abstractor | 38                              | 3.77         | 199,680                      | 318,864                |
| 10. Technical Coder            | 31                              | 4.00         | 460,800                      | 669,600                |
| 11. Terminal Operator          | 22                              | 3.34         | 84,480                       | 233,376                |
| 12. Technician                 | 19                              | 3.27         | 46,080                       | 103,104                |
| 13. Clerical                   | 21                              | 3.22         | 9,600                        | 44,880                 |
|                                |                                 |              | <u>680,960 Total</u>         | <u>1,783,312 Total</u> |

\*Burden rate is the factor by which the negotiated billing rate is divided to obtain actual employee salary.

OMPA STUDY OF DCS

RESPONSE

- The greatest contributors to total cost are the coding and abstracting function (those for which the burden rates are greater than 3).
- The negotiated labor rates between years 2 and 3 have increased appreciably, typically by a third and by 50% for Senior Engineers.

Related EDO-Directed Actions (from Attachment 1 of November 18, 1980 Memorandum)

The following list contains a brief description of actions being taken to redirect the Document Control System. The estimated annual contractual cost savings shown for some items represent the maximum amounts that might be realized. Achieving savings in one area may limit the savings possible through others. For example, if lower labor billing rates are negotiated (Item 2), then the maximum savings associated with other labor items would be less. Further, some of the actions that reduce contract costs may involve in-house costs.

1. Reduce the document backfit effort  
(Estimated Savings: <\$2 1/2 million)
2. Examine options to lower contractor billing rates  
(Estimated Savings: <\$1 million)
3. Limit content of the DCS data base  
(Estimated Savings: <\$1/2 million)
4. Test, and where feasible, have NRC staff perform document coding  
(Estimated Savings: potentially up to \$3 million)
5. Test the DCS subject search capability

In this "Actions" package the items seem to concentrate on costs and "cost savings"; in the "Briefing Package" the same list is given with "costs." However, in the so-called "Evidence Package," there is nothing that addresses these costs nor the list. There is no discussion of either the costs or the proposed "changes" addressed by the "Finding." There is no indication of what these costs mean. From what or where were the costs in the "Briefing Package" derived? What are the associated impacts? What is the total dollar value that the study group says could be saved overall (after NRC and other associated costs are taken into account)? Are these numbers, as they appear to be, only someone's guess? Strangely, the first column (Maximum Annual Contract Cost Reduction) in the Table in E.1 totals to \$12.25M, which is more than the contract ceiling of \$10,971M! This, in fact, is the option that NRC should be urged to take, since according to these figures, even with keeping the contract alive, NRC could - even by absorbing some costs - save a maximum of \$9M (from the second column in Table E.1). In short, these numbers do not make sense.



OMPA STUDY OF DCS

RESPONSE

6. Establish a DCS Policy Advisory Group
7. Expedite negotiations to permit recompeting the contract
8. Conduct user needs study
9. Designate full-time contract manager
10. Defer any expansion of video terminals
11. Reduce contractor planning and development staff  
(Estimated Savings: <\$½ million)
12. Eliminate duplicate document processing  
(Estimated Savings: <\$½ million)
13. Improve quality control and user statistics
14. Investigate techniques for user offices to share the cost of DCS

E. 2. Changes that would increase the current system benefits are:

|   | <u>Annual (Contract)<br/>Cost Increase</u> |
|---|--|
| a. Accelerate by a factor of two the backfit of documents                         | \$2½ million                               |
| b. Backfit subject search capability into existing data base                      | \$1 to 2*                                  |
| c. Increase hours of operation  | \$½  |
| d. Lease 100 additional digital terminals and associated equipment for HQ offices | \$¼  |
| e. Test and improve (if necessary) data base quality                              | \$½ to ½                                   |
| f. Expedite document processing   | \$¼  |

This table, like "Finding E.1," is taken directly from the "Briefing Package" and provides information for which no corroboration, denial or bases exist in the "Evidence Package."

This table did NOT appear in Dircks' directed "Actions," or was agglomerated into "Action 15."

\* One-time cost

OMPA STUDY OF DCS

RESPONSE

Evidence for Finding E.2 of Briefing Chart 8 (from Encl. A2, p. 28)

TIDC has planned to re-compete the contract in year 5. Re-competition could be expected to reduce contract costs.

Other costs shown for Finding E in the briefing package are estimates based on conversations with NRC and contractor staffs.\*

BRIEFING CHART 9 (p. 10 of Encl. A1)

F. What management issues are relevant to future DCS operations?

F. 1. There are no systematic procedures for review, approval, or documentation of user requests for additional products and services.

This point is correct.

I find basing cost estimates on "conversations" to be a strange way of doing business.

This is, once again, a rather peculiar allegation. Its peculiarity arises more from what is not said than from its content. This philosophy of "systematic procedures" for everything from review to decisionmaking to "systematic assessment" of user needs pervades only the "Briefing Package" and leaves the impression that if indeed one is not "systematic," he must certainly be unable to perform. (NOTE: We assume that "systematic" is intended to correlate with "formal.")

The program office was aware of only one request for "... examples of analyses that you've done with respect to the special services" or "... examples of procedures that you follow under normal conditions." We assumed that OMPA meant verbal explanation, since the program office had, four months earlier, provided detailed descriptions to other study members; on this occasion we assumed that the descriptions, procedures and information had been communicated among the study group members. Regretably, the data and information were not communicated among the members - or at least it so appears.

The concept of "systematic," as defined by OMPA, appears to be a point throughout the "Briefing Package" that runs counter to the design and implementation philosophy of the ARC's Automated Information Retrieval System. When the Commission approved the program office's request to issue the RFP and, later, the contract, the design philosophy that the System now represents was presented to them. In effect, the majority of the Office Directors and the majority of the Commissioners, themselves, sanctioned this design philosophy. And yet OMPA appears to question this whole approach throughout. It appears to TIDC to be an intentional contention.

\* Emphasis added

OMPA STUDY OF DCS

RESPONSE

Had the writers of the study group "Briefing Package" and "Evidence Package" mastered the many studies that were offered by the program office they could have discerned that perhaps this issue of "systematic ... " belonged to accounting problems and not to integrated information systems. The AEC/NRC has a long and unsuccessful history of numerous projects and millions of dollars spent on "systematically" developed systems. When these systems were implemented, they died of their own weight and effectively amounted to applying band-aids to the gaping wound of information retrieval! Although the program office made the results of these studies and "Systems" available to OMPA, either OMPA did not understand them, or OMPA chose to ignore the several very expensive lessons of the last 10 years.

