PDR
Advance Copy
ORG-NEXD

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

June 24, 1997

Mr. Robert H. Leyse
12136 Brookglen Drive
Saratoga, CA 95070

Dear Mr. Leyse:

'97 JUN 26 P1:47

I am responding to your e-mail messages to Chairman Jackson dated May 31 and June 2, 1997, concerning the December 30, 1996, Arthur Andersen report. My office, the Office for Analysis and Evaluation of Operational Data (AEOD) is responsible for initiating and providing oversight for the Arthur Andersen study of the Senior Management Meeting process.

The services of Arthur Andersen were obtained through a purchase order in accordance with an existing GSA supply schedule contract. Initially, three companies which were deemed appropriate by knowledgeable AEOD staff were selected from the GSA schedule. These vendors were sent a "Request for Quote" (RFQ) regarding the proposed work. The technical specifications for this RFQ were written by AEOD management. Arthur Andersen was the only vendor to respond to this request. Their proposal met the requirements of the work and they were found to be technically qualified. Copies of the RFQ, slides used by Arthur Andersen during their oral presentation, the evaluation of the RFQ response, the Purchase/Delivery Order documentation which includes the cost of the work and estimated hours, and the Statement of Work have been placed in the Public Document Room (PDR). Also, as you requested, a copy of the final report from the Idaho National Engineering Laboratory, "Senior Management Meeting Performance Data Additions," dated December 1996 and the resumés of key Arthur Andersen personnel have been placed in the PDR.

During the study, interviews of senior NRC staff were conducted by Arthur Andersen and NRC personnel. Structured questionnaires were not used and interviewees were assured anonymity. Consequently, no documents are available because all interview records and notes were destroyed after the report was issued. The results of these interviews were characterized in the report.

Transcripts of open Commission Meetings and transcripts of ACRS and ACNW meetings are routinely released in ASCI text and are available on diskette for purchase at the PDR. They are also placed on Fedworld for 30 days where they can be downloaded. Additionally, the transcripts of ACRS and ACNW meetings are available from the NRC Worldwide Web site where they can be searched by key word. Transcripts of Commission

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meetings will also be placed on this site by June 18, 1997. The NRC currently has no plans for compiling Commission transcripts on a searchable CD Rom.

I hope this letter has been responsive to your questions.

Sincerely,
Original Signed by:
Denwood F. Ross

Denwood F. Ross, Jr., Director
Office for Analysis and Evaluation
of Operational Data

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PDR

REQUEST FOR QUOTATION
(THIS IS NOT AN ORDER)

THIS RFQ ☐ IS ☒ IS NOT A SMALL BUSINESS SET-ASIDE

PAGE 1 OF 2 PAGES

1. REQUEST NO.	2. DATE ISSUED	3. REQUISITION/PURCHASE REQUEST NO.	4. CERT. FOR NAT. DEF. UNDER BDSA REG. 2 AND/OR DMS REG. 1	RATING
82678033	AUG 9 1996	82678033		

5a. ISSUED BY: U.S. Nuclear Regulatory Commission, Div. of Contracts
MS T-7-I-2 Washington, DC 20555

6. DELIVER BY *(Date)*:

5b. FOR INFORMATION CALL *(NO COLLECT CALLS)*

NAME	TELEPHONE NUMBER	
	AREA CODE	NUMBER
Deborah Neff	301	415-8160

7. DELIVERY: ☐ FOB DESTINATION ☐ OTHER *(See Schedule)*

9. DESTINATION

a. NAME OF CONSIGNEE: U.S.N.R.C.

b. STREET ADDRESS: 11545 Rockville Pike

c. CITY: Rockville

d. STATE: MD e. ZIP CODE: 20852

8. TO:

a. NAME

b. COMPANY

c. STREET ADDRESS

d. CITY e. STATE f. ZIP CODE

JUN 24 93:42

10. PLEASE FURNISH QUOTATIONS TO THE ISSUING OFFICE IN BLOCK 5A ON OR BEFORE CLOSE OF BUSINESS *(Date)*: 8/16/96

IMPORTANT: This is a request for information, and quotations furnished are not offers. If you are unable to quote, please so indicate on this form and return it to the address in Block 5A. This request does not commit the Government to pay any costs incurred in the preparation of the submission of this quotation or to contract for supplies or services. Supplies are of domestic origin unless otherwise indicated by quoter. Any representations and/or certifications attached to this Request for Quotations must be completed by the quoter.

11. SCHEDULE *(Include applicable Federal, State and local taxes)*

ITEM NO. (a)	SUPPLIES/SERVICES (b)	QUANTITY (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)
	Services as described on attached SOW in accordance with your GSA Supply Schedule Contract for Group 874 entitled "Quality Management Implementation Services and Products." You are requested to submit a cost quotation and make an oral presentation as outlined on the attached provisions. This RFQ is being issued on a competitive basis as described herein. A single delivery order pursuant to the appropriate GSA Supp , Schedule Contract will result.				

12. DISCOUNT FOR PROMPT PAYMENT

a. 10 CALENDAR DAYS (%)	b. 20 CALENDAR DAYS (%)	c. 30 CALENDAR DAYS (%)	d. CALENDAR DAYS NUMBER	d. CALENDAR DAYS PERCENTAGE

NOTE: Additional provisions and representations ☐ are ☐ are not attached.

13. NAME AND ADDRESS OF QUOTER

a. NAME OF QUOTER

b. STREET ADDRESS

c. COUNTY

d. CITY e. STATE f. ZIP CODE

14. SIGNATURE OF PERSON AUTHORIZED TO SIGN QUOTATION

15. DATE OF QUOTATION

16. SIGNER

a. NAME *(Type or print)*

b. TELEPHONE AREA CODE NUMBER

c. TITLE *(Type or print)*

AUTHORIZED FOR LOCAL REPRODUCTION
Previous edition not usable

STANDARD FORM 18 (Rev. 6-95)
Prescribed by GSA - FAR (48 CFR) 53.215-1(a)

STATEMENT OF WORK
PERFORMANCE INDICATORS FOR WATCH LIST PLANTS

BACKGROUND

Senior Management Meeting Process

The decision to add or remove a plant from the NRC Watch List is made semiannually at the Senior Management Meeting (SMM). The Watch List plants are those whose performance warrant NRC monitoring beyond that normally required*. These meetings have occurred since 1986 and the final outcomes are listed in the Summary of Senior Management Meeting Results[1]. Throughout the process, the information about the performance of the plants is provided primarily by the regions and the Office for Nuclear Reactor Regulation (NRR). The regions are responsible for the inspection activity of the plants, and have first-hand information based on their observations and assessments, and NRR provides oversight, licensing and event review for the reactor program. The Office for Analysis and Evaluation of Operational Data (AEOD) provides insights based on performance indicators[2], independent analysis of experience and Accident Sequence Precursors (ASP) that are based on information reported to the NRC.

