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REPORT OF THE COMPTROLLER GENERAL OF THE UNITED STATES

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Contract Award By The Federal Power Commission For Developing And Installing A Regulatory Information System

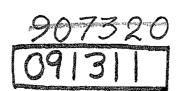
Certain Commission actions in awarding a contract may have detracted from the competitiveness of the award; however, the award was in technical conformance with Federal procurement regulations.

This report also discusses

- --the need to test available data management systems to insure procurement of the most suitable system for FPC's
- -- the need to require the contractor to maintain documentation supporting conclusions reached during its evaluation of data management systems,
- -- the need to periodically evaluate the security of regulatory information in the system to preclude unauthorized access, and
- --GAO's concern that the General Services Administration's review procedures regarding delegations of procurement authority under the Brooks Act (Public Law 89-306) should also apply to facilities services contracts.

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COMPTROLLER GENERAL OF THE UNITED STATES WASHINGTON, D.C. 20548

B-182285

The Honorable John E. Moss House of Representatives

Dear Mr. Moss:

The Federal Power Commission awarded a contract for developing and installing a Regulatory Information System. We prepared a report on this contract award in accordance with your request of September 20, 1974.

We invite your attention to the fact that this report contains recommendations to the Chairman of the Commission which are set forth on pages 14, 19, and 22. As you know, section 236 of the Legislative Reorganization Act of 1970 requires the head of a Federal agency to submit a written statement on actions taken on our recommendations to the House and Senate Committees on Government Operations not later than 60 days after the date of the report and to the House and Senate Committees on Appropriations with the agency's first request for appropriations made more than 60 days after the date of the report.

We will be in touch with your office in the near future to arrange for the release of the report to meet the requirements of section 236.

There of that

Comptroller General of the United States

Contents

| | | Page |
|---------|--|------------------------|
| DIGEST | | i |
| CHAPTER | | |
| 1 | INTRODUCTION | 1 |
| 2 | COMPETITIVENESS OF CONTRACT AWARD One firm performed both developmental | 4 |
| | and implementation work Time constraints in contract award | 4 |
| | procedures Time allowed for submitting | 5 |
| | proposals Time allowed for evaluating | 6 |
| | proposals Role of FPC employee formerly employed | 8 |
| | by the contractor Conclusions | 10 11 |
| | Agency comments and our evaluation Competitiveness of awarding | 11 |
| | contract to incumbent contractor Time constraints in contract award | 12 |
| | procedures Role of former contractor employee Recommendation to the Chairman, FPC | 13 14 14 |
| 3 | PROCEDURES FOR EVALUATING SUITABILITY OF DATA MANAGEMENT SYSTEMS Need for testing | 15 15 |
| | Need for maintaining supporting documentation | 16 |
| | Conclusions Agency comments and our evaluation Recommendation to the Chairman, FPC | 16 16 1 9 |
| 4 | SECURITY OF INFORMATION SYSTEM Access to information by Foster | 20 |
| | Associates, Inc. Conclusion | 21 22 |
| | Recommendation to the Chairman, FPC Agency comments and our evaluation | 22 22 |
| 5 | DELEGATION OF PROCUREMENT AUTHORITY UNDER THE BROOKS ACT | 22 |
| | Conclusion Agency comments | 23 25 25 |

| | | Page |
|--|---|------|
| APPENDIX | | |
| I | Letter dated September 20, 1974, from Congressman John E. Moss | 20 |
| II | Letter dated October 17, 1975, from the Chairman, Federal Power Commission | 28 |
| III | Letter dated December 5, 1975, from the Deputy Administrator, General Services Administration | 55 |
| | ABBREVIATIONS | |
| ADP ADPE FPC GAO GSA IBM PRC RFP RIS | automatic data processing automatic data processing equipment Federal Power Commission General Accounting Office General Services Administration International Business Machines Corporation Planning Research Corporation request for proposal Regulatory Information System | |

COMPTROLLER GENERAL'S REPORT TO THE HONORABLE JOHN E. MOSS HOUSE OF REPRESENTATIVES CONTRACT AWARD BY THE FEDERAL POWER COMMISSION FOR DEVELOPING AND INSTALLING A REGULATORY INFORMATION SYSTEM

DIGEST

The Federal Power Commission awarded a contract to PRC Information Sciences Company, a subsidiary of Planning Research Corporation, for developing and installing a regulatory information system.

The system is to provide the Commission prompt and ready access to data on financial and technical aspects of operations of electric and gas pipeline companies. The system is designed to assist in improving the effectiveness of the Commission's decisionmaking, decrease costs, and enhance regulatory activities and interactions with utilities and the public.

The contract award by the Commission was in technical conformance with Federal procurement regulations on competition; however, certain Commission actions may have detracted from the competitiveness of the award, as follows:

- --Permitting the contractor to do the development work under the first contract and also to compete for the second gave it a competitive advantage and possibly limited the number of offerors.
- --Requiring the system to be on line as soon as possible unduly limited the time allowed to prepare proposals and to adequately evaluate proposals received.
- --Permitting a Commission employee, formerly employed by and holding stock in Planning Research Corporation, to play a minor role in the contract award created an appearance of a conflict of interest, although GAO found no evidence of such a conflict.

GAO recommends that the Chairman of the Commission be sure that the actions which may have detracted from the competitiveness of the award are avoided in the future. (See p. 14.)

The Commission would have had greater assurance that the contractor's recommended data management system was in fact the best for its needs if it had required the contractor to

- --narrow the choice of data management systems under consideration to a few systems and test them for performance before recommending one system as the best and
- --maintain full documentation supporting its recommendation as to the best data management system. (See p. 15.)

Accordingly, GAO recommends that the Chairman of the Commission require testing of alternative systems when contracting for evaluations such as required under the first Regulatory Information System contract. In addition, the Chairman should emphasize the need to clearly set forth requirements for documenting contractor actions. (See p. 19.)

Foster Associates, Inc., consultant for the oil and gas industry, is associated with the contractor's parent company and thus may be in a position to gain unauthorized access to regulatory information in the Commission's new system. Although GAO found no evidence that security was violated, the Commission needs to periodically evaluate the security of the information system which it plans to do. (See p. 22.)

The law requires Federal agencies to obtain delegation of procurement authority from the General Services Administration to procure automatic data processing equipment. General Services Administration granted the Commission authorization to enter into the contract but did not follow its review procedures on delegation of procurement authority because it maintained that the Federal Power Commission was procuring facilities services not automatic data processing equipment.

In a similar procurement action by another Federal agency, GAO expressed concern as to whether review procedures regarding delegation of procurement authority should apply to

facilities services contracts as well. The same concerns apply to the Commission's procurement. The General Services Administration advised GAO that it would revise its regulations to make facilities services contracts subject to the same rules as direct agency procurement of equipment. (See p. 25.)

The Chairman of the Commission strongly objected to the findings and conclusions in the report and did not believe that anything different should have been done in the Commission's procurement for developing and installing its Regulatory Information System. (See app. II.)

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CHAPTER 1

INTRODUCTION

By Order No. 494 dated September 26, 1973, the Federal Power Commission (FPC) formalized its plans for a fully automated computer Regulatory Information System (RIS). When the system is fully developed and operative, it is expected to assist FPC in carrying out its responsibilities imposed by the Federal Power Act (16 U.S.C. 791) and the Natural Gas Act (15 U.S.C. 717). The system will also provide FPC, other Government agencies, industry, and the public at large prompt and ready access to data contained in FPC's central electronic data bank.

The intended benefits of RIS are to improve FPC's effectiveness in decisionmaking, to decrease FPC's data handling cost, to improve FPC's regulatory activities and interactions with utilities and the public, and to increase and enhance FPC's productivity.

One major step in implementing RIS was a development contract awarded on June 19, 1973, for about \$800,000, to PRC Information Sciences Company, a subsidiary of Planning Research Corporation (PRC). The contract required PRC Information Sciences Company to (1) redesign four annual reports submitted to FPC by electric and gas pipeline companies so that they can be submitted on magnetic tape, (2) install and operate for 6 months a data management system for these four annual reports, and (3) evaluate available data management systems and recommend to FPC the system best suited to RIS requirements.

The evaluation of available systems was completed in December 1973. As a result of its evaluation, PRC Information Sciences Company recommended that FPC adopt System 2000 and operate it on an International Business Machines Corporation's (IBM) computer. System 2000 is a data management system marketed by MRI Systems Corporation.

Another major step in implementing RIS was a second contract awarded on June 29, 1974, to PRC Information Sciences Company. This contract requires the contractor to develop, install, and operate a fully automated RIS facility at the Commission. Specifically, PRC Information Sciences Company is to

--analyze all annual and periodic reports and forms, submitted to FPC by electric and gas pipeline companies, on the financial, economic, environmental, and legal aspects of their operations to determine whether the information is structured for easy input into the computer file;

- --develop a system whereby the electric and gas pipeline companies can report to FPC in a medium compatible with the RIS file design;
- --create a data base using the data submitted on required reports and forms;
- --install a data management system and other appropriate software;
- --install and operate required equipment in the RIS facility;
- --program specific applications; and
- --supply the necessary training to FPC personnel for eventual takeover of the facility.

The contract contains options which allow FPC periodic renewal for continuing facility operation; should FPC excercise all such options, the contract is expected to total about \$10.4 million over a 5-year period.

Congressman John E. Moss requested that we review the adequacy of competition provided in awarding the second RIS contract and determine whether Foster Associates, Inc. (a wholly owned subsidiary of PRC) was involved with RIS and could gain access to information not available to the public through its association with PRC. In addition, the Congressman's office asked for information on (1) the involvement in the contract award of an FPC employee who was formerly employed by PRC and (2) any other questionable procedures used by FPC in awarding the contract.

We reviewed FPC's contract files on the award of the two RIS contracts, the Data Management System Comprehensive Study prepared by PRC Information Sciences Company under the first contract, and other pertinent records at the FPC head-quarters offices in Washington, D.C.

Discussions were held with officials of FPC, PRC, Optimum Systems, Inc. (OSI), and computer-related companies which were potential offerors to carry out FPC's contract work. We also discussed with General Services Administration (GSA) officials the authorization of FPC to obtain computer

equipment, and we spoke with the Department of Agriculture and Department of Commerce officials about their use of System 2000.

CHAPTER 2

COMPETITIVENESS OF CONTRACT AWARD

Contracts by Federal agencies are to be awarded as competitively as possible. Although we found no violations of the Federal procurement regulations on competition, we noted several FPC actions that may have detracted from the competitiveness of the award.

- --Permitting PRC Information Sciences Company to do the development work under the first contract and to also compete for the second contract gave the company a competitive advantage and possibly limited the number of offerors.
- --Requiring RIS to be on line as soon as possible unduly limited the time allowed offerors to prepare proposals and for FPC to adequately evaluate the proposals received.
- --Permitting an FPC employee formerly employed by and holding stock in PRC to play a minor role in the contract award created an appearance of a possible conflict of interest.

ONE FIRM PERFORMED BOTH DEVELOPMENTAL AND IMPLEMENTATION WORK

FPC's decision to allow the firm which carried out the first contract to also compete for the second contract is questionable, especially in view of FPC's apparent intention to keep the recommendations of the first contract free from bias.