If MPA is to be involved in further activities with automated information retrieval, an understanding of the situations faced by all parties - users, managers, processing staff, and review staff - is required. Based on "Actions" resulting from the "Briefing Package," which are unsupported by most of the "Evidence Package," one can only surmise that either (1) the OMPA staff cannot grasp the multifaceted aspects of an integrated information system or (2) that they cannot successfully convey these meaningfully to the executive level.

NOTE: The response to this "Finding" is on an "evidence point" basis (see below).

- F. 2. Pressure for growth in system products and costs occurs because:
- a. User offices do not incur the costs of services provided to them,
  - b. Special custom products and services must be added to compensate for unrealized system capabilities,
  - c. TIDC lacks practical authority or incentive to deny user requests, and
  - d. The practice of direct interface between TERA and NRC staff encourages increases in requests for services.

OMPA STUDY OF DCS

RESPONSE

Evidence for Finding F.2 of Briefing Chart 9 (from Encl. A2, p. 34)

Point 1 - "Numerous requests have been generated by particular user groups for specialized reports and these have been prepared and delivered by the contractor"

(SECY 79-649)

This "evidence point" is lifted out of context. This statement in the SECY paper was a summary statement to indicate to the Commission that the Contractor had, in fact, more than complied with the contract statement of work (SOW). The contract SOW (p. 3-3) states that:

"Tasks to be performed by the Contractor fall into two basic categories:

1. Implementation and operation of systems which will generate the following hard-copy reports:
  - a. Title List.
  - b. Subject Index alone or cross referenced to the Title List serial numbers.
  - c. Abstract/Index Journal.
  - d. Other non-periodic reports (e.g., bibliographies, document groupings, etc.)

The automated aspects of Tasks 1 thru 3 that are associated with the production of these hard-copy reports must be accomplished by the Contractor until the hardware, which will be procured by NRC, can be installed and tested satisfactorily. The offeror should make provisions for whatever computer services he estimates will be needed.

2. Implementation and operation of a Remote Access and Retrieval System for producing virtual images of documents from the NRC store of documents."

Point 2 - Most offices specified general and office-specific services they would like from the DCS, but none took cost into account.

(Office Director Comments)

OMPA Point 2 is apparently an OMPA "Summary of Office Director responses," which is not totally correct. Although most offices are interested in the product or service they request, whether they get what they have specified depends upon both the relative need of the specifying office and the amount of system perturbation induced into the overall System by the request. When TIDC is not convinced of need and requests documentation, that request for documentation is objected to by some offices or groups.

OMPA STUDY OF DCS

RESPONSE

Point 3 - "One of the fundamental services of the DCS is the capability to produce written printouts immediately to serve the needs of individuals or groups within NRC. This particular service has been available since the start of the DCS and has been taken advantage of by representatives from every major NRC program and staff office. Currently, an average of two requests for special reports are received and processed each day."  
(DCS Services Report)

Point 4 - See evidence for Finding C.4 for list of ongoing services provided by TERA.

Point 5 - Costs for additional services are added to the total cost of the contract (increased manhours, software modification, etc.). All costs for DCS contract are paid through Office of Administration administrative support funds (B&R No. 48-20-25-302).  
(TERA Contract)

Point 6 - "Another management strategy of note resulted from a decision of Bill Besaw that the relationship between the contractor and the NRC staff should avoid as much bureaucratic red tape as possible. Therefore, he decided not to establish an agency staff to specifically interface TERA. Rather he permits TERA client managers to work directly with the NRC staff. Therefore TERA project managers work directly with the NRC staff to assess their needs, solve their problems, accept orders for reports

The latest such request for documentation by TIDC and the appeal to the EDO, with the ensuing response demanded by the EDO, is included in Appendix B.

Point 3 is correct. Once the data are digitized, production of a special report generally takes minutes of computer time. Large expensive reports, which are generally produced periodically, were specified in both the original RFP and in the contract as deliverables. TIDC knew where the costly reports were required and called them out explicitly for obvious reasons. The cost for most of the special reports is, on the average, less than \$100. The utility of this to the NRC staff is generally quite large.

Point 4 is a reference.

Point 5 is either an OMPA summarization (it references TERA contract) or it is contained in an obscure portion of the contract which we could not find.

Point 6 raises some serious questions. The basic approach that Mr. Besaw has pursued is one of minimizing the involvement of the TIDC staff in either operating the computer or in generating ONLY that class of reports for which data are already digitized. Any authority beyond this that the Contractor exercised would cause risk to the Contractor and to Mr. Besaw. The risk to the Contractor would be that he would not be paid for man-power or products produced without contractual approval. The risk to Mr. Besaw would be that he might make himself liable to pay such demands as the Contractor could provide and for which the NRC did not approve.

OMPA STUDY OF DCS

and counsel them regarding their records management problems without having to obtain formal approval from the NRC Contract Officer Technical Representative."

(Grimsley Case Study)

RESPONSE

The overriding fact here is not what the "evidence" quotation suggests, but that the C.O.T.R. duties are spelled out explicitly in the Special Provisions, Article IX, Technical Direction and Surveillance. Article IX is included here with pertinent emphasis added:

"ARTICLE IX - Technical Direction and Surveillance

Performance of the work under this contract shall be subject to the technical direction and surveillance of the C.O.T.R. The term "technical direction" is defined to include, without limitation, the following:

- A. Providing information to the Contractor's supervising representative which: assists in the interpretation of drawings, specifications or technical portions of the work description.
- B. Review, and where required by the contract, approval of: technical reports, drawings, specifications, and technical information to be delivered, by the Contractor to the Government, under the contract.\*

Technical direction must be within the general scope of the work stated in the contract. The C.O.T.R. shall not exercise any supervision or control over the Contractor's employees; such employees shall be accountable only to the Contractor's supervising representative.\*

The C.O.T.R. does not have the authority to issue and may not issue any technical direction which: (i) constitutes an assignment of additional work outside the general scope of the contract; (ii) constitutes a change as defined in the contract clause entitled "Changes"; (iii) in any manner causes an increase or decrease in the ceiling price of the contract, or the time required for contract performance; or (iv) changes any of the expressed terms, conditions, or specifications of the contract.\*

All technical directions shall be issued in writing by the C.O.T.R. or shall be confirmed by him in writing within five working days after oral issuance.\*

The Contractor shall proceed promptly with the implementation of all technical directions duly issued by the C.O.T.R. in the manner prescribed

\* Emphasis added

OMPA STUDY OF DCS

RESPONSE

by this article and within the authority of the provisions of this article.