The SMM process begins with the independent screening of licensee performance by different organizations of the NRC staff. Each organization does some evaluation of the plants' performance. The organizations come together in a prebriefing to form a consensus on the plants for discussion based on input from their respective organizations. Following the prebriefing, the organizations prepare a Senior Management Meeting Executive Summary with written discussions about the performance of selected plants; these contain plant specific discussions and performance indicators. At SMM, the agency develops actions to address performance issues, including additions and deletions of plants from the Watch List.

Following each SMM, the licensees are informed of any NRC decisions or actions that have been taken with respect to their plants or facilities. The Commission is advised of the Watch List status, and reasons for addition or removal from the Watch List at the Periodic Briefing on Operating Reactors and Fuel Facilities. This meeting is transcribed. Following placement on the Watch List, inspection and other regulatory activity is generally refocused on the problems and the licensees generally document their improved performance. Removal of plants from the Watch List is part of the SMM process.

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* There are three categories of Watch List plants: Category 3 are shutdown plants requiring NRC authorization to startup and that the NRC will monitor closely; Category 2 plants are those authorized to operate that the NRC will monitor closely; and Category 1 plants are those removed from the Watch List.

The SMM process is described in detail in Attachments 1 and 2 of SECY-96-093, Guidance for Senior Management Meeting and Plant Evaluation Processes (to be provided upon award).

Senior Management Meeting Performance Indicator Study

The Commission has requested that the staff evaluate the development of improved indicators that can provide a more objective basis for judging whether a plant should be placed on or deleted from the Watch List. The Commission stated that the staff should look at the dominant and recurring characteristics of those plants that have been placed on the Watch List in the past, including 1) a high level of operational events, 2) inadequate engineering and technical support, and 3) management ineffectiveness. These characteristics are to be assessed through objective measures that are directly related to plant performance.

A study shall be completed with the assistance of contractors in response to the Commission request. The study needs to result in better identification of what makes a problem plant; their characterization needs to be more objective, consistent, measurable, and timely. In addition indicators must be developed from performance characteristics and measures in a logical sequence.

For the purposes of this study, the following definitions will apply:

> Characteristics are aspects of a plant's behavior that are important to safety performance.
>
> Measures are aspects of plant operation that are directly observable through data collection or inspection.
>
> Indicators are quantitative combinations or arrangements of measures that suggest or predict a characteristic which affects performance.

The study will involve four components: 1) examination of characteristics and attributes of past problem plants and those associated with good performers which were considered important in past senior management meeting deliberations, 2) identification of objective and timely indicators which relate to those characteristics, 3) correlation of indicators to historic performance trends, and 4) definition of the relationship between the resulting indicators and risk.

The scope of this contract will be to complete components 1 and 2, and to prepare an overall report integrating the results of all four components.

The examination of dominant characteristics (component 1) and the identification of candidate indicators (component 2) shall involve a thorough review of existing records, including the SMM briefing books, transcripts of Commission briefings and past detailed plant reviews including major team inspections and the study of Diagnostic Evaluation Inspection Reports

(DET study). Interviews with senior NRC staff, management, and selected licensees shall also be conducted. The effort shall be performed by an established management consulting firm. AEOD has a study in progress to look at common characteristics and attributes of plants for which there was a DET. This will become an input to the contractor effort.

The correlation of indicators to past performance trends (component 3) will proceed in parallel using a technical contractor. The output of that review will be a list of data and information to be gathered in order to support the necessary analysis.

The definition of the relationship between the resulting indicators and risk (component 4) will be performed by NRC staff. AEOD has a long-term effort in progress to develop risk-based indicators. This work will be used to the extent practical in the current study. It is essential to maintain logical models in which other candidate indicators can be evaluated.

A simple model is shown in Figure 1. The NRC maintains the risk at a particular plant is dominated by the potential for accidents resulting in severe core damage. Probabilistic analyses have shown that such accidents result from a sequence of failures starting with an initiating event which perturbs the plant from its normal operation. Human errors are known to be major contributors to such accidents. Other contributors include design deficiencies and safety system failures, some of which can occur from common causes. Figure 1 shows that the characteristics, measures and indicators of plant performance can be directly related to all of the factors that contribute to risk from core damage accidents. For example, the likelihood of design problems, human errors and equipment failures is strongly affected by the overall performance of the operating organization. The goal of component 4 of this study will be to relate the characteristics, measures and indicators to the risk-significant factors shown in Figure 1.

OBJECTIVE

Identify the characteristics, measures, and indicators that have been, could be, and should be used regarding the placement and removal of plants from the Watch List. Identity the characteristics, measures, and indicators that relate to nuclear safety in a systematic manner and result in the improvement to the objectivity, consistency, quantification, and timeliness of Watch List plant identification. In addition to examining the bases for past NRC decisions, identify new perspectives that can be applied.