FPC's intent to prevent bias was evidenced by a clause included in the first contract aimed at excluding computer hardware manufacturers from making proposals. The clause stated:

"It is understood that the successful contractor receiving award of an individual task under this contract shall be prohibited from participating in competition for the furnishing of any equipment which may be procured as a result of work generated by performance on the individual task for a period of three (3) years after the completion of this contract. Further, any services furnished to other contractors based on any work performed on the individual task shall be subject to approval by the Government. The contractor

further agrees that if there is any doubt as to whether furnishing equipment to the Government as a result of the individual task represents a conflict of interest, the contractor will secure a decision from the Government's contracting officer on this contract."

In a memorandum to the files an FPC official stated that the clause was intended to maximize competition for the second contract by preventing computer hardware manufacturers from "buying in" on the development contract and biasing the development work. Biasing the development work by a computer hardware manufacturer would maximize the possibility of selection of their equipment on the second contract. The official said, however, that by using the clause, FPC did not want to preclude any bona fide computer consulting organization like PRC Information Sciences Company from bidding on both the first contract and any follow-on contracts, and he implied that such organizations have nothing to gain by biasing the development work.

However, whoever performed the development work in the first contract may have had bias in evaluating data management systems. Not only might hardware manufacturers bias the evaluation, but also a computer consulting firm might have expertise in using a certain system or type of hardware and might bias its evaluation by recommending a particular system or hardware in a developmental contract to gain an advantage when competing for a follow-on contract.

PRC Information Sciences Company gained an advantage in competing for the second contract because of the work it performed and the experience it gained under the previous contract. Allowing an advantage to a contractor does not necessarily result in a disadvantage to the Government in terms of the best product and best price, but other bona fide competitors may have chosen not to make proposals because they could not overcome this advantage. The request for proposal (RFP) was sent to 74 potential offerors and only one firm other than PRC Information Sciences Company submitted a proposal. More firms may have competed for the second contract had PRC Information Sciences Company been excluded from submitting a proposal. The exclusion could have been through a specific provision in the first contract that whoever did the first contract could not compete for the second.

TIME CONSTRAINTS IN CONTRACT AWARD PROCEDURES

Of primary concern to FPC was to get the hardware portion of RIS on line as soon as possible so that it could use the

computer to help solve the critical energy problems of the winter of 1974. Its plans called for the contract to be awarded by June 30, 1974, and to have the hardware in initial operation by October 1974. Therefore, because the RFP was issued on April 26, 1974, and the proposal submission date was June 3, 1974, FPC allowed not more than 38 days for interested parties to respond to the RFP and allowed the remaining 27 days to evaluate any proposals received.

We believe these actions adversely affected competition for the contract award.

Time allowed for submitting proposals

The Federal procurement regulations do not prescribe specific minimum response times that Federal agencies should allow for the preparation of proposals under negotiated procurements. As a rule, the adequacy of the time allowed for proposal submission must be considered on a case-by-case basis as determined by agency officials. The more complex the procurement the more time should be allowed for proposal preparation and submission.

The Chairman, FPC, specifically instructed his staff that any company wanting to compete for the project was to be given every opportunity to do so.

We noted, however, that after the RFP was issued on April 26, 1974, three companies requested more time to prepare proposals but FPC did not extend the 38-day period allowed to respond. One of the companies, Optimum Systems, Inc., the only company other than PRC Information Sciences Company to ultimately submit a proposal within the 38-day bid response time, had requested that the due date for proposals be set back later in June. One of the other companies, a computer hardware manufacturer, requested, in writing, an additional 53 days to prepare its proposal, possibly to develop an alternative data management system using its own equipment The third company telephoned FPC asking whether the date for submission of proposals could be changed to a later date.

In a memorandum to the files an FPC official stated that missing any of the critical dates in awarding the contract would have required FPC to await another appropriation by the Congress, because FPC's authority to obligate the funds would have lapsed on June 30, 1974. In discussing the length of time allowed for preparing proposals, another official stated that the RFP could not have been issued before April 26, 1974, because its development depended on completion of all the work under the first contract.

We noted that, even though the second contract was more complex than the first, both allowed potential offerors about the same response time. Initially, the first RFP allowed only 32 days but later extended the period to 39 days because potential offerors requested an extension to submit proposals.

We discussed the adequacy of the 38-day response time for the second contract with five potential offerors including one company that had requested additional time to submit its proposal. Four of these companies were well-known computer hardware manufacturers and one was a computer consulting firm with the ability to make a proposal for the RIS contract. Three of the computer manufacturers told us that the 38-day requirement was unrealistic, and the computer consulting firm said that the requirement to meet such a deadline would unduly burden an organization.

We also discussed the 38-day limit with officials of Optimum Systems, Inc., the only offeror other than PRC Information Sciences Company. Company officials said they were able to meet the deadline only because FPC's request closely paralleled other contract work they were doing for the Environmental Protection Agency, which involved using System 2000--the system recommended by PRC Information Sciences Company under the first contract.

The specifications in the RFP stated that under the earlier contract PRC Information Sciences Company had determined that the System 2000 was the best available data management system for RIS needs. The specifications also stated that FPC concurred with this recommendation but wanted offerors to propose an alternative system if they so desired. who elected to propose a system other than System 2000, however, had to demonstrate that the proposed system met or exceeded the performance of System 2000 using the same assumptions, parameters, and techniques of measurement as employed by PRC Information Sciences Company in its report on data management systems. Therefore, it would be reasonable to expect a vendor to require more time and effort to propose a system other than System 2000 and the short span of 38 days would adversely affect its ability to compete with a firm proposing System 2000.

The RFP required a substantial amount of systems analysis work including conceptual design, input and output specifications, file conversion, equipment and software selection, and involved a complex technical evaluation before a responsive proposal could be prepared. We believe that FPC's desire to get RIS on line by October 1974 caused it to establish an unduly short response time which inhibited competition,

because offerors other than PRC Information Sciences Company and OSI apparently may not have had enough time to prepare proposals.

In view of several potential offerors' requesting additional time for preparation of proposals, it appears that FPC might have received more proposals by allowing more than 38 days, possibly a period of 60 days, as indicated by the requests for time extension. This would have given offerors, particularly those wishing to propose an alternative data management system, an opportunity to do so.

Time allowed for evaluating proposals

Setting a June 30, 1974, deadline for awarding the RIS contract, meant that FPC had to evaluate proposals received on June 3, 1974, in less than a month. During this period—the contract was actually signed on June 29, 1974—FPC had to evaluate the two proposals, conduct negotiations with both offerors, and solicit best and final offers.

We noted certain actions or lack of actions on the part of FPC which were caused at least in part by these time limitations and which did not seem to insure the highest degree of thoroughness and fairness in the evaluation process.

- --Relying on a subjective evaluation of the merits of the proposals submitted when a performance evaluation could have provided for more objectivity, thus strengthening the evaluation's reliability.
- --Failing to follow up certain evaluators' recommendations made during the proposal evaluations.
- --Allowing employees who had maintained close contact with PRC Information Sciences Company, while working under the first contract, to evaluate the proposals for the second contract.

Before receiving the proposals, FPC prepared evaluation scoring sheets and assigned 14 staff members to evaluate the proposals. According to an FPC official, the 14 evaluators were schooled in what was to be done when the proposals were received. The evaluators were given the proposals on June 5, 1974. On June 12, 1974, each evaluator had completed his evaluation. Thus in only 1 week each evaluator had to read, understand, and evaluate 2 proposals consisting of about 1,600 pages, much of which was very technical material discussing the methodology to be used in developing and

and implementing the RIS. The evaluation was almost entirely subjective with evaluators judging performance abilities of the two proposals without the benefit of quantified data as to which of the two proposals might result in a more effective RIS.

We discussed with some of the evaluators the evaluation procedure. Each evaluator assured us that he had enough time to evaluate the proposals and that the evaluations were thorough and devoid of any bias toward any particular company.

In our opinion, the evaluation would have been more objective had it used quantitative data which could have been obtained by testing the two proposals to determine which system performed more efficiently and effectively. Instead FPC relied solely on the subjective evaluation of the 14 staff members.

After the 14 evaluators had completed their evaluations, FPC had 2 employees in the Office of the Comptroller evaluate, in detail, the primary hardware and software proposals by both companies for technical performance. They determined, through a subjective evaluation, that the hardware and software proposals by PRC Information Sciences Company more closely satisfied the technical performance requirements set forth in the RFP. They stated further that OSI's proposal did not fully identify all hardware components and features and all software features, especially for System 2000. They recommended that a complete list of components and features be obtained from OSI to permit a full evaluation.

The technical performance requirements evaluation also concluded that the tape drives proposed by PRC Information Sciences Company met the Commission's requirements as stated in the RIS specifications but that more cost-effective compatible tape drives were proposed by OSI.

Notwithstanding the results of the performace evaluation, FPC took no followup action. FPC said this evaluation, which was not required by Federal procurement regulations, did not obligate it to follow up on any resulting findings or recommendations. We believe that such followup and additional negotiations would have helped to insure that it was accepting the best contract proposal.

We noted that some of the evaluators had (1) worked closely with PRC Information Sciences Company under the first contract, (2) helped prepare RFP specifications for the second contract, or (3) helped prepare the evaluation criteria. We question whether FPC personnel who had been associated with the work under the first contract or who had contributed to the

performance standards for the second contract should have been used in the evaluation because their objectivity may have been affected by prior work.

ROLE OF FPC EMPLOYEE FORMERLY EMPLOYED BY THE CONTRACTOR

The RFP for the second contract listed an FPC contracting specialist who was a former employee of PRC as FPC's contracting officer. FPC said that it erred in listing the specialist as the contracting officer, because the contracting officer for FPC was the Director, Office of Administrative Operations. We examined the issue further and obtained the following data on the circumstances of this employee's participation in the contract award.

The official was employed by PRC from August 1965 to June 1971 as a data systems analyst. In June 1971 he was hired by FPC as a contract specialist and at the time of our review was still employed by FPC.

During his employment at PRC, he acquired a beneficial interest in 122 shares of PRC stock at an average price of about \$22 per share by participating in the pension trust fund. After resigning from PRC, he elected to have his vested interest in the pension fund returned to him. This represented an amount of cash and the 122 shares of PRC stock he had acquired over the years. Since leaving PRC he did not acquire any additional stock, and on October 18, 1974, at the request of FPC, he sold his stock at about a \$2,000 loss.

FPC's records indicate that when the RFP for the first contract was issued, the employee informed the Assistant Executive Director and the Director of the Office of Administrative Operations that he would disqualify himself from participating in the proposal evaluations if PRC was an offeror in response to the RFP. When PRC Information Sciences Company submitted a proposal, the employee reportedly did not participate in any way in the evaluation.

Before the RFP for the second contract was issued, the employee informed the Director, Office of Administrative Operations, by memorandum dated April 22, 1974, that he wished to disqualify himself from participating in the evaluations, because he believed that PRC Information Sciences Company would submit a proposal. FPC contract records show, however, that the employee

--was permitted to attend a meeting in May 1974, where the RFP was discussed and a meeting in

June 1974, where a contract proposal in response to the RFP was discussed:

- --was authorized to accept on FPC's behalf OSI's proposal on June 3, 1974; and
- --did not divest himself of PRC stock until October 1974.

We found no evidence that the employee used the data he had obtained or his influence to the advantage of his former employer. Nevertheless, we believe FPC should have taken all steps necessary to avoid the appearance of a conflict of interest.

CONCLUSIONS

The contract was awarded in technical conformance with the Federal procurement regulations, but several actions by FPC may have detracted from the competitive nature of the contract award.