If, in the opinion of the Contractor, any instruction or direction issued by the C.O.T.R. is within one of the categories defined in (i) through (iv) above, the Contractor shall not proceed but shall notify the Contracting Officer in writing within five working days after the receipt of any such instruction or direction." (NOTE: This clause continues to give direction to the Contractor as to how to notify the Contracting Officer.)

- F. 3. Certain provisions of the TERA contract -- the contractor's proprietary rights to system software and the lease arrangements -- make it difficult for NRC to re-compete the contract.

Evidence for Finding F.3 of Briefing Chart 9 (from Encl. A2, p. 35)

Point 1 - Article XX of the original contract states that TERA claims rights to the original ARMS software after the contract has expired. In order to continue system operation, NRC must buy or lease the ARMS software. (Informal discussions have been held between TERA and the Division of Contracts regarding the possible NRC purchase of DCS software.) Article XX is reprinted below.

"ARTICLE XX - NRC Use of the Contractor's Propriety Software

The Contractor alleges that its Automated Records Management System (ARMS) is a proprietary computer system, designed and developed by TERA. The Contractor shall provide to the Nuclear Regulatory Commission the utilization of the applicable software portions of this system as determined by the Nuclear Regulatory Commission. Full rights and title to the existing ARMS software will remain

Point 1 would have been better served without the MPA interpretations.

The negotiations for both Points 1 and 2 are being pursued by the Contracts and Legal staffs.

OMPA STUDY OF DCS

RESPONSE

in TERA, except that the NPC only, will have the right to use, at no cost, the aforesaid applicable software portions of the ARMS system in the manner and for the purposes set forth in Section 3 of this contract. Such rights shall survive the expiration of this contract. Improvements in the applicable software portion of the ARMS system which are required to be originated or developed under this contract are subject to unlimited rights as defined in Clause 58."

(TERA Contract)

Point 2 - Discussions with the Division of Contracts indicate that if potential bidders planned to use the existing DCS facility they would have to negotiate with TERA for sublease of the facility.

(Telephone conversation - C. Lebo,  
Division of Contracts)

F. 4. The contract can be re-competed for year 4, beginning June 1981, only with an expedited contract source selection process.

This is a somewhat academic point. Based on previous experience with letting a contract, the program office estimates 12 to 18 months would be required to complete a competitive procurement of this type. This means that the program office should have begun the rounds of SOW preparation and submitting to all the user offices for review, comment, suggestions, and subsequent approvals in August 1979 in order to make a June 1981 date.

But the OMPA study was ordered by the EDO and Commissioner Gilinsky in July 1980 and it was not completed until November 1980. Thus, all the time of the program office members who should have been drafting the SOW was occupied by "studies" to provide that it couldn't be done!

Now that a full-time C.O.T.R. has been named, we can only assume that the task of drafting a new competitive SOW is his responsibility. Also, the SOW for Year 5 should have been started by August 1980 to make the June 1982 deadline.



OMPA STUDY OF DCS

RESPONSE

- F. 5. The cost of buying the DCS equipment now (and maintaining it) is less than the cost of continuing to lease the equipment for another two years.

Evidence for Finding F.5 of Briefing Chart 9 (from Encl. A2, p. 37)

To date NRC has leased rather than purchased ADP equipment. The TERA contract contains an equipment purchase option that allows NRC to take a credit against the purchase price equal to a set percentage of lease payments made by NRC. During the contract's third year (June 1980 to June 1981), a credit of 63% of our cumulative lease payments is applicable. If equipment is purchased in the contract's fourth year or later, the credit is only 50% of lease payments. After 5-1/2 years of paying lease, NRC will own the equipment and pay only maintenance costs of approximately \$300-500,000 per year.

(TERA Contract, Section 5.A.5(a))

BRIEFING CHART 10 (p. 11 of Encl. A1)

- G. What other issues are relevant to future DCS operations?
- G. 1. TERA appears to have been responsive to the formal contract requirements and to the particular needs of various NRC users.

Routine notification of FY 80 unobligated balance was transmitted to the Office Directors by the Controller on November 14, 1980, and ADM responded with the request for funds on November 25, 1980 (see Appendix C).

This statement is absolutely wrong!

OMISSION 17:

The OMPA study group makes the same errors in its support for "Finding F.5" that are made over and over. They assume that the equipment for the Contract is ADP equipment and ignore all other. In fact, the other equipment comprises a much larger volume than ADP equipment. This alone demonstrates how little OMPA really understood its assignment.

Aside from the failure to correctly identify the subject, the rest of the OMPA paraphrase of Contract NRC 10-78-580 appears to be accurate.

This section appears to have been added to placate the Contractor and as a convenient place to address a Commissioner request for information that was provided under SECY 78-67A, Appendix B. (See Appendix D)

Additionally, this section appears to highlight items that are already addressed, either directly or implicitly, or could have been addressed in other sections. We see no logical reason for this section.

OMPA STUDY OF DCS

RESPONSE

- G. 2. An examination of the document control systems of 14 other agencies suggests the following:
- a. Compared to the DCS, the systems in other agencies are sufficiently different in purpose and content that direct comparisons of specific costs and benefits are of limited value.
  - b. General comparisons of system attributes are:
    - NRC's system contains more document types (exception: CIA),
    - NRC relies on contractors to a greater degree,
    - NRC has more people working on its system than all but one agency,
    - The rates of documents entered into the DCS and searches conducted on the DCS are not significantly different from the averages for other systems,
    - The total costs of NRC's system (contractor and in-house) are significantly greater than the total costs for the other agencies.

- G. 3. With respect to terminals:
- a. The DCS was originally designed as an all video system.
  - b. The cost of video terminals appears to be three to six times that of digital terminals.
  - c. Primarily because of difficulties with the microfiche tub files associated with digital terminals, the staff has expressed a preference for video terminals.

This is one of those "Findings" that leads to the initial statement of this paper that the "Briefing Package" and "evidence" are filled with innuendo, but specifics remain either unsaid or unsupported.