QUALIFICATIONS REQUIRED

The contractors shall have key personnel whose training, experience, and overall qualifications permit the conduct of an integrated management analysis study. The contractors shall also have personnel with methodological skills to design studies, interface appropriately with and interview executives, develop and deliver data collection instruments, tabulate and statistically present qualitative and quantitative findings, and analyze and interpret such findings into acceptable written report formats. The contractors shall have the ability to rapidly assimilate

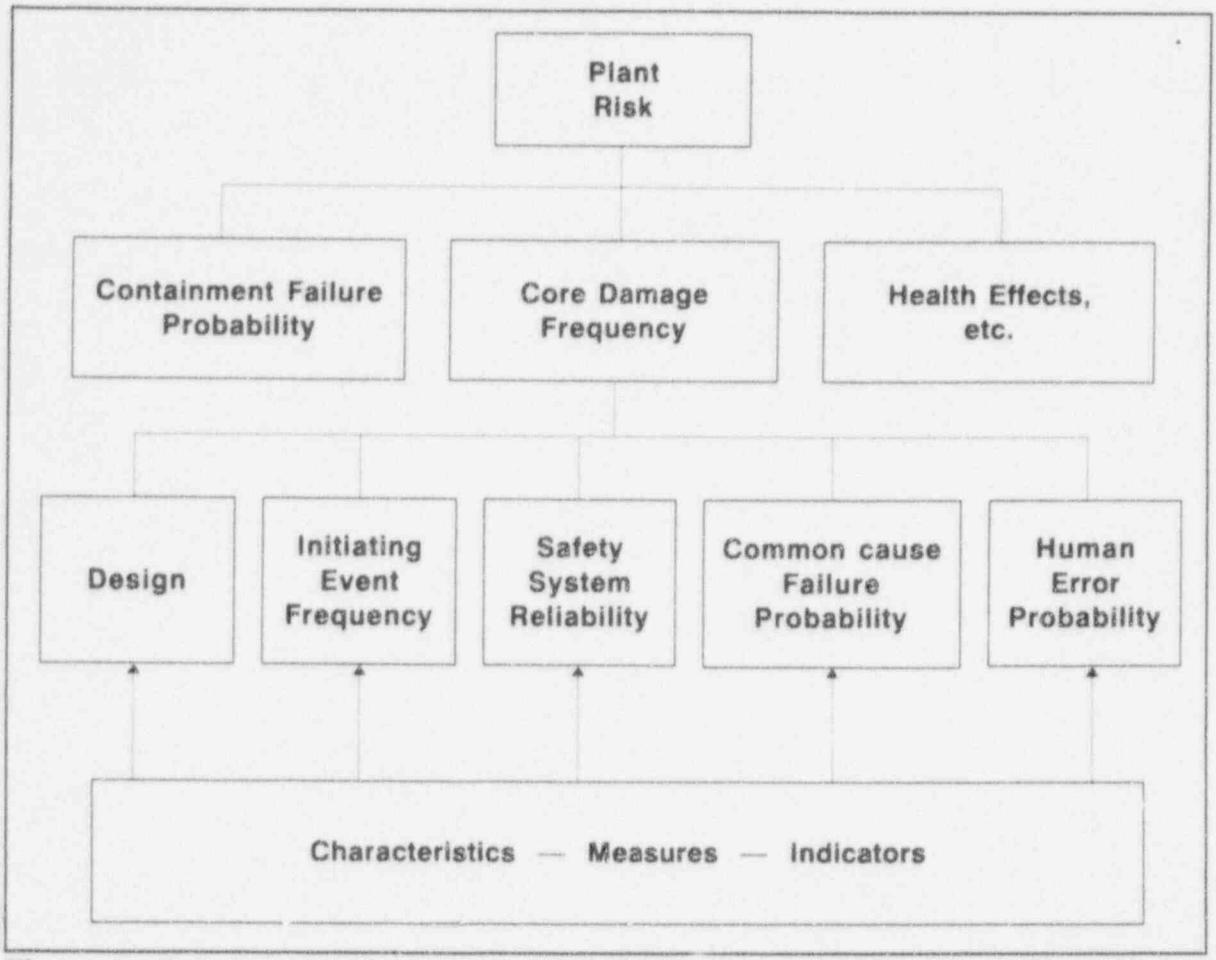


Figure 1: Relationship of Characteristics, Measures, and Indicators to Plant Risk

information associated with the nuclear industry regulatory environment and express findings in the terminology of that environment.

The individual who will direct the task shall have demonstrated the highest degree of professional competence. The individual shall have a minimum of 20 years of professional experience to include 10 years of upper management experience in a large organization. A working knowledge of operating and management processes of an electric utility is desired. The individual shall have had experience with the identification and resolution of significant performance problems in industrial organizations. The individual will also have experience with strategic planning. The individual shall have had the experience with developing performance characteristics, measures, and indicators, and assessing results. A bachelors degree is mandatory and an advanced degree(s) is preferred (e.g., M.B.A., M.S., Ph.D.s in a related technical or business field).

The investigator(s) shall have at least 10 years of professional experience, preferably including experience with the electric utility industry. At least one individual or consultant shall possess a working knowledge of operating and management process of a nuclear electric utility. The

individual shall have had experience with developing performance characteristics, measurement, and indicators in an operating environment and assessing results. A bachelors degree is mandatory and an advanced degree(s) is preferred (e.g., M.B.A., M.S., Ph.D.s in a related technical or business field).

WORK REQUIREMENTS

The contractor shall provide the necessary qualified personnel, facilities, materials and services to complete the task. While in Washington, NRC will provide office space and access to NRC documents and information systems. Contractor personnel shall be available to travel and respond to NRC staff questions and comments on all phases of this project throughout the period of performance.

STATEMENT OF WORK

The contractor shall submit a report that identifies the characteristics, measures, and indicators that have been, could be, and are recommended for consideration regarding the placement and removal of plants from the Watch List. The contractor shall identify the characteristics, measures, and indicators that relate to nuclear safety in a systematic manner and result in the improvement to the objectivity, consistency, quantification, and timeliness of Watch List plant identification. The report shall identify characteristics, measures, and indicators that focus on the dominant and recurring characteristics of past Watch List plants. The report should also address leading indicators, measures, and characteristics such as economic stress measures that NRC should observe to increase watchfulness for evidence of safety performance change.

As described in more detail below, the contractor shall integrate the review of NRC information, the interviews, data, analysis, findings, results and recommendations into a single report. The report shall be based on the collective analysis and evaluation of material provided by the NRC, the contractor's participation in interviews of NRC and licensee management, and the contractor's past experience.