Allowing PRC Information Sciences Company to do the development work under the first contract and also to compete for the second contract gave it an advantage over other potential offerors because of the work performed and experience gained under the first contract and may have discouraged other potential offerors.

The limited time allowed for responding to the RFP also may have resulted in several potential offerors not submitting proposals. The limited time frame gave PRC Information Sciences Company an advantage over its competitors. Moreover, the short time allowed for FPC's evaluation of the proposals resulted in several actions which adversely affected the evaluation process. Permitting an employee formerly employed by and holding stock in PRC to play a minor role in the contract award gave the appearance of a possible conflict of interest, although we found no evidence that the employee used his influence to the advantage of PRC Information Sciences Company.

AGENCY COMMENTS AND OUR EVALUATION

The Commission staff disagreed with our conclusions on the procedures used in the contract award and stated that it did more than was required to maintain a competitive environment for the award. The staff's comments on our principal findings in this chapter are summarized below and presented in full in appendix I.

Competitiveness of awarding contract to incumbent contractor

The staff did not consider that permitting the contractor to do the development work under the first contract and also to compete for the second contract gave it a competitive advantage over other potential offerors. The staff conceded, however, that some advantages might accrue to an incumbent contractor but this would be only in the area of learning how the Commission operates.

We believe that the advantage of an incumbent contractor goes beyond that stated by the Commission staff. Such contractor would be in a position to bias the selection of a data management system and the computer hardware to be used and thus would be able to more readily submit a responsive proposal for the second contract for developing and installing the system.

The Commission staff stated that by excluding PRC Information Sciences Company it would have deprived itself of a proven supplier of services which had performed to the Commission's satisfaction. The staff stated further that open competition should not be constrained by denying an offeror the right to compete where he is qualified.

Although FPC would have deprived itself of a proven supplier of services had it excluded PRC Information Sciences Company, it seems that excluding it would have promoted greater competition because (1) other potential offerors may have been discouraged by the advantage gained by the incumbent contractor and (2) FPC thought it reasonable to exclude hardware manufacturers from performing the first and second contract through the hardware exclusion clause, even though the clause also constrained open competition by denying qualified offerors the right to compete.

In addition, the satisfactory performance of PRC Information Sciences Company on the first contract does not necessarily insure that the contractor will perform satisfactorily on the second, nor does it follow that others could not perform satisfactorily.

The Commission staff stated that to encourage open competition, all potential offerors were given an opportunity to benefit from the results of the first contract. No potential offeror could have benefited from the first contract as much as the incumbent contractor. For example, the information provided in the RFP for the second contract did not contain the reasons PRC Information Sciences Company

rejected many data management systems or that it recommended that System 2000 operates best on IBM equipment.

Time constraints in contract award procedures

The Commission staff said serious potential bidders had sufficient time to prepare a response to the RFP and that the Commission had no difficulties in evaluating proposals made.

With regard to the time allowed for submission of proposals, the Commission staff stated that FPC was able to allow more time than the Federal procurement regulations required. There is no minimum response time that Federal agencies should allow, but the time to be allowed should be considered on a case-by-case basis by the agency involved. Two potential offerors asked for more time but were denied their request. This would indicate that FPC could have received more proposals by allowing more than 38 days.

With regard to the time allowed for the evaluation of proposals, the Commission staff stated that the energy crisis prompted timing expedience. The staff stated that if more time had been allowed for performance festing, the evaluation would not have been any more valid because valid measurement criteria had already been developed in the first contract and because evaluators had had enough expertise to make valid assessments.

Any time an evaluation based on subjective judgment is further supported with objective information, such as quantitative data from performance testing, the quality of the evaluation process is considerably improved. An important consideration in the evaluation process should be to minimize subjectivity and possible bias by the evaluators. In addition, if several alternative systems had been proposed, FPC's failure to require performance evaluations could have seriously jeopardized FPC's chances of obtaining the most effective system.

Regarding our comment that the recommendations from an FPC staff technical evaluation of the two contractor proposals should have been followed up, the Commission staff said that the matters to be followed up were insignificant and that such followup would have required more time. We agree it would have taken more time, which is the issue at hand. We cannot judge the importance of the information but believe that any information which helps to insure that the Government is getting the best product for funds expended is important.

Role of former contractor employee

The Commission staff stated that the Commission employee played an inconsequential role in the contract and none in awarding the contract and that when he became aware of a potential conflict, he immediately took all appropriate steps to remove himself from this environment.

Nevertheless, FPC's permitting the employee to attend meetings where the contract award was being discussed to accept OSI's proposal and to continue to hold stock in PRC for several months contributed to an appearance of a conflict of interest.

RECOMMENDATION TO THE CHAIRMAN, FPC

The Chairman, FPC, should be sure that those actions which we believe detracted from the competitive nature of the contract award are avoided in future procurements.

CHAPTER 3

PROCEDURES FOR EVALUATING

SUITABILITY OF DATA MANAGEMENT SYSTEMS

FPC did not require the contractor under the first contract to test available data management systems. We believe that testing should have been an essential requirement of the contract which would have helped to insure that the data management system selected—System 2000—was, in fact, the best available for RIS needs. In addition, FPC did not require the contractor to maintain documentation supporting its comprehensive study of data management systems.

NEED FOR TESTING

Testing is the best method for selecting a data management system that is to fulfill a particular need. Testing, using representative data bases and typical application problems on a scaled-down basis, can provide reliable quantitative timing and performance data to be used in evaluating the suitability of the system. Through testing it is possible to select from many available data management systems those that will work most efficiently.

PRC Information Sciences Company did not test available systems before making its recommendation to FPC that System 2000 was the best for RIS needs. Its evaluation method primarily involved reviewing what the manufacturers claimed the system could do by first examining manuals obtained from the manufacturers detailing their systems capability and then by discussing the systems' capabilities with manufacturers' representatives. PRC Information Sciences Company, explaining its lack of testing, stated that RIS requirements were too varied to obtain a good representative data base that would be needed for testing.

PRC Information Sciences Company officials stated that, before making the recommendation in late 1973 as to which data management system best served FPC's needs, they sought to obtain detailed information from the various vendors and also some users of the systems being considered. They said they contacted three users of System 2000 including the Departments of Agriculture and Commerce but that documentation was not maintained which would show the third user's name. They said they were unable to supply us with the information they obtained from the Departments of Agriculture and Commerce on System 2000, because the workpapers prepared during the evaluation had been destroyed.

We therefore made inquiries at the Departments of Agriculture and Commerce about their experience with System 2000. At Agriculture we were told that any information furnished to PRC Information Sciences Company during the latter part of 1973 could have been only theoretical because the system was not operating at that time. Similarly at Commerce, we were informed that installation of System 2000 began in July 1973 and the system was not completely ready for use until January 1974.

The contractor's failure to test available systems can be attributed to FPC's not establishing a requirement in the first contract that such tests be made before recommending a best available system. We believe that the contract should have required the contractor to demonstrate conclusively through testing that the recommended system was the most appropriate for FPC's RIS.

NEED FOR MAINTAINING SUPPORTING DOCUMENTATION

PRC Information Sciences Company did not retain certain data supporting its report to FPC recommending that System 2000 was the best data management system for RIS needs. The report contained PRC Information Sciences Company's rationale for the recommendation, but a company official told us that the company's documentation supporting the facts in the report had been destroyed.

We reviewed the contract including the RFP and found that FPC did not include specific requirements that the contractor keep any documentation. Without complete documentation of the contractor's actions leading to the recommendation of a data management system, FPC was not able to fully review the contractor's evaluation or to determine that its recommendation was sound and reliable.

CONCLUSIONS

We believe that FPC should have required, in its RFP for the first contract, that the contractor establish by actual testing which of the data management systems under consideration was the best suitable to meet FPC's requirements. Furthermore, FPC should have required full and complete documentation of all contractor actions for selecting a data management system.

AGENCY COMMENTS AND OUR EVALUATION

The Commission, in disagreeing with our conclusions, said the theory that testing data management systems for

performance would produce the best candidate system is unproven and open to serious question, especially for testing systems which have yet to be developed.

We do not say that testing will always produce the best candidate system. In our view, however, testing is a necessary step in the evaluation process. The question of whether FPC should have tested candidate data management systems involves its rationale for relying solely on the objective feature analysis method of evaluation. We do not object to the use of this method; however, using it should not have precluded testing.

The objective feature analysis method relies on judgments and opinions for decisionmaking through analyzing agencies' needs and comparing available systems. The method uses vendors' literature and technical presentations to determine what system best meets the agencies needs. Testing provides comparable data in such areas not discernable by comparing literature as

- --program execution time,
- -- number of errors encountered,
- --ease of use of the system language,
- --ease of date base generation and maintenance,
- --ease of the use of system documentation,
- -- amounts of main storage and auxiliary storage used,
- -- quality and quantity of vendor support,
- --ease of specification of report formats, and
- -- number of problems encountered.

In addition, testing can also verify vendors' claims about their systems' performance.

In arguing against testing, FPC maintains that test problems would have to be designed, programed, and implemented for each competitive system configuration. Further it maintains that large amounts of data would have to be collected, validated, and loaded into the data base.

FPC failed to recognize that the standard practice is to require testing on only those few systems that are in final contention, thus eliminating much of the work the Commission staff feels was needed. In addition large amounts of data would not have been needed. Nevertheless, in this instance FPC already had the data available and could have had a large portion of it in a form that could have been used for testing, because part of the first contract required that four reports regularly received by FPC be redesigned and keypunched so that they could be submitted on magnetic tape. The contract also required installation and operation of a data management system. FPC could have required that these operations be used as the basis of the test.

FPC stated that, through testing, bias can be introduced into the selection of a data management system. It stated that there is more likelihood of bias using testing than any other approach. We agree that bias can be introduced into the test but the competence and integrity of the contractor is at stake just as it is in using any other method, including the objective feature analysis method. Using both methods, however, may provide the means necessary to recognize and minimize bias.

We continue to believe that FPC erred by not requiring the contractor to test available data management systems especially because it would eventually be investing more than \$10 million in its Regulatory Information System.

With regard to maintaining supporting documentation, the Commission staff stated that they received a detailed report prepared by the contractor which documents the recommendations that System 2000 is best for FPC's needs. This report, however, contained little information about the experiences of users of the various candidate data management systems. believe that, because the candidate systems were not tested to document such things as operating efficiency, resources used, and ease of use, PRC Information Sciences Company should have determined these things during the user survey. FPC permitted the contractor to include only general terms in the detailed report about the results of the user survey. The detailed report stated that the users feel that System 2000 is an excellent package with many outstanding capabil-FPC required no further detailed information as to operating efficiencies, problems with the system, etc.

FPC contends that the lack of material was a small portion of the evaluation and that the lack of the data had no effect on the selection of the data management system. We do not know what effect, if any, this data would have had on the selection process, but we maintain that the data should have been important to FPC, because it would have put FPC in a better position to make an informed decision about whether System 2000 was best for its needs.

RECOMMENDATION TO THE CHAIRMAN, FPC

We recommend that the Chairman, FPC, require testing of alternative systems when contracting for evaluations such as required under the first RIS contract. In addition, the Chairman should emphasize the need to clearly set forth, in the contract terms, the requirements for documenting contractor's actions.