Having stated in Item a. that a comparison is of limited value, the study nonetheless goes on to make "general comparisons."<sup>4</sup>

The logic of making direct comparisons that are of "limited benefit," as stated by the above point causes the reader to wonder why it was, nevertheless, done! Also, the ambiguities and logical inconsistencies between the "Findings" create confusion for the reader trying to understand what is being said. One can only suspect intentional obfuscation. For example, does "Dash 3" mean that to do a given job, more contractor personnel are required than having the same job done by government personnel? If one reads from "Dash 2" to "Dash 3" consecutively, then this is the logical conclusion. The table of "comparisons" provided by OMPA only adds more confusion.

The only conclusion that can be drawn from "Finding G" is that numerous universes of information retrieval exist and that efforts must be tailored to agency requirements.

What does this mean? Does it mean:

- (a) Why was the design changed to include digital?
- (b) Was (a) changed because of (b)?
- (c) If (a) and (c) are correct, then why did these not override (b)?
- (d) Items (a) and (c) did not override (b) because (b) and (d) were of stronger weight logically?

Emphasis added

OMPA STUDY OF DCS

- d. The cost of transmitting video images among scattered NRC locations makes an all video system impracticable at the present time.
- e. Measures to improve video image quality have been initiated.

RESPONSE

- (e) But since (e), if successful, will add to (a) and (c) and these three will then logically outweigh (b) and (d) - therefore, we must wait ...

As with the whole of the study group report, the "Finding" is not supported by the "evidence." Further, the whole OMPA study does not support the EDO "Actions" since the only correlation between the two "packages" (i.e., Findings and Evidence) is "Finding E." Logically, the "evidence" does not support the "Actions" and, in fact, there is no connection between the "Actions" and the "evidence."

APPENDIX A

Memorandum, Donoghue to Cornell, June 5, 1980, "Document Control System"

Back of Appendix A Banks

UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20543

MEMORANDUM FOR: E. Kevin Cornell, Deputy Executive Director  
for Operations

FROM: Daniel J. Donoghue, Director  
Office of Administration

SUBJECT: DOCUMENT CONTROL SYSTEM

Reference: Memo, Cornell to Donoghue, "Document Control System," dated  
May 19, 1980.

In your memo of May 19, 1980, you asked for "... at least three options which would reduce expenditures by approximately one third, one half, and two thirds." We discuss six options below which would reduce services now provided by DCS, but by amounts different than those you suggested. In addition to the function (option) and the amount of reduction of expenditures we have provided a discussion of impacts of each cut.

As we discussed during our meeting of May 16, 1980, the System was designed and implemented to expedite and provide major assistance to the licensing and inspection/enforcement functions of the NRC staff. Accordingly, the reductions are discussed below in inverse order of potential impact on the licensing and enforcement programs.

1. Backfit of B&W Plants

a. Entire Backfit Effort

The backfit efforts are two-fold: one part is to assure, with direct assistance from the technical staff, that files are complete; the second part of this effort is to put all existing information in a standard format (done by computerizing the information) so that the staff can find a document by a number of different routes (e.g., by Docket No. by date/author, by subject, etc.). Such cross cuts of information are not possible without a computer because of the very large, very complex data base with which the technical staff works.

This thinking was the impetus for NRR and I&E requesting that all B&W-designed plants be backfit as soon as possible. This foresight has proven valuable in both the subsequent Crystal River and Arkansas Nuclear One incidents.

The funds for the supplemental FY 80 budget request were justified by NRR, and OADM must get NRR and I&E concurrence before any cuts are made in this function. If these concurrences were obtained, the extra shift at TERA, which now processes these documents would be discontinued. This would mean that:

- the staff would be required to use files that are known to be incomplete to make judgments directly bearing on public health and safety on B&W-designed and Systematic Evaluation Program (SEP) plants;
- the GS-14 and -15 technical staff and Project Managers would, once again, be forced to revert to a role of "paper tracker" in order to reasonably perform their technical functions; this, in turn, reduces his efficiency measurably.

The net result of elimination of the extra shift, in terms of dollars, would be \$2.3 M in FY 81.

b. Eliminate 24X Microfiche of Backfit Dockets

The backfit is being treated uniquely in the production of microfiche. On an ongoing basis, the routine daily flows have only 48X microfiche made for staff use. However, when the backfit effort was begun the PDR and ACRS identified a need for 24X microfiche. The PDR needed 24X for high-volume fast blowback to hard copy (necessitated for response to public and because of unavailability of older records) and the ACRS needed 24X to send to its members.

If this function were eliminated, the dollar savings would be about \$75K in FY 80 and about \$275K in FY 81. The effects of eliminating this would be a very slow response to the public for older, but active, files because the hard copy reproduction would have to be done in-house (on a first-come, first-served basis with staff working overtime) until a contractor could be secured by the PDR to do blowback of 48X fiche. The ACRS would get only 48X microfiche to use in-house. We don't know what they would provide to members.

2. Document Handling for Multicopy Packages

The NRC currently has TERA expediting document flows, particularly to the PDR. This means that TERA marks and packages documents after processing them and then delivers these packages to five different locations including the PDR at H Street and LPDR and Central Files staffs in Bethesda. If this effort were to be withdrawn from TERA, then TERA would receive only one document and would return that document after the data and information on it had been extracted and the document had been filmed.

Since this service cannot be eliminated and current NRC staff is limited, a contract would have to be let for this function. The impacts would be:

- a contract could not be completed before the beginning of FY 81;
- once the contract is let, work would be duplicated between the new contractor and TERA (e.g., keystroking titles, etc.). This means that although money can be extracted from the TERA contract, the overall TIDC budget requirements would increase.
- estimated cost to hire another company is eight man years, or about \$560,000.

If this were to be withdrawn from TERA, it would yield about \$350K from DCS funds.

### 3. Regulatory Information Distribution Service (RIDS)

Another function which TERA performs for the NRC staff (NRR, I/E, AEOD) is the automation of all incoming documentation (principally, Docket 50 at present) relating to casework to allow TIDC to control it. OADM is currently considering expanding the RIDS activity because of staff requests and activities (see attached memos).