Prior to the final report, a draft report shall be issued for NRC comment. The contractor shall address and resolve the comments to the NRC's satisfaction. After issuance of the final report the contractor shall be requested to present the results, possibly in a public forum.

The following work shall be performed and documented in the report:

1. The contractor shall review all the background information provided by the NRC and any material identified as relevant by the contractor.

2. Identify what performance characteristics, measures, and indicators have been used to put a plant on, and remove a plant from, past Watch Lists and analyze the results. This shall be done for the plants identified (Reference 1) from January, 1991, to through January 1996 (exclude Browns Ferry Unit 1). Develop a matrix to show links

between the corresponding characteristics, measures, and indicators. This matrix shall identify gaps in the information. The information shall be analyzed and documented in the report.

2.1 Using the Senior Management Meeting Executive Summaries (10 summaries about 200 pages each), the EDO list of dominant and recurring characteristics, Senior Management Meeting Summaries (10 summaries about 30 pages each), the transcripts of the Periodic Briefing on Operating Reactors and Fuel Facilities (10 summaries about 100 pages each), summary information developed for the Senior Management Meeting premeeting (10 packages about 100 pages each), and relevant licensee correspondence (documents to be provided), identify the characteristics, measures, and indicators that have been used to put a plant on, and remove a plant from, the Watch List. Develop a matrix of the corresponding characteristics, measures, and indicators. Analyze the information and document the analysis in the report. The analysis shall discuss the objectivity, consistency, and timeliness of the information.

The example matrix in Figure 2 is provided for illustration. It shows three potentially important characteristics of plant operations; root cause assessment, personnel qualifications and preventive maintenance. For each of these characteristics, at least one measure is listed. Two are given for preventive maintenance. Numerical indicators are given for two of the four measures. .

Characteristics	Measures - Indicators
Root Cause Assessments/Corrective Action	Recurring Problems
Personnel Qualifications	Training Program Effectiveness - Requalification Failure Rate
Preventive Maintenance	Equipment Reliability - Safety System Failure Rate - Forced Outage Rate Material Condition

Figure 2: Example Matrix of Characteristics, Measures, and Indicators

2.2 Using the Senior Management Meeting Executive Summaries, identify the characteristics, measures, and indicators that have been used to identify the plants selected for discussion, and highlighted as good performers. Compile the data in a matrix similar to Figure 2. The information shall be analyzed and documented in the

report. The analysis shall discuss how the good performers characteristics, measures, and indicators differ from those of the Watch List plants.

2.3 Administer interviews of selected licensees and NRC senior managers. Licensee interviews shall be scheduled and accompanied by an NRC representative. In order to meet the tight schedule, parallel interviews and analysis may be necessary. The contractor shall provide and discuss interview questions with the NRC.

2.3.1 Conduct interviews of NRC senior managers to understand the judgements made and information used to evaluate licensee performance; identify what characteristics, measures, and indicators the managers judge to be the most vital in evaluating declining and improving performance.

2.3.2 Conduct interviews at the offices of two licensees of past Watch List plants to understand what characteristics, measures, and indicators they used to measure declining and improved performance. Also, interview one good performer to identify what they consider to be important characteristics, measures, and indicators to maintain good performance. This will require review of background information to be supplied by the NRC.

2.4 Based on the reviews and interviews, provide a summary, discussion, and evaluation of the characteristics, measures, and indicators. Identify those most common, and the most relevant, characteristics, measures, and indicators used as well as gaps in the information. Evaluate the extent to which the Watch List plants distinguish themselves from good plants.

Where there is no link between characteristics, measures, and indicators, identity where additional measures could be applied.

Complete the matrix of the corresponding characteristics, measures, and indicators.

3. Identify characteristics, measures, and indicators that could/should be obtained, and added to the matrix or used to fill in the gaps of information. Identify new perspectives on performance assessment, beyond those which the NRC has used in past decisions. The contractor shall use their (1) observations, analysis, and evaluation of the NRC information; (2) knowledge base from experience with electric utilities and other industries; and (3) experience with the development and analysis of performance factors. The contractor shall add this information to the matrix. Document the findings and observations in the report. Convey description of the characteristics, measures and indicators to the NRC contractor responsible for the third component, 3) correlation of indicators to historic performance trends, and to the NRC for evaluation of the fourth component, 4) definition of the relationship between the resulting indicators and risk.

REPORTING REQUIREMENTS AND DELIVERABLES

All reports shall be sent to the NRC Project Officer with a copy to the NRC Project Manager and Technical Monitor. The contractor shall provide the following:

1. A monthly business letter report shall be submitted detailing schedule and cost status; status of each deliverable, and expenditures versus forecast specified.

2. A detailed plan to include a schedule with milestones, and individual man hour forecast for each task element, 5 days from the start of the contract.

3. Interview questions 10 days before scheduled interviews.

4. An evolving matrix of corresponding characteristics, measures, and indicators in the monthly business letter report as the task progresses.

5. A draft report, which integrates the results of the tasks and subtasks on November 15, 1996.

6. A final report, reflecting NRC comments, December 13, 1996.
The final report will be delivered with a camera ready copy suitable for inclusion in the NRC document control system. The report shall contain an executive summary, summary of findings and observations, conclusions, and recommendations. The format of the reports shall be specified by the NRC Project Officer

7. The contractor shall deliver electronic discs containing the report to the NRC Project Officer upon completion of the task.

DELIVERABLE	Completion Date
Detailed plan and milestones	5 days after contract award
Interview questions	10 days before conduct of interviews
Notes of Interview	3 days after the interview
Initial Matrix from 2.0	October 11, 1996
Initial Matrix from 3.0	October 25, 1996
Draft Report	November 15, 1996
NRC Comments/Meeting	November 29, 1996
Comment resolution/Meeting	December 9, 1996
Final Report	December 13, 1996
Electronic copy	December 13, 1996

Completion dates based on a start date of September 3, 1996

MEETINGS AND TRAVEL

The following meetings and travel are anticipated can be used for planning purposes and estimating costs:

Up to seven 3-person, 2-day trips; one to each NRC Regional Offices to participate in interviews, and three licensee offices.