CHAPTER 4

SECURITY OF INFORMATION SYSTEM

FPC's request for proposals stated that the contractor is responsible for planning and implementing steps to insure complete security of all transactions and information. Although we found no evidence that security was violated, FPC needs to maintain a constant vigilance over the system to insure its security.

Complete security includes both external and internal security. The external security is intended to protect the automated data processing system, its computer programs, and stored data from unauthorized access, manipulation, or destruction. External security also includes provisions for the physical security of the computer.

Internal security is to protect data from users who are authorized to use the computer but are not authorized to have access to all of the data in the system.

External security was primarily the responsibility of FPC because the contractor was required to locate the computer and the data bank in the FPC headquarters office where the FPC's security force could physically guard it. The internal security features proposed by PRC Information Sciences Company included those security features contained in System 2000 and an operating system designated "OS/VS2 Release 1.6" marketed by an equipment manufacturer. A computer operating or control system manages the data as computer programs are run on the computer. In addition, the system is designed to provide internal security of the data.

FPC recognized at the time the contractors' proposals were evaluated that information introduced into the data bank would be available to anyone through FPC's Office of Public Information and that security would have to be strengthened before proprietary information could be introduced into the data base.

OSI proposed similar security features and stated that in 6 to 9 months the proposed operating system would be replaced with "OS/VS2 Release 2" which among its other features reportedly offers security and integrity capability beyond Release 1.6.

PRC Information Sciences Company provided "OS/VS2 Release 1.7," a more recent version of the OS/VS when installing the operating system and in April 1975, changed to "OS/VS2 Release

3" which reportedly further increases internal security and system integrity.

ACCESS TO INFORMATION BY FOSTER ASSOCIATES, INC.

Foster Associates, Inc., a consultant for the oil and gas industry, is affliliated with PRC Information Sciences Company and, although not involved in the development of FPC's RIS, may be able to gain unauthorized access to regulatory information in the system. The results of our inquires into Foster Associate's relationship to the contractor and ability to gain such access are discussed below.

Foster Associates, Inc., as a consulting firm specializing in the energy field, has extensive involvement with natural gas matters and regularly monitors the activities of FPC to keep the industry attuned to regulatory changes. To carry out this function, the firm must in the same manner as does the general public seek information on gas-related matters through FPC's Office of Public Information.

At the time our review began--October 1974--we discussed with the FPC official primarily responsible for implementing RIS the possibility that Foster Associates, Inc., could benefit from a sister company's developing and operating an RIS for FPC by gaining unauthorized access to regulatory information in the data bank. The official told us that he was aware of the relationship between Foster Associates, Inc., and PRC Information Sciences Company. He said, however, that since only public information would be included in the data bank while PRC Information Sciences Company was developing RIS, there was no need for concern about the possibility of unauthorized access.

Nevertheless, the Chairman, FPC, felt there was reason for concern. On October 23, 1974, he wrote to PRC requesting that PRC managers and employees refrain from seeking or requesting from Commission employees any data, original or derived, which is not publicly available with equal access to all. In addition he requested that no information of any kind shall be developed by PRC from the RIS data bank without express written authority by FPC.

We also made inquiries about a possible indirect involvement of Foster Associates, Inc., in the development of RIS. We reviewed information on PRC Information Sciences Company's staffing of the proposed RIS project team to determine whether any members were or had ever been affiliated with Foster Associates, Inc. Only one individual, who served in the

capacity of a legal consultant to PRC Information Sciences Company during the contract negotiation period, had been affiliated with Foster Associates during the years 1956 through 1972, long before Foster Associates became affiliated with PRC. Since 1962 the individual has been an independent attorney.

CONCLUSION

The data management system and operating system incorporates general safeguards for external and internal security. After we expressed our concern about the security of the data in the system, the operating system was upgraded by adopting the manufacturer's latest operating system design. Also, the FPC Chairman issued specific instructions to prevent access by contractor personnel to information not publicly available. Our inquiries showed no evidence of Foster Associates, Inc., gaining unauthorized information through its affiliation with the contractor developing RIS.

We believe, however, that FPC needs to maintain continuous vigilance over the security of RIS and should evaluate periodically the adequacy of safeguards built into the system.

RECOMMENDATION TO THE CHAIRMAN, FPC

We recommend that the Chairman, FPC, require the Assistant Executive Director, Office of Regulatory Information Systems, to periodically evaluate the adequacy of the security of the data in RIS and to upgrade the security when necessary.

AGENCY COMMENTS AND OUR EVALUATION

The Commission staff agrees that FPC needs to maintain constant vigilance over the security of RIS and that FPC should evaluate periodically the adequacy of safeguards built into the system. The Commission staff stated that FPC plans to assign a "RISK" team that will constantly attempt to uncover security weaknesses, evaluate security features, and recommend security improvements. This staff also listed several other security procedures that FPC plans to implement.

If properly implemented, FPC's plans for evaluating the security of RIS should be adequate.

CHAPTER 5

DELEGATION OF PROCUREMENT AUTHORITY

UNDER THE BROOKS ACT

Public Law 89-306 (Brooks Act) requires, among other things, that automatic data processing equipment be leased or purchased by agencies other than GSA only after a delegation of procurement authority by the Administrator, GSA. The Federal Property Management Regulations implementing the act require the submission of documentation to GSA for review to determine whether an agency's data processing needs can best be fulfilled by means of direct agency procurement.

GSA granted FPC authorization to enter into the RIS contract but did not follow the review procedure for delegation of procurement authority. According to GSA officials, there was no distinction between the authorization given FPC and a delegation of procurement authority, although the type of internal review given automatic data processing equipment (ADPE) procurements was different from that given to automatic data processing (ADP) services procurements. GSA's rationale was that this was not a procurement of equipment and software but rather a procurement of facility management services and therefore GSA's regulations for delegation of procurement authority did not apply.

The circumstances under which FPC contracted for developing and installing RIS are similar to those under a recent Federal Energy Administration contract for automatic data processing services which our Office reviewed for the House Committee on Government Operations and for Congressman John E. Moss (B-178205, July 15, 1975). As discussed in our July 1975 report, GSA reinterpreted its responsibilities under the Brooks Act that the requirements for review of agency direct procurement should equally apply to contractor acquisitions of equipment for the account of the Government.

Following are pertinent excerpts from GSA's response to our Office at the time we reviewed the Federal Energy Administration contract.

"Based upon resources available to GSA, future agency requests for contractor services will be reviewed by GSA, * * * on an expanded basis to first determine if the type of contract proposed by the using agency is the most appropriate for overall Government economy and efficiency. Whether a fixed price type contract, or a cost reimbursement type contract is appropriate for specific

procurements, they will also be reviewed to assure appropriate requirements specification, evaluation, and selection provisions."

* * * * *

"When the using agency requirement will result in general purpose ADPE, software, other components or services being acquired by a contractor for the Government's account, or under conditions where title will or may pass to the Government, then irrespective of the type of contract, the GSA review will consider the incorporation of such techniques as GFE, [Government-furnished equipment] Government sources of supply, Government approval of the vendor's 'make or buy' decision and Government approval of the 'lease vs. purchase' decision (to include use of the ADP Fund multiyear flexibility)."

In addition, our July 1975 report pointed out that in a recent opinion to GSA's General Counsel dated May 6, 1975, the Assistant Attorney General, Department of Justice, similarly found:

"* * * The intent of the Act would, of course, be seriously undermined if an agency could avoid its application by merely contracting out its ADP work. Thus, I would interpret the Brooks Act as allowing GSA to coordinate and provide for the economic and efficient purchase, lease, and maintenance of ADP by federal agencies or by contractors who have specifically undertaken to supply ADP services to those agencies."

In October 1975, GSA revised its regulations to make the review procedures for facilities services contracts similar to the review procedures required under the delegation of procurement authority regulations.

Although we have some reservations about the propriety of GSA's determination that the review requirements for delegation of procurement authority did not apply when FPC asked for authority to enter into a facilities services contract, we do not question the validity of FPC's contract award. As we stated in our July 1975 report on the Federal Energy Administration's contract award, the Federal agency seeking GSA's authorization is entitled to rely on such authorization to proceed with the procurement.

CONCLUSION

GSA advised our Office that it is considering further revision of its regulations under the Brooks Act to make ADPE procurements through facility services contracts subject to the same review requirements as those currently required for direct agency procurement where (1) ADPE will be contractor leased and full lease costs are paid by the Government or (2) ADPE will be contractor purchased for the account of the Government or title will pass to the Government. In our opinion, a revision should provide greater control over future facilities services contracts such as the one FPC entered into, because it would provide for the same GSA review as that required by the Brooks Act for hardware procurement.

AGENCY COMMENTS

Commission staff stated that this discussion was a matter of concern relating to GSA and not FPC. The Deputy Administrator, GSA, in his letter dated December 5, 1975 (app. III), agreed with the conclusion in our report.

JOH: 1 E. MOSS
3RD DISTRICT
SACRAMENTO, CALIFORNIA
ADMINISTRATIVE ASSISTANT
JACK MATTESON



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CONGRESS OF THE UNITED STATES

HOUSE OF REPRESENTATIVES WASHINGTON, D.C. 20515

GOVERNMENT OPERATIONS COMMITTEE: RANKING MAJORITY MEMBER SUBCOMMITTEES ON FOREIGN OPERATIONS & GOVERNMENT UNFORMATION CONSERVATION & NATURAL RESOURCES

TOM GREENE

INTERSTATE AND FOREIGN COMMERCE COMMITTEE: CHAIRMAN, COMMERCE & FINANCE SUBCOMMITTEE

DEMOCRATIC STEERING AND POLICY COMMITTEE

B-182285

September 20, 1974

Elmer B. Staats, Comptroller General General Accounting Office 441 G Street, N. W. Washington, D. C. 20548

Dear Mr. Staats:

On or about July 11, 1974, the Federal Power Commission let a contract of approximately \$10 million for a computer information system to the Planning Research Corporation. This system, the FPC says, will handle "the entire range of FPC's regulatory responsibilities."

Planning Research is the parent company of Foster Associates, an energy economics consultant group serving the oil and gas industry. The system, if the FPC claim is correct, would include all appropriate regulatory information, which would be of incalculable value to organizations and individuals with a proprietary interest in oil and gas.

I would like the General Accounting Office to ascertain whether or not all required competitive bidding procedures were followed by the FPC in letting this contract. Also, will these private organizations be operating the system? If so, will they have instant access to the information in question. If so, what protection is there to prevent the benefits of that information from being available to the petroleum industry.

Elmer B. Staats

September 20, 1974

Please let_me hear from you shortly on this matter.

JEM:

John E. Moss Member of Congress

27

Mr. Henry Eschwege

I urge that GAO revise the draft report to incorporate the requested revisions in the report of the Acting Executive Director including the supplementary response to the GAO report. It is further requested that this letter, the review of the GAO report by the Acting Executive Director, and the response to the GAO report be made a part of the proposed report of the General Accounting Office. If your draft report is revised as recommended then it is, of course, within your discretion to issue whatever you may believe to be relevant to your ultimate report.

I want to thank the GAO staff for their comprehensive review of the contract award by the Federal Power Commission for the development and installation of a Regulatory Information System. While the GAO study properly concluded that the Commission was in conformance with Federal Procurement Regulations, we will cooperate to improve our procedures as may be warranted. Pending the issuance of your final report, the Acting Executive Director has established a management team to review all contract awards and to file appropriate management reports for the administration of the Commission and response to Congressional and GAO inquiries.