In the last two years incoming documents that require control have increased from about 50 documents/day to about 150 documents/day. From the above referenced memos, we can only anticipate additional growth. Therefore, the function cannot be eliminated. It can only be shifted to another contractor. As with Item 2, above, the cost increases for putting it out on a separate contract. However, in this case, the impacts are more dramatic than Item 2 above:

- a different contractor will require about 10 people to do this work. This estimate is based on past NRC and TERA efforts.
- the service purchased separately will cost the NRC \$700K-\$750K.
- unless the cycle is completely automated, a separate contractor will be slower. Currently, the whole RIDS processing cycle is automated so that the 150 documents are processed and ready for pick up in six hours or less. The duplication by TIDC staff requires another three hours on the average. The staff often finds this wait time unsatisfactory. Any longer delay would be unacceptable.

Because the RIDS cycle is completely automated only about \$175K could be recouped by removing this from the DCS contract. The assumption made to arrive at the estimated cost for a different contractor than TERA was that only a small portion of the processing of the documents would be automated. This is the reason for the very great discrepancy between the dollar costs of doing it with DCS and having it done elsewhere.

### 4. Allow No RUSH Handling of Documents

Currently an estimated 8% of the TERA manpower is spent on special projects (e.g. oversize drawings for the Incident Response Center; special processing of all State Emergency Plans). This special handling could be stopped, if absolutely necessary. However, it is not recommended because the impacts could be quite severe. For example, the I&E staff needs as-built drawings for all the operating nuclear plants to be available for use in the IRC. As a result, more than 2700 drawings were gathered by the Regional Offices and shipped to the IRC/HQ staff in less than a month. Needless to say, a volume



such as this is not manageable, nor are the drawings useable without some kind of systematic procedures. To handle this for the IRC, TIDC and TERC automated drawing titles so that the information relating to the drawing can be retrieved by title, by drawing number (and revision), by plant, by docket number, or by date and the drawings were reduced to fit into an opening on a standard 80-column computer-type card so that they could be managed.

To cut into this type of service from the System would seriously impair the NRC staff's (technical and legal staff) ability to respond to emergency and heavy overload situations.

#### 5. Cut Technical Support Functions

The System provides, and was designed to provide, both technical information and records management as required by the Administrative Procedures Act of 1967, and the Atomic Energy Act of 1954, as amended. However, the number of documents processed can be cut from the full daily flow of about 1000 documents/day to only those documents that are made publicly available (about 500 documents/day). The impacts of this action are:

- no services would be to the internal staff; only the documents made publicly available would be handled;
- no document or data files would be computerized so that the offices would be able to see what each other is doing;
- no file integrity could be assured because there would be no document control;
- staff members would have to return to keeping their own files and, essentially, two people working on the same plant would end up with two different sets of records (i.e., the Project Managers, Tech. Reviewers, etc., would have to return to the mode we operated in three years ago - being file clerks principally and technical people secondarily).
- the agency would return to putting out several reports on one topic that used different data bases and came to different (and conflicting) conclusions (this actually has happened prior to 1976);
- no FOIA assistance can be provided.

The cost of providing this service for publicly available documents would be about \$6.8 million (more than half of the current cost of \$10.971M). This cost can be trimmed only by the following actions:

- 1.) NRC provide space for the 50-55 people required to code, key, and handle the documents and to house the equipment. This would allow NRC to trim about \$1.05M; and

E. Kevin Cornell, Deputy Executive Director  
for Operations

Page 3

2.) Further, if we could find the 50 slots required for minimum processing of the publicly available documents (about 1.25 million documents/year in FY 79), about \$2.5-\$3.0M can be extracted from the contract.

The NRC has a basic operation cost of about \$2.5-\$3.0M in computer or time-sharing costs to process the volume of documents that it makes publicly available. This cost cannot be cut; it is bare minimum. Further, this number will probably grow because the number of documents made publicly available grows yearly. Between 1974 and 1979 the number of publicly available documents increased from about 15,000 documents/year to about 1,250,000 documents/year. While the increase is not likely to be so dramatic in the next five years, it will increase. Further, if the policy of making all documents public is implemented (see SECY 79-301; it has already been adopted by the Commission), then the volume of documents will increase by at least 30%.

We think this is responsive to your request. However, if you should have questions, we will try to answer them.

ORIGINAL SIGNED BY  
Daniel J. Donoghue ✓

Daniel J. Donoghue, Director  
Office of Administration

Enclosures  
Memo 5/28/80-Thompson to Besaw  
Memo 6/3/80-Besaw to Thompson

bcc: Mr. Donoghue's chrono  
Mr. Besaw  
Myrna Steele  
← Central Files  
TIDC Reading File

| OFFICE  | TIDC         | TIDC    | OA      | OA         |  |  |
|---------|--------------|---------|---------|------------|--|--|
| CURNAME | MLSteele/hhw | WJBesaw | RKorrey | DJDonoghue |  |  |
| DATE    | 6/5/80       | 6/ /80  | 6/ /80  | 6/ /80     |  |  |

UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20545

SS113: 2100

MAY 16 1980

MEMORANDUM FOR: William J. Besaw, Director, Division of Technical  
Information and Document Control, ADM .

FROM: Dudley Thompson, Executive Officer for  
Operations Support, IE

SUBJECT: HANDLING OF CLASSIFIED INFORMATION

On April 16, 1980 we requested the regions to send a copy of the enclosed letter to all Fuel Cycle and Materials licensees. This action was a followup to a request from AEOD to take several near-term steps to improve the data collection and dissemination of reports. In this letter, a specific request is made to send a copy of each report to DMB for dissemination.

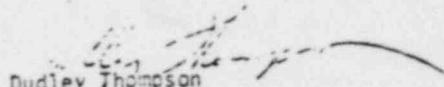
It has come to my attention that DMB is not in a position to handle classified information. Obviously, prior to taking the above action we should have checked this point out, but we did not. In one case, Security has been contacted by a licensee and until such time that DMB can take classified information, the licensee was advised not to send any reports to DMB.

In a meeting on May 7, 1980, attended by Steve Scott, Wilda Mullinix, et al on a related matter, we obtained the impression that DMB is gearing up to be the agency's central receiving point for operational reports from licensees. We have long been aware that a central system for receipt and dissemination of these reports is the logical solution to many of the problems we encounter with LER-type reports. We are in support of a centralized receiving point and we are giving preliminary thought to recommending a rule change to facilitate such a system.

In view of the above, it would appear highly desirable--if not mandatory--for DMB to set up the facilities and procedure to handle classified information.

CONTACT: G. C. Gower  
49-27246

We would be interested in knowing your plans in this area rather promptly in order for us to resolve the problem noted above with fuel cycle and materials licensee reports and for our further consideration regarding a centralized receiving point for licensee reports.