At least 10 trips of 4 days to the NRC Headquarters for each senior contractor investigator and the task executive director plus one trip for comment resolution and two trips for presentation of the report.

The contractor shall obtain verbal or written approval of the NRC Project Officer before any travel is undertaken for this project.

ESTIMATED LEVEL OF EFFORT

The estimated level of effort is 2988 man-hours.

PERIOD OF PERFORMANCE

The period of performance shall end 150 days from the contract award date.

APPLICABLE SPECIAL PROVISIONS

The work specified in this SOW is not fee recoverable.

It is the responsibility of the contractor to assign staff, employees, subcontractors, or consultants who have the required educational background, experience, or combination thereof to meet both the technical and regulatory objectives of the work specified in this SOW. The NRC will rely on the representations made by the contractor concerning the qualifications of the personnel assigned to this project including assurances that all information contained in the technical and cost proposals, including resumes, is accurate and truthful.

The contractor will make provision to protect the confidentiality of sensitive unclassified material to be used in the conduct of this study, including but not limited to the Senior Management Meeting Summaries and summary information developed for the Senior Management prebriefs.

REFERENCES - REFERENCES #2 & #3 to be provided at time of award

1. Summary of Senior Management Meeting Results

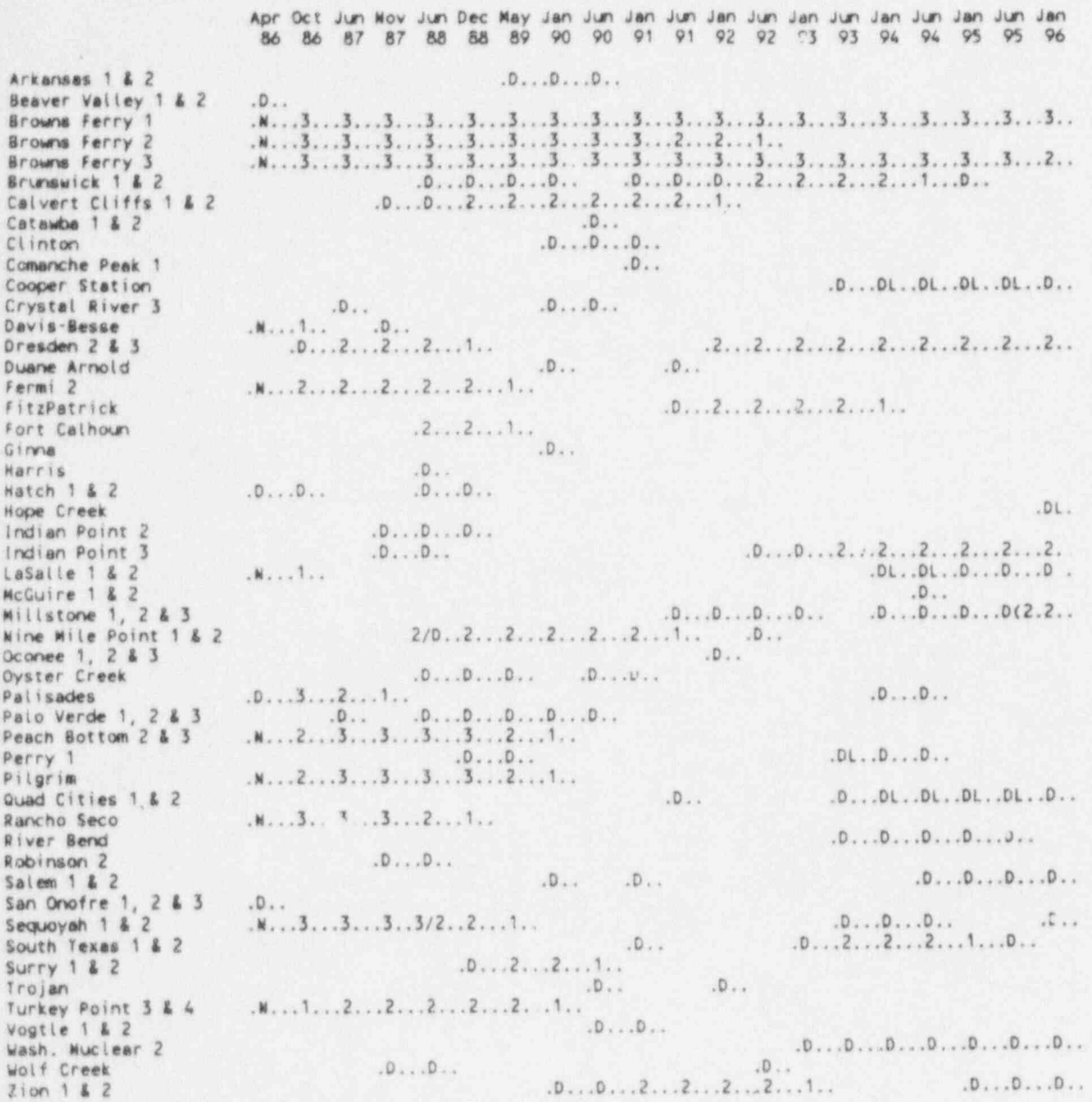
2. U.S. Nuclear Regulatory Commission, Office for Analysis and Evaluation of Operational Data, "Performance Indicators for Operating Commercial Nuclear Power Reactors, Data Through September 1995, Parts I and II."

3. U.S. Nuclear Regulatory Commission, Guidance for Senior Management Meeting and Plant Evaluation Processes," Commission Paper SECY-93-093, May 1, 1996.