Sincerely,

John N. Nassikas Chairman

Enclosure

Memorandum from the Acting Executive Director to Chairman Nassikas dated October 16, 1975, with attachment

See GAO note 1, p. 54.

APPENDIX II APPENDIX II

FEDERAL POWER COMMISSION WASHINGTON

OFFICE OF THE EXECUTIVE DIRECTOR

OCT 16 1975

MEMORANDUM TO: Chairman Nassikas

FROM : Acting Executive Director

SUBJECT : Review of GAO Report

We have completed a review of the General Accounting Office (GAO) report entitled "Contract Award by the Federal Power Commission for Development and Installation of a Regulatory Information System". GAO found that the contract award by the Commission was in conformance with Federal Procurement Regulations. While there was no question from the beginning that this was the case, nevertheless the year spent by GAO in making the study has been beneficial in that we are now more positive that our own procedures are effective and that our professional staff as well as the contractor's have been able to withstand the scrutiny of the investigation. As you know, GAO conducted many side investigations during the conduct of this study.

In general, we feel that the GAO staff put forth a lot of effort to conduct the study. They were at all times most professional in their approach, even during those phases of the study in which they had little expertise. We strongly feel that the report should be rewritten to reflect the facts, i.e., the FPC was in conformance, etc., than the way it has been written. In its present form, it attempts to cloud the issue by tendering opinions, many of which are not shared by the professional staff of the Federal Power Commission.

The following comments are based on an analysis of the draft copy of the report given to us on September 23, 1975. We have attempted to follow the general format of the report itself in order that our comments may be directly related to items in the report. Since most of the report prepared by the General Accounting Office (GAO) is made up of opinions,

Elmer B. Staats

September 20, 1974

Please let_me hear from you shortly on this matter.

John E. Moss Member of Congres

JEM:●

FEDERAL POWER COMMISSION WASHINGTON, D. C. 20426

OFFICE OF THE CHAIRMAN

October 17, 1975

Mr. Henry Eschwege
Director
Resources and Economic Development
Division
General Accounting Office
Washington, D. C. 20548

Dear Mr. Eschwege:

This is in response to your draft report evaluating the contract award by the Federal Power Commission for the development and installation of a Regulatory Information System. We are pleased that the detailed study by the General Accounting Office has resulted in a finding that the FPC was in conformance with appropriate Federal Procurement Regulations. We, of course, had every confidence that this would be the case.

Commission staff has completed a detailed review of the report and, while in disagreement with many of the opinions expressed by GAO, nevertheless does concur with some of the recommendations. Most of the GAO recommendations are rather general and are indicative of good business practices that should be adhered to by all agencies of the Federal Government.

I have enclosed the report of Joseph N. DiMarino, Acting Executive Director, which addresses all issues raised by GAO comprehensively and fairly. I concur in his analysis. In addition, there is attached to the report of the Acting Executive Director a specific and further detailed response to the GAO report with which I also concur.



Mr. Henry Eschwege

I urge that GAO revise the draft report to incorporate the requested revisions in the report of the Acting Executive Director including the supplementary response to the GAO report. It is further requested that this letter, the review of the GAO report by the Acting Executive Director, and the response to the GAO report be made a part of the proposed report of the General Accounting Office. If your draft report is revised as recommended then it is, of course, within your discretion to issue whatever you may believe to be relevant to your ultimate report.

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Sincerely,

John N. Nassikas

how N. Shinks

Chairman

Enclosure

Memorandum from the Acting Executive Director to Chairman Nassikas dated October 16, 1975, with attachment

See GAO note 1, p. 54.

FEDERAL POWER COMMISSION WASHINGTON

OFFICE OF THE EXECUTIVE DIRECTOR

OCT 16 1975

MEMORANDUM TO: Chairman Nassikas

FROM : Acting Executive Director

SUBJECT : Review of GAO Report

We have completed a review of the General Accounting Office (GAO) report entitled "Contract Award by the Federal Power Commission for Development and Installation of a Regulatory Information System". GAO found that the contract award by the Commission was in conformance with Federal Procurement Regulations. While there was no question from the beginning that this was the case, nevertheless the year spent by GAO in making the study has been beneficial in that we are now more positive that our own procedures are effective and that our professional staff as well as the contractor's have been able to withstand the scrutiny of the investigation. As you know, GAO conducted many side investigations during the conduct of this study.

In general, we feel that the GAO staff put forth a lot of effort to conduct the study. They were at all times most professional in their approach, even during those phases of the study in which they had little expertise. We strongly feel that the report should be rewritten to reflect the facts, i.e., the FPC was in conformance, etc., than the way it has been written. In its present form, it attempts to cloud the issue by tendering opinions, many of which are not shared by the professional staff of the Federal Power Commission.

The following comments are based on an analysis of the draft copy of the report given to us on September 23, 1975. We have attempted to follow the general format of the report itself in order that our comments may be directly related to items in the report. Since most of the report prepared by the General Accounting Office (GAO) is made up of opinions,

we have, wherever possible, tried to analyze the opinions and give them subjective value.

The report was prepared at the request of Congressman John E. Moss. Congressman Moss has requested and received much of the same information given to GAO. We have at all time cooperated with Congressman Moss, his office, and the GAO staff in order that this contract could be thoroughly audited and evaluated by anyone desiring to do so. The study by GAO began back in October of 1974. We have, in some cases, responded to specific questions from GAO with specific answers and/or analyses in order to assist the GAO staff.

Digest

The report begins with a digest and the first page (i) contains a very brief statement of the contract award and the Regulatory Information System (RIS). The first sentence of the second paragraph states "GAO found that the contract award by the Commission was technically in conformance with Federal Procurement Regulations relating to competition; however, GAO belives that certain Commission actions may have detracted from the competitiveness of the award."

A fundamental question is "When a contract award is in conformance with regulations is it proper for another agency, GAO, to attempt to second guess whether or not what the Commission did was proper?" If, in fact, "Commission actions may have detracted", then the problem is one with the Federal Procurement Regulations and not with an agency's conformance with those regulations. Generally, we could accept this report as long as there was an understanding with GAO that we are not in agreement with their opinions. We feel that the GAO opinions are predicated on subjective analysis as well as after-the-fact considerations and not on objectivity and certainly not in the environment of the ongoing activities of one and a half years ago. In fact, we would not recommend changing our approach to this contract in regards to the points raised by the GAO study. Specifically, the points concerning whether or not to allow Planning Research Corporation (PRC) to bid; the times allowed for proposal preparation and selection, and the method used to evaluate the data management systems.

Since many readers of this report will interpret statements out of context, we also feel it is unfair to use words such as "shortcomings" and similar terms regarding FPC actions since the alleged "shortcomings" did not, as eviderced by GAO's final analysis, impact FPC's conformance to Federal regulations.

GAO indicates that the specific Commission actions they feel detracted from the competitiveness of the award are:

(1) Permitting the contractor to do the developmental work under the first contract and also compete for the second contract gave it a competitive advantage and possibly limited the number of offerors.

We did not and do not consider that any potential bidder had a competitive advantage over any other and this is discussed in more detail later in this memo.

(2) Requiring the system to be on-line as soon as possible unduly limited the time allowed to prepare proposals and to evaluate proposals received.

This is a subjective opinion of GAO and we have previously responded to the GAO team concerning this item. However, once again it should be pointed out that the requirements of the system, including necessary scheduling, are a responsibility of the Agency. The Agency made the decision that in order to effectively perform its mission it had to move expeditiously in installation of the computer system. The Commission had no difficulties in evaluating proposals and believes that companies which were serious potential bidders had sufficient time to prepare a response. This also is discussed on later pages. It should be pointed out that the GAO staff missed a very important feature and that was that the "system" in totality did not have to be on-line as soon as possible, but only the hardware portion of that system in order that the Federal Power Commission could use the computer for solution of critical energy problems associated with the winter of 1974. We feel that this comment implies that GAO is placing itself in the position of determining whether or not the Agency's priorities are proper.

(3) Permitting a Commission employee formerly employed by and holding stock in the contractor to play a role in the contract award.

This also was responded to at great length during the investigation. The Commission employee referred to played an insignificant role in the contract and none in the awarding of the contract. The employee referred to is a long-time Government servant and has shown himself to be a highly ethical employee. When he became aware of a potential appearance of conflict, he immediately took all appropriate steps to remove himself from this environment. This is also discussed in more detail on later pages.

The next statement is that GAO recommends that the Commission alert its staff to the "shortcomings" in the award of the contract so that similar "shortcomings" can be avoided in the future. We do not feel that there were any "shortcomings" and that the staff performed as required according to the Federal Procurement Regulations both technically and in the full spirit of competition.

The GAO report then goes on to state that the Commission did not have adequate assurance that the data management system recommended by the contractor was, in fact, the best for its needs and gives three reasons that it feels justifies the statement.

The first has to do with a recommendation that the contractor should narrow the choice of data management systems under consideration to a few systems and test them for performance before recommending a system as the best.

In general, we feel that our specifications provided more than adequate assurance that the data management system selected was the best for our requirements. In fact, the contractor did narrow the data management systems under consideration to a few and then proceeded to evaluate them. The allegation presented that testing them for performance would necessarily always produce the best candidate is unproven and open to serious question, especially regarding testing of systems which have yet to be developed. We will go into this in more detail later in this memo.

See GAO note 2, p. 54.

See GAO note 2, p. 54.

The third recommendation in this category is that the contractor should maintain documentation supporting its recommendations. We have a very detailed report prepared by the contractor which documents their recommendations to us. The term "supporting documentation" is unclear and perhaps alludes to certain information that GAO could not obtain from the contractor. The lack of this material had no affect on the selection of the data management system. The fact of the matter is that the data management system had to pass a detailed set of criteria and evaluation prior to selection. We feel that we more than adequately specified all actions to take place by the contractor and had clear and detailed requirements for the selection of the data management system.

The next reference is to Foster Associates, Inc. This has been fully described to the GAO staff and, as indicated by GAO, we are constantly aware of and evaluating our need for security so GAO's recommendation in this regard is superfluous. The FPC does periodically evaluate the security of its information system, as well as who may or may not have access to the regulatory information in the Commission's RIS.

The balance of the digest refers to the General Services Administration and its administration of the Brooks Bill. Since the Federal Power Commission did everything that it was supposed to in terms of its relationship to GSA and the requirements of the Brooks Bill, we feel that this section is also extraneous information and should be in a separate report to the General Services Administration.

Chapter One

"Introduction"

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Chapter One describes the RIS and the steps leading up to the award of the contract and finally to the request by Congressman John E. Moss for information concerning this contract. We find no difficulty with accepting Chapter One in its entirety.

Chapter Two

"Competitiveness of Contract Award"

In Chapter Two GAO again states that they found no violations of the Federal Procurement Regulations relating to competition, but then states that they noted several FPC actions that may have detracted from the competitiveness of the award. The same items are described here as were described in the Digest. Our comments remain the same for this summary statement. We feel that the Agency did much more than was required to maintain a competitive environment for the award of this contract. It should be noted that we described in detail to the GAO staff the steps we took to maintain a competitive environment during the award of this contract. It should be noted further that GAO did not indicate any of the efforts by the FPC to promote competition.

"One Firm Performed Both Developmental and Implementation Work

"FPC's decision to allow the firm which carried out the first contract to also compete for the second contract is questionable, especially in view of a provision in the first contract which seemed to be intended to preclude the contractor from biasing recommendations made under the first contract in an effort to assure award of follow-on contracts."