  
Dudley Thompson  
Executive Officer for  
Operations Support, IE

Enclosure: Ltr. to all Fuel  
Cycle and Materials licensees  
dtd 5-16-80

cc: S. Scott, DBM  
L. Robertson, NMSS  
R. Paulus, X00S  
W. Mullinix, X00S  
V. Miller, NMSS  
J. Crooks, MPA  
C. Michelson, AEOD

NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

JUN 6 1988

MEMORANDUM FOR: Dudley Thompson, Executive Officer for  
Operations Support, IE

FROM: William J. Besaw, Director  
Division of Technical Information  
and Document Control, ADM

SUBJECT: HANDLING OF CLASSIFIED INFORMATION

As you noted in your memorandum of May 29, the Division of Technical Information and Document Control is developing the Document Control System as the central system for the receipt, control and internal dissemination of incoming licensee information. Presently, all proprietary and non-proprietary submittals by power reactor licensees are centrally processed through what is called the Regulatory Information Distribution System (RIDS).

We agree that expanding RIDS to include all licensee submittals is the most logical, prudent and efficient approach to document management. As you noted, in response to a recent request from the AEOD, we agreed to expand RIDS to include non-reactor licensee submittals. Our staff is presently working with IE, NMSS, NPA and AEOD to develop the proper distribution patterns for each type of submittal. In addition, a recent study by OIA indicated that DCS should also receive all LER's directly from licensees. We have discussed this with Mr. Jordan of IE.

As you suggest, a rule change is needed as soon as possible to assure that NRC has an efficient and effective means of controlling documentation and disseminating it to those staff members who need the data.

We are prepared to begin the central control of documentation immediately in accordance with the AEOD's request and your April 16 letter to the Regional directors. Such action will mean better document management as well as reduce the copying, postage and handling burdens presently imposed on Regional offices which must now forward multiple copies of the documents to Headquarters. However, we can not implement the control of classified documents at this time due to the staffing requirements that such an effort would impose. The security control and accountability requirements for classified documents are stringent. To preclude any compromise of classified information and assure that all documents were controlled in accordance with Manual Chapter 2101 would require us to immediately augment our staff by at least two positions. While such staffing is contemplated in our long range plans, we do not presently

have the slots available. Until such time as staffing is available we must refer classified materials from the RIDS system. When staffing is available, we would initially create only digital records on DCS. In the future, we plan to electronically control access to video images also.

Steve Scott will continue to work with your staff to integrate as many types of reports as possible into the system.

Original Signed By

~~William J. Besaw~~

William J. Besaw, Director  
Division of Technical Information  
and Document Control, ADM

cc: D. Donoghue, ADM  
C. Michelson, AEOD  
R. Brady, Security  
G. Gower, IE  
J. Crooks, MPA  
E. Jordan, IE

APPENDIX B

Letter, R.F. Fraley, Executive Director, ACRS, to William J. Dircks, EDO, NRC, October 6, 1980, "The TERA Corporation Retrieval System," and reply, November 24, 1980, "Unrestricted Access for ACRS to all Indexes and Records of NRC staff and Program Offices."



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS  
WASHINGTON, D. C. 20555

October 6, 1980

Mr. William J. Dircks, Executive Director  
Office of the Executive Director for Operations  
U.S. Nuclear Regulatory Commission

Dear Dircks:

SUBJECT: THE TERA CORPORATION RETRIEVAL SYSTEM

The Advisory Committee on Reactor Safeguards was given a TERA terminal last May and, in late June, was given a tub file for material placed in the Public Document Room (PDR) after July 1, 1980. However, this office has been permitted access to only that information that has been released to the PDR. This precludes ready ACRS access to internal NRC documents generated by/for the staff which can contribute significantly to the activities of the Committee, even though these documents are frequently provided in full-size copy for Committee review or use. I understand that this limitation has to do with a concern about the ability of the ACRS/ACRS Office to withhold such material from publication in the conduct of Committee business.

This memo is to confirm discussion with Kevin Cornell to request that this office be given access to the central files databank and to comparable tub files so that we may utilize the TERA system fully.

In this connection it should be noted that the ACRS Office and Committee members will provide the same protection of these documents as members of the regulatory staff in accordance with 10CFR Part 9 - Public Records. Release of such records in accordance with FOIA requests, for example, are coordinated with the originator in accordance with procedures for control/release of such documents via the Division of Rules and Records.

Sincerely yours,

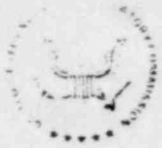
A handwritten signature in dark ink, appearing to read "R. F. Fraley".

R. F. Fraley  
Executive Director

cc: Kevin Cornell

APPENDIX B





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

November 24, 1980

MEMORANDUM FOR: Directors of Offices and Divisions

FROM: William J. Dircks  
Executive Director for Operations

SUBJECT: UNRESTRICTED ACCESS FOR ACRS TO ALL INDEXES AND RECORDS  
OF NRC STAFF AND PROGRAM OFFICES

In response to a request from the Advisory Committee on Reactor Safeguards, it has been agreed that the ACRS will have unrestricted access to the digital data base and the 48X microfiche resulting from the DCS portion of the NRC's Automated Information Retrieval System.

There are some documents for which only digital records are made on the DCS and microfiche is not available. In these cases, the documents are retained in the originating office. In the event that ACRS requires copies of such documents, they have been advised to contact the originating office for a copy.

A handwritten signature in cursive script, appearing to read "William J. Dircks".

William J. Dircks  
Executive Director for Operations

Lack of Appendix B Bank

APPENDIX C

Memorandum, Donoghue to Triner, November 25, 1980, "Office of Administration's Request for Unobligated FY 80 Carryover Funds."

Index appendix C Bank

NOV 25 1980

MEMORANDUM FOR: Edwin Triner, Director  
Office of Budget

FROM: Daniel J. Donoghue, Director  
Office of Administration

SUBJECT: OFFICE OF ADMINISTRATION'S REQUEST FOR  
UNOBLIGATED FY80 CARRYOVER FUNDS

In accordance to Len Barry's memo of November 14, 1980 same subject, I am requesting FY 1980 carryover funds for use on two high priority unfunded requirements.

The priority one request (Attachment 1) is for the acceleration of support to the LPDR's. For this accelerated program, I am requesting \$290,000 in administrative support funds and \$29,000 in travel funds.