Reference 1

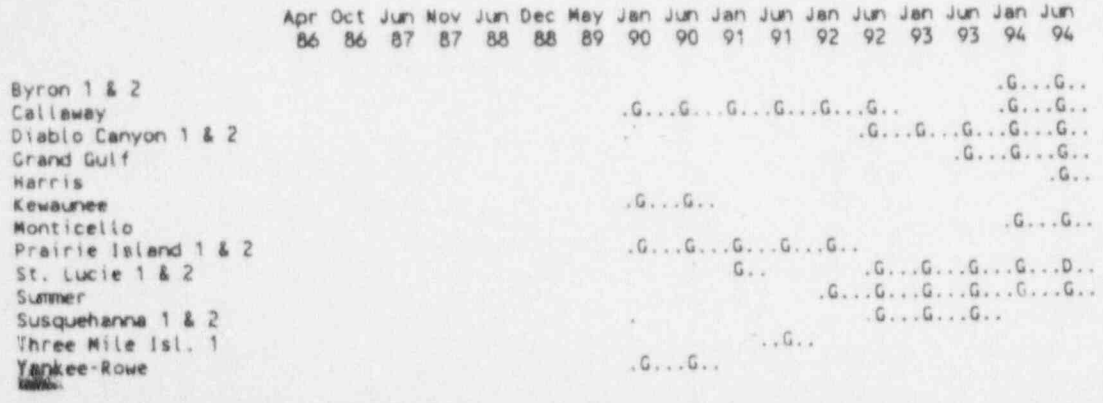
Summary of Senior Management Meeting Results

(D = Discussed; DL = Declining Letter; N = No category assigned; ?/? = Unit A/Unit B)



Summary of Senior Management Meeting Results - Good Performers

(G = Good;



PROPOSAL PRESENTATION AND FORMAT

General Instructions

(a) Information submitted in response to this RFQ must be typed, printed, or reproduced on letter-size paper and each copy must be legible.

(b) The quoter must submit the following material, which will constitute its quotation as defined by FAR 2.101, in two separate and distinct parts, at the date and time specified in Block 10 of the SF 18 for receipt of quotations. Quotations may be faxed to (301) 415-5761.

Part 1 - Request for Quotation (SF 18).

One original or faxed signed copy of the SF 18 and attached organizational conflict of interest certification.

Part 2 - Cost Quotation.

One original or faxed copy of the cost quotation. Specific information on cost quotation preparation is provided in below.

Oral Technical and Management Presentation and Supporting Documentation Requirements - Instructions

(a) The quoter shall make an oral technical and management presentation in accordance with the instructions contained herein. Immediately after the oral presentation, the quoter shall participate in an interview conducted by Government representatives. The sole purpose of the oral presentation and the interview is to permit the Government to test and evaluate the quoter's knowledge, competence and qualifications with regard to the Government's requirements and program objectives.

(b) Neither the oral presentation nor the interview will constitute discussions within the meaning of FAR 15.601 and 15.610, and neither will obligate the Government to entertain revisions to the quote or to solicit revisions to quotations. The NRC intends to award without discussions. Nevertheless, the Agency may hold discussions and request revisions to quotations, if necessary.

(c) Quoters are prohibited from taping or recording their own oral presentations. Should the NRC tape or record the quoter's presentation, the NRC will NOT provide the quoters with a copy of the tape or recording.

(d) The oral technical and management presentation and written supporting documentation may not contain any reference to cost.

(e) Caution--quoters are hereby notified that all information provided in its oral presentation and supporting documentation, including all resumes, must be accurate, truthful, and complete to the best of the quoter's knowledge and belief. The Commission will rely upon all representations made by the quoter both in the evaluation process and for the performance of the

work by the quoter selected for award. The Commission may require the quoter to substantiate the credentials, education, and employment history of its employees, subcontractor personnel, and consultants, through submission of copies of transcripts, diplomas, licenses, etc.

(f) The quoter shall submit through the oral technical and management presentation and supporting documentation, full and complete information to permit the Government to make a thorough evaluation and a sound determination that the quoter will have a reasonable likelihood of meeting the requirements and objectives of this procurement.

Oral Technical and Management Presentation - Location

Oral technical and management presentations will be held at a conference room in NRC Headquarters located on Rockville Pike, in Rockville, Maryland. Each conference room will have a viewing screen. The NRC can provide an overhead projector for use at the request of the quoter. Contact Debbie Neff, NRC Contract Specialist at 301-415-8160 should you require such equipment.

Oral Technical and Management Presentation - Schedule

(a) The order in which the quoters will make their oral presentations will be determined by lottery by the Contracting Officer after receipt of quotations. Oral presentations will be scheduled to begin no earlier than 9:00am on the second business day after the close of the solicitation.

(b) The Contracting Officer will notify all quoters of their scheduled oral presentation date and time. Once notified, quoters shall complete their oral presentations as scheduled. Requests to reschedule will not be entertained. The NRC reserves the right to reschedule oral presentations under extraordinary circumstances at the sole discretion of the NRC Contracting Officer.

(c) It is anticipated that oral presentations shall not exeed 1.5 hours in duration and shall be followed by a 30 minute recess. The subsequent interview session will commence immediately after the recess and shall not exceed 1 hour in duration.

Oral Technical and Management Presentation - Topics

The following topics must be addressed by the quoter through the oral technical and management presentation. It is required that those individuals proposed as key personnel for this effort perform the presentation.

1. PERSONNEL QUALIFICATIONS/EXPERIENCE

The objective of this part of the oral presentation shall be to clearly demonstrate to the NRC what qualifications and experience the proposed personnel have to perform the effort as described in SOW. The quoters shall address the availability of the proposed personnel and shall describe the composition of the proposed project team(s) to be assigned to this effort, and delineate the responsibilities of the team members inclusive of technical,

management, and administrative functions.

2. ORGANIZATIONAL EXPERIENCE AND PAST PERFORMANCE

The quoter shall describe all corporate qualifications and experience in performing contracts, similar in size and scope to this procurement, over the past 3 years, and the extent to which the necessary knowledge, experience and skills remain available within the organization. The oral presentation shall include, but shall not be limited to, a discussion of the quoter's qualifications and experience in regard to the following:

- knowledge of operating and management of an electric utility
- resolution of performance problems in industrial organizations, strategic planning or total quality management
- performance measurement (i.e. developing links between performance elements and measures, benchmarking an individual performance in an industry, measuring performance in an operating environment and assessing results)
- ability to perform project management and quality assurance (completeness and accuracy) of technical reports
- experience in planning, scheduling, and control of personnel and work flow
- ability to control costs and provide project status and cost information in the format and content specified in the SOW (provide examples of the system that will be used for monitoring and reporting detailed status and cost information.