The first major section of Chapter Two concerns itself with one firm performing both developmental and implementation work. The GAO investigation in this area relates to the use of a "hardware exclusion clause" in the first contract. It should be pointed out that both contracts required developmental and implementation work. The developmental effort in the first contract was related to four forms and the implementation was to automate a data base utilizing a small data management system. The second contract was also developmental in that it required the design and construction of a larger data base, as well as the implementation and automation of all of the FPC's public use forms.

The Federal Power Commission has given a detailed report on the use of the hardware exclusion clause to the GAO staff, as well as participating in a meeting with GSA and GAO to discuss general usage of the hardware exclusion clause. For the most part, this type of exclusion clause is

used precisely as indicated, i.e., to prevent hardware manufacturers from low bidding on a contract in order to bias the future selection of hardware. The FPC guarded against this by inserting a hardware exclusion clause in the first contract and the result was accomplished. The GAO report implies that it was to preclude a "contractor" from biasing recommendations. The fact is that it was applicable only to hardware manufacturers. The FPC feels that this sets the stage for maximizing competition in follow-on contracts. We are certain that hardware bias would have been present in the initial contract had the contract been available to hardware suppliers.

All of the design benefits derived from the first contract, especially those related to the evaluation of data management systems, were incorporated in the specifications of the second contract. The inclusion of this material is a direct expression of the Commission's policy to solicit bids from the widest possible environment; as also evidenced by the Commission's positive step to solicit proposals from a large number of potential offerors. Had this material not been included, a definite loss would have occurred to the Government. At the same time, had the successful contractor been excluded from bidding competitively on the second contract, the Government would have deprived itself of the competition that could be put forth by a proven supplier of services who had, in fact, performed to the Commission's satisfaction.

A philosophy of practicing open competition among all qualified offerors should not be constrained by denying an offeror the right to compete in an area where he is qualified. At the same time, all potential offerors were given an opportunity to benefit from the results of the first contract in order to actively encourage open competition and place all offerors on notice that their proposals would be weighed by an established set of evaluation factors. Each proposals would be considered on its own merit thus assuring that no offeror had a favored position or special knowledge not available to all others. It is worth noting that the System 2000 data base management system is a commercial product openly available to all customers. As such, it is reasonable to assume that no offeror could enjoy a favored position based on special knowledge or advantages. also reasonable to assume that any interested offeror who wished to do so could produce a different system on the basis of his own expertise and experience and would therefore be expected to present such a system in his proposal without undue burden.

As pointed out in a previous report to the GAO staff, the exclusion of a computer consulting firm because of alleged potential bias is not a sound recommendation. Consulting firms pride themselves in their objectivity in approaching a client's problem. In this specific case, the successful contractor had a good operating knowledge of a data management system known as ADABAS since they had it installed at their own data center. However, their objective and comprehensive study of our requirements led them to make a recommendation for the System 2000.

There is no question that some advantage might accrue to an incumbent contractor but this would be only in the area of learning how the Commission operates. The specifications for the second contract were so written as to give maximum information to those companies desiring to bid. Again, and although GAO does not indicate any rationale for the following, it should be pointed out that there were three bidders on the first contract in which there was no incumbent and two bidders on the second contract in which there was an incumbent.

That the magnitude of either contract could be handled only by hardware vendors or consulting houses is not addressed, but the threat of future FPC bias because of the award in the first instance is stated very strongly when the report finds that "allowing such an advantage to a contractor does not necessarily result in a disadvantage to the Government in terms of the best product and best price, but other bona fide competitors may have chosen not to make proposals because they could not overcome this advantage" (FPC emphasis). No evidence exists of a specific "No Bid" or failure to respond at all due to advantage resting with PRC. Further, GAO's admission is inherent that advantage to the government exists in an award strategy where techniques which were experimented with in a developmental effort become specific requirements within an implementation activitiv.

It is obviously advantageous to the government to be able to award to a developer from a former instance for implementation at a later date, when the award evaluation proves him to be the best choice available from all offerors.

It is interesting to note, with respect to the report's assertion that ". . . a computer consulting firm might have expertise in using a certain system or type of hardware and

might bias its evaluation . . . in order to gain an advantage . . .", that PRC was using ADABAS in its McLean facility at the time they performed under the first contract and yet found substantial cause for recommending System 2000 as the appropriate data management system for the FPC. This is most interesting in view of the considerable experience of Optimum Systems, Inc., at the Environmental Protection Agency using System 2000 - - a rather substantial advantage to OSI in the circumstances cited.

"The RFP was sent to 74 potential offerors and only one firm other than PRC Information Sciences Company submitted a proposal. More firms may have competed for the second contract had PRC Information Sciences Company been excluded from submitting a proposal."

The last two sentences in this section indicate that something should be drawn from the fact that the Request For Proposals (RFP) was sent to 74 potential offerors and only one other than PRC Information Sciences Company submitted a proposal. We feel that this is very misleading since the first RFP in which there was no incumbent was sent to well over 100 potential offerors and only three firms submitted bids. The last sentence is strictly supposition in that there is no way of knowing if any other firms would have competed for the second contract. We feel that this last sentence is, by the use of the word "may", very subjective. The point in question is whether ot not GSA should regulate this kind of activity and preclude its happening. Again, what we did was legal and proper according to all current regulations and we, in fact, exceeded even the spirit of the competitive requirements.

"Time Constraints in Contract Award Procedures"

The second section of Chapter Two concerns itself with time constraints in contract award procedures. FPC schedules are considered to have "unduly limited the time allowed to prepare proposals and for FPC to evaluate the proposals received." This assertion is not borne out by facts provided GAO. No Bid respondents (27 in total) replied that more time was needed in 3 cases only. These respondents were large scale equipment vendors who indicated that additional research time was needed and/or that delivery and installation of hardware within stated times would be problematic. These vendors were genrally more familiar with FPC requirements as the result of common business contact than were

non-vendor parties who expressed interest. It can be reasonably concluded that approximately 40 of the concerns who requested and received the RFP never had intentions of bidding. Of the approximately 7 or 8 other prosepctive bidders, it can further be reasonably concluded that organizational capability to perform within the constraints of the RFP was non-existent or committed elsewhere; therefore, no response was received except from the capable, interested offerors. The requirement to respond within the constraints of the RFP was deemed a reliable and valid indicator of overall respondent capability.

This also applied to requirements placed on offerors to show equal or superior performance of alternative data management systems. Offerors were required to prove systems capable of being in place on June 30, 1974. Systems of that type would readily match up, comparatively, to specifications set out in the RFP. One such alternative was received (from Optimum Systems, Inc.) which did not prove equality, let alone superiority, using the required evaluation techniques and would have been rejected had award been made to OSI due to Lack of proven equality.

As to the assertion that there existed a need for a "complex technical evaluation before an adequately responsive proposal could be prepared", the FPC provided ample opportunity subsequent to the formal Bidders' Conference for examination of forms, files and other pertinent analytical inputs.

The question of thoroughness and fairness in the evaluation process alluded to (1) reliance on subjective evaluation in lieu of performance evaluation, (2) failure to follow-up evaluators' recommendations, and (3) allowing employees familiar with the former contract to evaluate the proposals for the second contract.

Reliance on subjective evaluation and allowing familiar employees to evaluate responses, Items 1 and 3, are interrelated arguments. The energy crisis prompted timing expedience. The former contract was monitored for the most part from July 1973 through February 1974, by one individual, excepting the Assistant Executive Director. Others monitored minor segments for short periods of time. After February 1974, two persons exerted almost their entire efforts to monitorship of the development effort; others contributed. All persons who evaluated the proposals were

familiar in one way or another (and in varying degrees, from relatively little to extremely detailed knowledge) with the previous contract with PRC. Much of the subjectivity which was noted in the evaluation was the result of what had been done in that contract and specifically reflected the individual evaluator's perception of what had to be done in the future in relation to that previous effort. Since timing was of vast consideration; because performance testing would have required more time than was available; since valid measurement criteria had been developed in the former contract; and since evaluators were expert enough to make valid assessments of proposed technical performance, hardware and software, performance testing would not have yielded more valid evaluation.

Technically, both PRC and OSI met performance specifications with their proposal for tape drives; some minor difference existed in cost/performance ratio in the OSI proposal. The FPC found little reason to pursue the matter of an insignificantly lesser cost for the drives as an individual line item in relation to the significantly greater cost of the entire RIS program as proposed.

The management of the Commission did not generate the crisis imposed on it by developments in the national energy posture. We did, however, anticipate a rapid escalation in the needs for information processing. We took timely steps to go out and solicit bids for an initial contract to develop a set of specifications for RIS which would assure success. Based on the results of the initial contract, the agency prepared an extensive set of specifications which was sent out for bids. The set of specifications was prepared at a level of detail to permit each potential bidder to learn quickly about all tasks to be performed, all analyses to be carried out and about software and hardware to be procured which could perform these tasks. The inclusion of all details and supporting reference material about a data base management system was intended to permit vendors to gain a clear insight into the scope of the contract and therefore to cut down on the time necessary to prepare a proposal. It was also prepared at that level of detail to spare offerors the effort of proposing an initial system design which might not meet the Commission's needs. The Commission needed to implement RIS as expeditiously as possible, and considering all constraints, management considered it not an impossible task to prepare and offer a competitive proposal. The fact that PRC and OSI prepared indeed each a rather detailed, voluminous and concise

proposal is evidence of the fact that the task could be completed. Staff was made available to offerors who needed additional information or clarification or wanted to familiarize themselves with the Commission.

The second, or implementation contract, in our opinion, was less complex than the first because all of the benefits of the first contract were used to provide clarity and details about the tasks and requirements. The design principles were clearly included in the set of specifications and permitted each offeror to form his proposal around stated requirements. The remaining design efforts were clearly focused in the direction of achieving specific objectives, affording each bidder an opportunity to offer his best solutions to those requirements. Any bidder who wished or intended to develop and present new design concepts not taking advantage of the previous work performed and incorporated in the specifications, could possibly be at a disadvantage. But the Commission had already expended about \$800,000 to form the framework for developing and implementing RIS, and management would not be prudent not to take advantage of the initial contract results for both of the above stated reasons: loss of benefits from developmental expenditures, and increased proposal preparation time and expense. worth noting that proposals for the initial developmental contract were asked for and completed by three bidders within approximately the same number of days, even though the first contract called for extensive initial design efforts to be incorporated in the proposal.

The Commission has responded to the GAO staff with a rather detailed dissertation on the amount of time allowed for bid response. We do not feel that these actions affected competition in any respect whatsoever, but it should be pointed out that the Federal Procurement Regulations indicate that the prime parameter for determining time allowed for preparation of proposals is, in fact, the time requirements of the agency. Although our requirements were immediate, we were able to nevertheless allow more time than the Federal Procurement Regulations required. At the top of page 8 of the GAO draft report, they refer to a hardware manufacturer requesting additional time to prepare its proposal and then they imply that it was in order to develop an alternate data management system using its own equipment. If this offeror is Control Data Corporation, than the comment is not relevant since the System 2000 operates on Control Data Corporation equipment. The question of the five potential offerors with whom GAO discussed the bid requiements has been covered in

detail in our previous response to GAO. While we welcome GAO's opinions, we are convinced that had the appropriate corporate management decided to bid on the specifications, each of these companies could have done so within the time frames established.