The priority two request (Attachment 2) is to exercise the option to purchase the basic package of equipment for the Document Control System. Should the purchase option be exercised at this time, the payback period is 8-9 months, which is a very positive cost advantage for the long-term operation of the DCS.

ORIGINAL SIGNED BY  
Daniel J. Donoghue  
Daniel J. Donoghue, Director  
Office of Administration

Enclosures:  
As Stated

Office of Administration  
Division of Rules and Records  
Request for Unobligated FY 1980 Carryover Funds

- a. Fund function: Accelerated LPDR Support
- b. Amount: \$290,000 for Administrative Support Funds  
\$29,000 for Travel Funds

c. Concise description of the unfunded requirement:

Funds are necessary to (1) pay libraries for the actual costs of maintaining and servicing NRC's local public document collections in order to assure that the collections are maintained in good order and in an up-to-date manner and (2) pay travel costs to LPDRs in connection with the installation of microfiche reader printers and to audit LPDRs to assure they are up-to-date.

d. Explanation:

The Office of Administration has budgeted to provide funding and micrographic support to libraries maintaining NRC's local public document collections. It was the original intent that this program would be phased in gradually over a three-year period. In FY 1981, \$84,700 was allocated for this program, and \$248,000 is being requested in FY 1982 budget.

In FY 1980, 30 microfiche reader printers and supporting equipment were purchased for the LPDRs. The FY 1981 funds are being used to purchase an additional 32 microfiche reader printers and supporting equipment. Funds are also being reprogramed by the Office of Administration in FY 1981 to provide microfiche reader printers and associated equipment to the remaining 36 libraries which house local public document collections for power reactors.

As a result of recent publicity and criticisms of the program by Nader and Pollock, the Commission has decided to accelerate the support program. The Office of Administration is also making available in FY 1981 funds to provide financial assistance to 10 of the 98 libraries which house these collections. The requested funds of \$290,000 for administrative support will provide support for the remaining 88 power reactors collections (\$3,000 each), 22 limited service collections (mini-LPDRs) (\$1,000 each), and three research and test reactor collections (\$1,500 each).

Attachment A

In addition, \$29,000 of additional travel funds are necessary to implement, coordinate, and supervise the activities associated with this accelerated support program. The break down of these addition funding requirements are listed below:

| <u>Requirement</u>  | <u>Funding</u> |
|---|----------------|
| 1. Install 62 microfiche reader printers now on order; deliver microfiche covering period from January 1979; convert LPDR to TERA filing system, and instruct library staff in use of fiche and new filing system (Requires each LPDR to be visited, and assumes four LPDRs can be visited each trip at a cost of \$1,000 per trip.)                                    | \$15,500       |
| 2. Move 10 LPDRs which either (a) are located in Courthouses and do not have evening or weekend hours or (b) are unable or unwilling to properly maintain collections. (Requires collection to be moved and set up in new location, and the library staff instructed in its use. Requires a separate trip to each location averaging 2-3 days at a cost of \$500 each.) | 5,000          |
| 3. Install 36 microfiche reader printers to be ordered in FY 1981. (Same requirements and assumptions as in item 1 above.)  | 9,000          |
| 4. Close 12 LPDRs where the plants have announced cancellations or deferrals. (Same assumption of four LPDRs per trip at a cost of \$1,000. If LPDRs are not closed, it would still be necessary to visit them in FY 1981 to assure the documents were being maintained.)   | 3,000          |
| 5. Audit maintenance of 22 mini-LPDRs and 3 research and test reactor LPDRs (Visits would be combined with other scheduled trips. Assumes an additional cost of \$200 per LPDR.)  | 5,000          |
|   | <hr/>          |
| TOTAL FY 1981 TRAVEL COSTS  | \$37,500       |
| BUDGET ALLOCATION FOR FY 1981   | \$11,600       |
| COMMITTED THRU 11/19/80   | <u>2,950</u>   |
| BUDGET BALANCE  | <hr/>          |
|   | 8,650          |
| ADDITIONAL FY 1981 TRAVEL REQUIREMENTS  | \$28,850       |

The impact of not providing funding support in FY 1981 is severe. NRC will not be able to assure that the collections are being properly maintained and criticisms of the document collections are likely to continue. Moreover, the Division of Rules and Records will not be able to execute the Commission's decision to accelerate the support program for the LPDRs.

As part of the Commission's legislative package for the 97th Congress, the Office of Administration has submitted a proposal to require applicants and licensees to establish, fund, and maintain a local public document collection near the site of proposed or existing nuclear power plants. If the legislative proposal is enacted, NRC funding of local public document collections would only be of a temporary nature.

e. Priority: One



REQUEST FOR FUNDING OF UNFUNDED  
REQUIREMENTS

2. (a) Function: Administrative Support
- (b) Amount: \$850,000
- (c) Convert System (Automated Information Retrieval System) equipment from lease to purchase. (See Item (d) below.)
- (d) When the NRC's Automated Information Retrieval System was begun in June 1978, a purchase option for system equipment was included. The contract provides that the equipment be leased out but that "The NRC may, at its option, purchase the system . . . at any time after the basic period of performance . . ." The usage allowance shall be 63% of the cumulative monthly-lease payments if the system is purchased after the third year of the contract. (TIDC calculations of cost are in Attachment 1.)

In OADM budget submittals for both FY 80 and FY 81, funds were requested to purchase the equipment since the investment and usefulness clearly make it beneficial for the NRC, as a whole. However, in both FY 80 and FY 81, the requested funds were not allowed and funds were included for lease, only.

The reasons for the TIDC request for funds to convert the equipment was that both our cost analysis and the cost analysis performed by the Division of Contracts showed that the most effective time for equipment purchase was in Month 25 (June 3 - July 3, 1980) of the contract.

Finally, the portion of the OMPA study relating to the purchase of the current DCS configuration is given in Attachment 2. Effectively, this shows, as TIDC had stated in budget submittals, that the most cost-effective time for purchase of the equipment was in June 1980. However, it is still to the benefit of the Government to purchase the equipment as soon as possible.