The quoter shall identify the key personnel who performed under the contracts discussed.

3. UNDERSTANDING OF CONTRACT OBJECTIVES

The objective of this part of the oral presentation shall be to clearly demonstrate to the NRC the quoter's understanding of the technical requirements of the RFQ including problems to be solved, objectives to be achieved and scope, magnitude and complexity of the effort.

Supporting Documentation Requirements

The quoter's written documentation as defined below shall support the oral presentation.

(a) The quoter shall provide the following written documentation by the date and time specified in Block 10 of the SF 18 for receipt of quotations (three copies if delivered by hand or express mail). Documentation may be faxed to (301) 415-5761. Please notify Debbie Neff if over 20 pages are to be faxed.

(1) The quoter shall provide paper copies of overheads documenting the main points of each topic to be discussed through the oral presentation with the identity of the individual presenting the topic noted. All printed copies must be legible and reproduced in black and white on standard letter-size paper. No other material to be referenced through the oral presentation will be accepted.

(2) The quoter shall provide the information outlined below for its last three contracts similar in size and scope to this procurement completed over the past 3 years and all ongoing contracts. The NRC will attempt to contact a reasonable number of the references provided. This information will be used to evaluate the degree of the quoter's success in past performance.

Contract No.:
Name and address of Government/commercial entity:
Point of Contact:
Contracting Officer:
Telephone Number:
Technical Representative:
Telephone Number:
Date contract awarded:
Period of performance of the contract (including extensions):
Dollar value of the contract:
If applicable, the dollar value of the modifications to the contract:
Type of contract awarded:
Brief description of the work:

(3) The quoter shall identify all individuals anticipated to perform this effort and shall provide resumes for each individual in accordance with the format outlined below. The resumes should be directed to the specific needs of the contract and not be general in nature. Resumes shall be included for any subcontractor/consultant personnel, if known. The quoter shall indicate the extent to which each individual will be available to perform this effort. Resumes should not exceed 2 pages in length for each individual identified.

RESUME FORMAT

a. Name and Title

b. Name of Firm with which associated

c. Years of Experience with this Firm and other Firms

d. Education - Degree(s)/Year/Specialization

e. Description of experience and qualifications relative to the effort described in the SOW of this RFQ

f. State whether the person proposed will fill a Key Personnel position and indicate the percentage of time this person will commit to this effort.

(4) All designated contractor employees should be in the employ of the quoter or designated subcontractor(s) at the time of the oral presentation. If any of the personnel are not employed by the quoter or proposed subcontractor at that time, firm written commitments assuring the availability of such individuals are to be included with the supporting documentation.

Cost Quotation

(a) The quoter shall provide a written cost quotation for the effort described in this RFQ. The information to be provided in support of the cost quotation must include pertinent details sufficient to show the elements of cost upon which the total cost is predicated and shall also include the following:

- the bases for the estimated labor hours

- a breakdown of the labor hours by labor category for the period of performance

- the source of labor rates for both contractor personnel and any subcontractor personnel (Note: level-of-effort data shall be expressed in man-hours.)

- the source and bases for estimation of all other direct costs

- the rates for labor overhead, fringe benefits, general and administrative expenses, and fee or profit, if not already included in GSA approved loaded contract rates

AWARD AND EVALUATION OF PROPOSALS.

(a) Quotations will be evaluated against the evaluation factors specified below. These factors are listed in their relative order of importance. Award will be made to the quoter:
(1) Whose quotation is technically acceptable;
(2) Whose technical/cost relationship is most advantageous to the Government; and
(3) Who is considered to be responsible within the meaning of Federal Acquisition Regulation Part 9.1.

(b) Although cost/price is an important factor in the evaluation of quotation, technical merit in the evaluation criteria set forth below is a more significant factor in the selection of a contractor. Further, to be selected for an award, the quoted cost/price must be realistic and reasonable.

(c) The Government may:
(1) Reject any or all quotations.
(2) Accept other than the lowest cost/price quotation; and
(3) Waive informalities and minor irregularities in quotations received.

EVALUATION FACTORS

1. Personnel Qualifications, Experience and Availability

Degree of qualification and experience of proposed personnel to perform required tasks (minimum qualification and experience level for certain personnel apply - see SOW). Degree of availability of proposed personnel and commitment of qualified staff to contract. (45 points).

2. Organizational Experience and Past Performance

Extent to which the proposal demonstrates that the offeror's proposed organization has the necessary experience and current capabilities (including management and quality assurance capabilities) and has successfully performed on past and current contracts for the type of work described in the SOW. (40 points).

3. Understanding of Contract Objectives

Degree to which offeror demonstrates an understanding of the technical requirements including an understanding of the problems to be solved and objectives to be achieved as well as the scope, magnitude and complexity of the effort. (15 points).

AUTOMATED CLEARING HOUSE (ACH) ELECTRONIC PAYMENT

It is the policy of the Federal Government to pay government vendors by the Automated Clearing House (ACH) electronic funds transfer payment system in lieu of a U.S. Treasury check. The electronic system is known as Vendor Express. Payment shall be made in accordance with FAR 52.232-28, entitled "Electronic Funds Transfer Payment Methods" which would appear in any resultant purchase order.

Upon notification of award, the successful quoter shall complete the "Company Information" portion of the attached Form SF 3881, entitled "Payment Information Form - ACH Vendor Payment System". The contractor shall take the form to the ACH Coordinator at the financial institution that maintains its company's bank account. The ACH Coordinator will fill out the "Financial Institution Information" portion of the form and return it to the Office of the Controller at the following address: Nuclear Regulatory Commission, Division of Accounting and Finance, Mailstop T-9-E-2, Washington, DC 20555, ATTN: ACH/Vendor Express. Once the Office of the Controller has processed the contractor's sign-up form, the contractor will begin to receive payments electronically via Vendor Express/ACH.

If the offeror/bidder has questions concerning ACH/Vendor Express, he/she may call the Commercial Payments staff at (301) 415-7520."