Staff assigned to evaluate the proposals were given a presentation to become familiar with the demands being placed on them. Staff selected represented a cross section of professionals familiar with the Commission's need, requirements and workload and were considered capable of carrying out such an evaluation. Based on the assumption that staff could understand the requirements set forth in the specifications and the bidders' response to those requirements, the evaluation would be expected to lead to a meaningful selection. The factors analyzed fell into two main classes. The first was a decision whether the bidder did or did not address a specific requirement to execute certain tasks or provide specified services. The subjective portion of those yes/no decisions was based on the degree of clarity offered by the vendor with respect to the proposed execution. The element of subjectivity cannot be avoided without asking vendors to execute physically the proposed taks and present results with all necessary documentation. The second class of decision was a purely subjective evaluation of the overall quality of vendor design proposals proposed to be assigned. Evaluating personnel and overall vendor qualifications is a subjective task. To avoid subjectivity in evaluating proposed design efforts requires again production of full results with an undue burden on vendors.

In both cases, where subjectivity was used, it could have been avoided only at great expense to the offerors and with consequential large delays of time to develop a full data base and to generate an adequate number of representative queries and background batch programs. We did not consider this approach feasible or desirable for an additional reason. Constructing a representative data base with queries and a background batch workload can in itself be used to introduce a bias in the performance of the software and the hardware. Such a selection may not represent the best solution possible, and to detect bias would require extensive effort and expertise in the system being evaluated. The Commission's greatest expertise lies in knowing its requirements, which was used to present the specifications and to evaluate the proposals.

A separate technical evaluation of the proposals submitted was carried out to confirm that all proposals conformed to the specifications and could expect to be an appropriate system. The purpose of this investigation was to uncover any technical details which might have been overlooked and which could present operational difficulties in the future. No difficulties were found, and management did not find it necessary to reconsider the selection results. The fact that OSI did not list in detail all features provided by the proposal did not have a significant bearing on the selection. The technical consideration of alternate magnetic tape drives offered by OSI was not pursued because the amount of money involved was an insignificant factor in the proposal, and lease/purchase comparison between the competing drives would have required even more time.

Because of aspersions on FPC staff, we feel that we must once again state that the selection of the most qualified evaluators will assure the most objective evaluation of any proposal. This is true especially if the evaluators will, in turn, become users of the system and hence are responsible for the quality of performance they expect from the system. To have worked with a contractor on previous occasions should not be considered a disqualification for an evaluator, provided that there be no interest in the contractor's award and that a specified set of selection criteria is used. It is possible that at times previous experience with specific contractor performance or personnel may result in feelings such as satisfaction or dissatisfaction but the professional competence of the evaluation staff selected was such that no personal bias would be expected or tolerated by the Commission. In addition, a large number of evaluators was assigned to elicit a broad cross section of evaluations so that no single or few individuals could exercise an overriding influence.

"Role of FPC Employee Formerly Employed by the Contractor"

The next section of Chapter Two relates to the role of an FPC employee formerly employed by the contractor. All of the facts concerning this matter are well known to the GAO staff. We would suggest that the very last paragraph of this section be placed first: "We found no evidence that the employee used the data he has obtained or his influence to the advantage of his former employer." FPC has taken and continues to take all steps necessary to avoid the appearance of conflict of interest in any area of Commission activity.

"Conclusions"

"The contract was awarded in technical conformance with the Federal Procurement Regulations . . . "

We consider that management and professionals of the Commission taking part in the selection of this contract exercised diligent care and displayed competence. We also consider our methodology of presenting the specifications and evaluating the proposals to be in the best interest of the government and the bidders in this particular type of implementation contract.

"Recommendations to the Chairman, FPC"

We do not feel there were any shortcomings and the professional staff of the Commission constantly performs to the highest spirit of competition.

Chapter Three

"Procedures for Evaluating Suitability of Data Management Systems"

Chapter Three relates to the evaluation of data management systems and the GAO report begins on a negative note stating the FPC did not establish certain essential evaluation requirements. We feel that this is totally in error in that the FPC had established all essential evaluations in order to gurantee that the FPC received the best data management system for the RIS.

The entire thrust of this chapter is an attempt by GAO to justify their posture that testing, or benchmarking, the data management system would have provided the agency with more assurance that the selected data management system was better. We feel that GAO should unequivocably state at the beginning of the chapter that this is a subjective opinion which they have adopted and that there is now and will continue to be debate in the technical community concerning the relative merits of testing or benchmarking.

The GAO report itself highlights a major problem associated with testing. In the second paragraph they state that "testing, using representative data bases and typical applications on a scaled down basis . . . " Had GAO investigated this further, they would have come to the same

conclusion that we did and that is that this approach produces a great deal of subjectivity in what should be an objective process. The results of testing as suggested by GAO would only be as reliable as the ability of personnel to select "representative data bases", identify "typical application", and design the amount of scaling down to be done. All of these activities are clearly subjective and, more dangerously, could, in fact, be used to bias a selection; that is, the personnel developing the benchmarking could select data which would highlight the best area of certain data management systems, while playing down others. We feel that there is more capability of bias in an approach of this nature than any other approach.

Generally there are two primary methods of evaluating large hardware and/or software systems commonly in use today. They are testing (benchmarking) and objective feature analysis.

Testing (Benchmarking)

Generically, benchmarks encompass a problem set used to measure the performance of one competing system relative to all others. The problem set forming the benchmark is to be employed on several different vendor system configurations in order to obtain objective performance statistics. These statistics reflect the capabilities of the competing systems in performance of the total workload, the throughput, the estimated average and peak demand workload, the prediction of the overload, and other specific requirements to support the actual application. In this manner, a benchmark can furnish objective data which are used as subsequent information in the selection of the final system.

Objective Feature Analysis

This method involves creating a list of important features by which to judge the competing systems. These features may be a mixture of considerations of costs, system characteristics, user-generated experiences, or any other items. All pertinent aspects of the system are included. Then the performance of each system being evaluated relative to each factor is determined, and a normalized score is given to each raw performance value. Each normalized score is numerically weighed by an assigned multiplication factor to ensure that each evaluation factor is given its proper importance. The weighted normalized scores are then added

to produce a total. The highest scores indicates the system with the best features, taking into consideration the wieghting factors that reflect system requirements.

In both methods, the validity of the results of systems comparison depend upon the degree to which actual conditions can be forecasted and evaluated.

When using the testing (benchmarking) method to evaluate competing systems, the following difficulties must be considered:

- 1. Selection of a representative problem set that reasonably reflects true RIS system requirements. This would have been especially difficult in the RIS because the system design process was not complete at the time the DMS study was conducted.
- 2. Ability to reflect future RIS systems requirements. In the dynamic environment at the FPC, future RIS systems requirements could differ substantially from present ones. Thereby, these future requirements, unknown when benchmark is run, cannot be measured during the testing period.
- 3. Benchmarks can be run with only the DMS software features available and operational at benchmark time. New features for the DMS software package planned for the future cannot be demonstrated at benchmark time, thereby they cannot be tested and evaluated.
- 4. Extent to which benchmarks can be conducted on the actual computer hardware and operating software configurations were not known when the DMS study was conducted.
- 5. In a multiprocessing environment, meaningfull benchmark runs can be made only if exact usages of the proposed system can be accurately predetermined. The RIS operating environment, with a constantly shifting mix of background and foreground jobs, and a constantly changing machine workload, cannot be accurately predetermined.
- 6. The time required to conduct a meaningful benchmarking effort can be prohibitive, thereby making the cost of the test very expensive. The benchmark's problem set would have to be designed, programmed and implemented for each competitive system configuration. In addition, large amounts of data would have to be collected, validated and loaded into the data bases. All very time consuming and expensive.

7. Benchmarking results, to a large extent, are dependent also upon the abilities of the personnel involved. Individual capabilities and inherent subjective factors of the individuals involved in the benchmark test, no matter how small, can cause variances in the tests that do not properly reflect actual system capabilities. When the DMS Comprehensive Study was conducted to select the most appropriate data management system for the RIS, these difficulties in testing (benchmarking) were real and significant. The unknowns at that time in initial and future RIS system requirements, hardware and software configurations, and actual operating environment plus the large amounts of time and money involved in benchmarking could not be disputed. Therefore, it was concluded that the objective feature analysis method was more appropriate, at that time, and therefore it was used.

The primary advantages of the objective feature analysis method for evaluating data mangement systems, when the DMS Comprehensive Study was conducted, included:

Ability to evaluate potential requirements that could reflect future conditions

Ability to evaluate proposed DMS software features that were not available at study time

In addition, it was determined that the objective feature analysis method was an objective decision making tool with a straightforward rational basis that could not easily be biased by preformed opinions on systems capabilities.

Using a test or benchmark approach also requires the presence of a representative data base and a representative operational mix of jobs expected to be placed on such a system. The Commission, in developing RIS and the data base, did not have these components to be furnished to bidders for execution and subsequent evaluation. To generate the necessary components would have required large amounts of contract services to prepare the data base and application programs, as required in the contract specifications. For the Commission to ask for benchmark services would have required of the bidders to execute a substantial portion of the contract, including specific design tasks called for in the contract, which would have placed a large financial burden on every bidder, and would be a task which would not

likely have been completed in the time available. Had each bidder been asked to test in an independent manner a proposed system, comparability of the results would have been impaired and could not have been used as a selection factor. Additionally, there would have been a great risk that bidders would construct a test or benchmark which would be biased towards the specific system proposed, but which may not necessarily meet the Commission's actual requirements. Evaluation of such benchmark tests for presence of a bias would require efforts out of proportion to the expected benfits.

The methodology selected by management was to follow a faster and more economical procedure which could be expected to lead to uniform results which we knew would best serve the Commission's needs. The approach selected concentrated on the evaluation of features management considered necessary and essential to the performance of the system, and to incorporate in the specifications requirements for processing volumes we had determined would satisfy projected Commission workloads. The specifications encompassed the use of the data base in conjunction with the projected volume of applications programs and also included the performance of update requirements to keep the data base current. Data base management systems are especially sensitive to the type of demands placed on them. Systems which perform query functions well may require disproportionate efforts to keep the data base current, and as the volume of update transaction increases operational demands on the system may not be met.

Fully testing of data base management systems requires therefore the execution of the full range of expected operating workloads to determine the limits imposed by the design and cpacity of a proposed system.

The alternate approach selected by the Commission includes a more comprehensive evaluation of all functions of a proposed system which are required to meet Commission objectives and requirements. The presence of needed factors and system performance in actual installation was checked during the first contract by locating installations which indeed had obtained and used such data base mangement systems. The additional assurance the Commission required of bidders who proposed a system was incorporated in the contract specifications which required that the proposed system must be capable of handling the expected level of work in an operational environment. In this way, bidders

were required to evaluate the capability of the proposed system to meet all contractual requirements, and to offer the most cost effective solution in a competitive effort to obtain the contract.

All data base management systems available, including government funded systems, had been considered in the initial contract to locate all possible systems which could satisfy Commission requirements. The selection and evaluation of candidate systems were governed by the functions the Commission expected to use in carrying out its functions, by the level of utility incorporated in the design of such systems, and the ability of such systems to be integrated into the expected operational environment, including user satisfaction. The guidelines developed in the initial contract were clearly described in the attachment to the specifications of the second implementation contract proposal and made available to all bidders. These guidelines and the workload specifications conveyed to each bidder a concise statement of the objectives to be achieved and the rationale and degree of desirability for all functions desired by the Commission. In fact, the success experienced so far in the implementation has assured the Commission that the methodology employed has furnished us with the services we had expected, and that all essential elements of the evaluation have served their purpose. In addition, the methodology selected saved offerors considerable expense and time in preparing their proposals and indeed made the evaluation process of the Commission valid and cost effective for industry and government.