- (e) Priority: Two

Enclosures:  
As stated

Attachment B

|   |                |
|---|----------------|
| Cost to Purchase Equipment  | \$1,413,802    |
| Less: Funds no longer required to lease<br>the equipment just purchased | <u>567,355</u> |
| Additional funds required to Purchase<br>Equipment                      | \$846,447      |

COST ANALYSES FOR PURCHASE  
OF EQUIPMENT FROM CONTRACT  
NO. NRC-10-76-860

Purchase Price (from Contract) = \$3,765,342

Usage allowance to NRC = 63% of cumulative monthly-lease payments

Monthly Lease Payment  
(during basic period of performance) = \$143,332/mo.

Total number of months leased  
(during basic period of performance) = 20.5

Total lease cost during  
basic period of performance = (\$143,332/mo.) (20.5 mos.)  
= \$2,938,306

-----  
Monthly Lease Payment (during  
extended period of performance) = \$113,471

Number of months in extended  
period of performance prior  
to equipment purchase = 7 (from 6/3/80-1/3/81)

Lease cost during extended  
period of performance prior to  
equipment purchase = (\$113,471)(7)=\$794,297

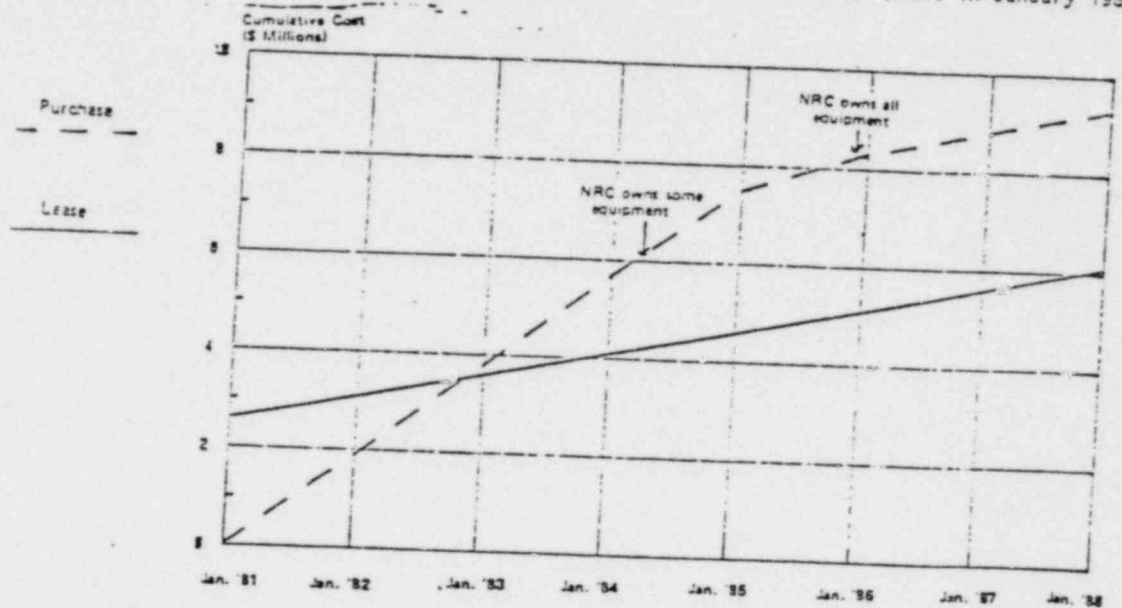
-----  
Total Dollar Amount Applied = (\$2,938,306 + \$794,297)(0.63)  
= (3,732,603)(0.63)  
= \$2,351,540

-----  
Amount NRC must pay to  
take title to equipment = \$3,765,342 - \$2,351,540  
= \$1,413,802

-----  
Amount required to lease  
equipment from 1/3/81-6/3/81 = (5)(\$113,471)  
= \$567,355

Finding F.5. The cost of buying the DCS equipment now (and maintaining it) is less than the cost of continuing to lease the equipment for another two years.

Figure F-5: Comparative Costs of Leasing/Purchasing DCS Equipment in January 1981



- \$4.2M cumulative lease payments Sept. 1978 through Dec. 1980 not included
- Maximum annual maintenance costs assumed to be \$500K
- NRC owns equipment after 5 1/2 years of lease payments
- Purchase costs do not include credit for salvage value

To date NRC has leased rather than purchased ADP equipment. The TERA contract contains an equipment purchase option that allows NRC to take a credit against the purchase price equal to a set percentage of lease payments made by NRC. During the contract's third year (June 1980 to June 1981), a credit of 63% of our cumulative lease payments is applicable. If equipment is purchased in the contract's fourth year or later, the credit is only 50% of lease payments. After 5-1/2 years of paying lease, NRC will own the equipment and pay only maintenance costs of approximately \$300-500,000 per year.

(TERA Contract, Section 6.A.5(a))

The following tables show the supporting computations for Figure F-6 and are based on purchasing equipment by January 1981.

APPENDIX D

Memorandum, Commissioner Gilinsky to Chairman Ancarrie and Commissioners Hendrie and Bradford, October 6, 1980, "Year Four of the Document Control System Contract."



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

OFFICE OF THE  
COMMISSIONER

October 6, 1980

MEMORANDUM FOR CHAIRMAN AHEARNE  
COMMISSIONER HENDRIE  
COMMISSIONER BRADFORD

SUBJECT: YEAR FOUR OF THE DOCUMENT CONTROL  
SYSTEM CONTRACT

The attached memorandum from OIA of September 5, 1980 recommends that Year Four of the TERA Contract (which begins June 3, 1981) be awarded on a competitive basis. A previous memorandum of April 23, 1980, from the Division of Contracts made a similar suggestion, although their target date of September 15 for a Statement of Work (SOW) does not seem to have been acted upon. I am concerned that if we do not act immediately on this very complex contract, it will be too late to obtain competitive bids for Year Four.

This is a very costly and problem-plagued contract. It would be difficult to justify before Congress our failure to act on these recommendations from our own staff.

The staff should note Commission approval of the Year Three contract to TERA requested that future contracts be limited to essential NRC requirements and reflect all cost-saving modifications. The chief problem with this contract has been that the basic needs of the NRC were not clearly defined at the outset. The pending MPA and OIA investigations should help to establish these. The new SOW should be limited to these basic, clearly-defined needs, and such options as the video system and special services should be costed separately.

There have been repeated delays in producing the MPA and OIA reports, due to the complexity of the contract. While awaiting these reports, however, the preliminary contract work, such as appointing a Review Board, should begin immediately. Any further delay will automatically result in continuation of the present unsatisfactory contract.

*Victor Gilinsky*  
Victor Gilinsky

Attachment

cc: EDO  
SECY