See GAO note 2, p. 54.

See GAO note 2, p. 54.

"Need for Maintaining Supporting Documentation"

The third section of Chapter Three relates to the need for maintaining supporting documentation. We do not feel there was any documentation not maintained that was instrumental or in any way would have changed the results of the data management system evaluation. The entire data management system evaluation was presented to Commission staff over a period of weeks and then was documented in a very comprehensive report and analysis to the Federal Power Commission. The subtle allegations by GAO concerning the incomplete documentation relate only to a small portion of the evaluation and have no bearing whatsoever on the final outcome.

In summary, then, we feel that the concept of being able to "demonstrate conclusively through testing" is totally erroneous. It is obvious that all that testing would prove would be that for a specific set of data running some specifically designed applications, one system might show better performance than another. This would be totally inadequate for the complexity of the system requirements for the RIS. There were many factors that had to be considered in this evaluation.

One of the basic criteria we established for the data management system evaluation was that it be well supported by the supplier which, of course, includes making enhancements and improvements to the system. Government supplied systems, as well as others, that did not meet this requirement were rejected. In our judgment, this was absolutely necessary since the data management system, as a subset of the RIS, must be completely well supported and not subject to the whims of a sponsoring agency. We feel that the data management system report submitted by the contractor is a very comprehensive document. We further feel that any competent data base analyst would have no difficulty in fully reviewing the contractor's evaluation and ranking based on that document alone. It should also be pointed out that there was a tremendous amount of professional FPC effort that went into the design and development of the specifications and requirements for the data management system to be used at the Commission.

We feel that in this entire chapter GAO has projected only a singular philosophy of advanced testing of systems which is improper in the environment under which the RIS was developed.

We do not agree with the conclusions since, again, we feel that they are not in conclusion, but, in fact, statements of position and not based on any tangible facts.

We do not agree with the GAO recommendation since we feel that the FPC staff has (1) fully specified all actions of the contractor that are essential to the performance of its services, and (2) set forth in contract terms all requirements indicated by the Federal Procurement Regulations.

Chapter Four

"Security of Information System"

Chapter Four relates to the security of the information contained in the RIS data banks. We remind GAO again that at this time there is only public information contained in the data banks. As stated several times to GAO, when it is necessary to handle other than public information, appropriate steps will be taken by the FPC. We are not in disagreement with GAO concerns since we feel that the FPC is making every possible effort to protect the necessary confidentiality of

information. We do, however, feel that there is a subtle implication on the part of GAO that there is some difficulty with current procedures. This is not true.

It should be pointed out that the Office of Regulatory Information Systems will periodically evaluate the adequacy of the security of the RIS and will upgrade the security when necessary. This will be achieved by:

- (1) Assignment of a "RISK" team that will constantly attempt to uncover security weaknesses, evaluate security features, and recommend security improvements.
- (2) Implementing improved security procedures in the areas of: (a) authorizing use of the RIS, especially in the data base areas; (b) assignment, control and changing of passwords; (c) upgrading of security features inherent in the MVS operating system software and System 2000 DMS software; and (d) documentation and reporting of accesses to data bases to facilitate detecting unauthorized use.

Through these steps, the FPC will maintain adequate security provisions over all transactions and data contained in the RIS data bases and will periodically upgrade security provisions for even greater protection.

The second section of Chapter Four relates to the access of information by Foster Associates. As stated several times to GAO by FPC, as well as by PRC, Foster Associates was not "associated" with PRC Information Sciences Company at the time of the contract. The association is limited to the executive officers of both of these companies reporting to the same individual. There is, to the best of my knowledge, no technical or business association between the two companies. We have reviewed this situation very carefully and have reported to the GAO staff in memorandum form.

GAO also makes the statement that the Chairman of the Commission felt there was reason for concern. This is not true. The Chairman's letter was written in response to, and as a result of, various newspaper articles concerning the security of the FPC data. It was meant to re-enforce our posture regarding the security of our data and not meant to instigate any new procedures. The action by the Chairman of the FPC was triggered by the GAO investigation and adverse and incorrect publicity, rather than any real reason for concern since the FPC has at all times handled security matters properly.

We do not have any disagreement with the conclusion of Chapter Four. We do disagree with the recommendation since the implication of the recommendation seems to be that the FPC is not constantly reviewing its posture regarding security. As pointed out to GAO staff, the FPC does constantly review its posture regarding security and at no time do we feel we have altered this position of close monitoring of our security program.

Chapter Five

"Delegation of Procurement Authority under the Brooks Act"

Chapter Five relates to the delegation of procurement authority under the Brooks Act (Public Law 89-306). We feel that this chapter should not be in this report since the FPC presented its entire program to GSA and followed all advice given by GSA concerning the contract award. It should be pointed out in passing that the approval given to the FPC by GSA was predicated on "no available resources within the government". This would include not only the hardware, but the data management system discussed in the previous chapter. This obviously leads to the conclusion that GSA also felt that there was no appropriate data management system available for the kind of use to be made by the FPC. We have given additional information to the GAO staff concerning our relationship with GSA and the presentations given.

Generally, we concur with the report's characterization of actions relating to GSA which the FPC took prior to entering into a contract agreement. There are, however, a number of statements which are unclear or ambiguous and, in order to ensure no misinterpretation of the facts, bear further discussion.

The most important point is that the procurement action which FPC undertook was specifically directed by GSA. In the earliest stages of development, we solicited GSA's advice and direction through a series of presentations and meetings during which we explained what we hoped to accomplish and asked for a recommended course of action. During these meetings we were instructed to process a Form 2068, Request for ADP Service, as opposed to requesting a delegation of procurement authority. The report makes no reference to this fact (i.e., we were directed by GSA not to request a DPA) and infers that the decision to follow the course which we did was an FPC decision. This is not the case and this

point should be made prior to any discussion about other agency (FEA) procurements and the correctness and legality of them. In fact, we question whether these types of discussions (FEA vs. GSA) should even be included in a report which is dealing with the FPC contract award.

We feel very strongly that the report should state in no uncertain terms that the FPC followed the specific direction of GSA regarding a delegation of procurement authority.

Summary

As stated earlier, the General Accounting Office found that the contract award by the Commission was in conformance with all Federal Government regulations. In addition to this finding, they added to the report their opinions concerning certain aspects of the overall award process. With this information in mind, we , however, do not feel that we would have conducted the award process in any way differently than we did. We gave as much time as possible for the proposal preparation. We conducted the evaluation very professionally. We maintained security of information as required and feel that we accomplished all goals and objectives established for the RIS consistent with all applicable Federal regulations. The question of the Commission employee holding stock in the contractor was addressed at the moment it occurred. The employee removed himself from any active role in the award and we do not feel there was anything else that could have been done. Most of the GAO report relates to opinions and we feel that the exercise of the decisions in the environment of the award process was the primary responsibility of the FPC and at that time these decisions were correct and, having read the GAO report, we are just as convinced that they are correct today.

I have attached additional material related to the specific points raised by GAO in their report.

Joseph N. DiMarino

Attachment

Response to GAO Report

GAO notes:

- 1. Attachment to Acting Executive Director's memorandum is not included in this report because it restates agency's position in this memorandum.
- Deleted comments relate to matters in the draft report which have been revised in the final report.

UNITED STATES OF AMERICA GENERAL SERVICES ADMINISTRATION WASHINGTON, DC 20405



DEC 5 1975

Honorable Elmer B. Staats Comptroller General of the United States General Accounting Office Washington, DC 20548

Dear Mr. Staats:

This is in reply to the September 23, 1975 letter of Mr. Fred J. Shafer, Director of your Logistics and Communications Division, concerning the proposed report to Congressman John E. Moss on a contract award by the Federal Power Commission (FPC).

We have been asked to comment on Chapter 5 of the proposed report because it discusses actions of the General Services Administration (GSA).

The proposed Chapter 5 stated that the circumstances under which FPC contracted are similar to a recent Federal Energy Administration (FEA) contract for ADP services. We provided extensive comments concerning your interest in the FEA procurement in our General Counsel's letter dated April 9, 1975, to your General Counsel, Mr. Paul G. Dembling. It is from this letter that the GSA quotes appearing in the proposed Chapter 5 were taken.

We are concerned about the misleading nature of the following statements.

"FPC was granted authorization from GSA to enter into the RIS contract but no delegation of procurement authority was given." (Second paragraph, page 25).

"...we have some reservations as to the propriety of GSA's determination that the requirements for delegation of procurement authority did not apply..." (Second paragraph, page 27).

With regard to the above, it has never been our intent to distinguish between an "authorization" and a "delegation of procurement authority." In addressing this issue

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in the April 9, 1975 letter on the FEA case, we stated that "...the decision of a Federal agency to acquire ADPE or to seek contractor services for any form of computational support was within the scope of the Act and required some form of GSA approval..." (see paragraph 2, page 9). Although we made no distinction in the form of our approval, we did indicate that the type of internal review given to ADPE procurements was different from that given to ADP services procurements. However, we consider our "authorization" to FPC to be a delegation of procurement authority for the acquisition of ADP services.

In the near future, we will be issuing an amendment to the Federal Procurement Regulation (FPR) that will move procurement and contracting of ADP equipment, software, maintenance services, and supplies from Subpart 101-32.4 of the Federal Property Management Regulations (FPMR) to Subpart 1-4.11 of the FPR. Included in this action is a change to make provisions (the old FPMR 101-32.4) applicable to Government contractors when the equipment or system governed by the new FPR 1-4.11 (formerly 101-32.4) are (a) leased and full lease costs are paid by the Government under one or more contracts, or (b) purchased by the contractor for the account of the Government or title will pass to the Government.

In view of the above, we believe that the phrasing of your conclusion would be more precise and in accord with the intent of our comments in our April 9, 1975 letter referred to above, if the first sentences were revised as follows:

"GSA has advised our office that it is considering a revision of its regulations under the Brooks Act to make procurement of automatic data processing equipment through facility services contract subject to the same review requirements as those currently required for direct agency procurement where (1) the ADPE will be contractor leased and full lease costs are paid by the Government or (2) the ADPE will be contractor purchased for the account of the Government or title will pass to the Government..."

It is also pertinent to note that our Federal Procurement Regulations Staff, in conjunction with Automated Data and Telecommunications Service (ADTS) and the various agencies, will be considering expanded ADPE procurement and contracting guidance applicable to all Federal agencies. We expect this guidance to encompass provisions of the sort set forth in Section 3-1100.2(b) of the Armed Services Procurement Regulation which are applicable to contracts that require negotiation or

determination of costs. The provisions will require initial and annual review thereafter of a contractor's ADPE system and leasing arrangement when Government participation in leasing costs-exceeded a stated threshold and will require advance determination of the validity of the requirement and the reasonableness of the leasing and resulting cost under FPR 1-15.205-50. The provisions will be designed to assure that contractor incentives for efficient and economical contract performance will be preserved yet to assure close control of costs that will be included in Government contract prices.

We appreciate this opportunity to comment on your proposed report and to further advise you of our plans in this procurement area.

Sincerely,

Administrator