(End of provision)

NRC FORM 103
(5 95)
NRCM 5101

PURCHASE/DELIVERY ORDER

POINT OF ISSUE: U.S. NUCLEAR REGULATORY COMMISSION

DOC: 252A

INSTRUCTIONS: See billing address, lower left corner of this form.

THIS NUMBER MUST APPEAR ON ALL INVOICES AND/OR PACKAGES AND PAPERS RELATING TO THIS ORDER.

ORDER NUMBER: DR-96-0516

DATE: 8/28/96

REQUISITION NUMBER: 82679033

	PURCHASE ORDER PER YOUR QUOTATION OF	APPROPRIATION/ALLOTMENT: X0200	JOB CODE: J3229	B & R NUMBER: 68215116025	BOC NUMBER
	NEGOTIATED PURSUANT TO THE AUTHORITY OF 41 USC 252(C)(3)				
X	DELIVERY ORDER UNDER CONTRACT NUMBER: GS-22F-0093B				

TO (Seller):

Arthur Andersen & Co., SC
ATTN: Drew Valentine
1150 17th Street, NW #901
Washington, D.C. 20036
TIN #: 350732690

CONSIGNEE AND DESTINATION
(SHIP TO NRC WAREHOUSE UNLESS OTHERWISE SPECIFIED)

U.S. NUCLEAR REGULATORY COMMISSION
ATTN: William Raughley, M/S T 4A9
ROCKVILLE, MD 20852

DELIVERY F.O.B.	PLACE OF INSPECTION AND ACCEPTANCE	DATE
Destination		

DELIVERY DATE	DISCOUNT PAYMENT TERMS
150 days	Net 30

PLEASE FURNISH THE FOLLOWING ON THE TERMS SPECIFIED ON BOTH SIDES OF THIS SHEET AND ON THE ATTACHED, IF ANY, EXCEPT THAT ANY SUCH TERMS WHICH MIGHT BE INCONSISTENT WITH THE TERMS OF ANY EXISTING FEDERAL CONTRACT OR AGREEMENT UNDER WHICH THIS ORDER IS PLACED WILL NOT APPLY.

ITEM NO.	ARTICLES OR SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	The Contractor shall provide services as described in the attached Statement of Work for the Office of Analysis and Evaluation of Operational Data (AEOD) at the following rates:				
	Category	Est.		Fixed Hourly Rates	
1.	Program Executive	120	HRS	$229.00	$27,480.00
2.	Engagement Leader	490	HRS	$164.00	$80,360.00
3.	Team Leader	960	HRS	$72.49	$69,590.40
4.	Team Member	1,428	HRS	$49.83	$71,157.24
	Travel ..... NOT TO EXCEED				$17,220.00
	NRC Contacts:				
	Contractual: Debbie Neff (301) 415-8160 NRC Project Officer: William Raughley (301) 415-7577				
	Contractor Contacts:				
	Drew Valentine or Kathryn Kelly (202) 778-4911/4936				

PERSON TO CONTACT REGARDING THIS ORDER	TELEPHONE AREA CODE	TELEPHONE NUMBER	TOTAL	
Debbie Neff	301	415-8160	NOT TO EXCEED	$264,167.07

SUBMIT INVOICE IN **DUPLICATE** IN ACCORDANCE WITH INSTRUCTIONS ON REVERSE (P.O. NUMBER MUST BE INCLUDED ON ALL INVOICES) AND FORWARD TO:

DIVISION OF ACCOUNTING AND FINANCE
OFFICE OF THE CONTROLLER T-9 E2
U.S. NUCLEAR REGULATORY COMMISSION
WASHINGTON D.C. 20555-0001

SIGNATURE AND TYPED NAME

/s/ Mary M. Mace

CONTRACTING OFFICER

NRC FORM 103 (5-95)

NRC FORM 103A
(11-87)
NRCM 5101

U.S. NUCLEAR REGULATORY COMMISSION

ORDER NUMBER

DR-96-0516

PURCHASE ORDER CONTINUATION

INSTRUCTIONS. Purchase orders describing services may provide data crossing the Quantity, Unit, Unit Price, and Amount columns

NAME OF CONSIGNEE

ARTHUR ANDERSEN & CO, SC

ITEM NUMBER	ARTICLES OR SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	Use of Automated Clearing House (ACH) Electronic Payment It is the policy of the U.S. Nuclear Regulatory Commission to pay government vendors by the Automated Clearing House (ACH) electronic funds transfer payment system in lieu of a U.S. Treasury check. The electronic system is known as Vendor Express. Payment shall be made in accordance with FAR 52.232-28, entitled "Electronic Funds Transfer Payment Methods." To receive payment by Vendor express, the contractor shall complete the "Company Information" portion of the Form SF 3881, entitled "Payment Information Form - ACH Vendor Payment System." The contractor shall take the form to the ACH Coordinator at the financial institution that maintains its company's bank account. **The contractor shall discuss with the ACH Coordinator how the payment identification information (addendum record) will be passed to them once the payment is received by the financial institution. The contractor must ensure that the addendum record will not be stripped from the payment.** The ACH Coordinator will fill out the "Financial Institution Information" portion of the form and return it to the Office of the Controller at the following address: Nuclear Regulatory Commission, Division of Accounting and Finance, Mailstop T-9E2, Washington, DC 20555, ATTN: ACH/Vendor Express. Once the Office of the Controller has processed the contractor's sign-up form, the contractor will begin to receive payments electronically via Vendor Express/ACH. If you have questions concerning ACH/Vendor Express, contact the Commercial Payments staff at (301) 415-7520.				

STATEMENT OF WORK
PERFORMANCE INDICATORS FOR WATCH LIST PLANTS

BACKGROUND

Senior Management Meeting Process

The decision to add or remove a plant from the NRC Watch List is made semiannually at the Senior Management Meeting (SMM). The Watch List plants are those whose performance warrant NRC monitoring beyond that normally required*. These meetings have occurred since 1986 and the final outcomes are listed in the Summary of Senior Management Meeting Results[1]. Throughout the process, the information about the performance of the plants is provided primarily by the regions and the Office for Nuclear Reactor Regulation (NRR). The regions are responsible for the inspection activity of the plants, and have first-hand information based on their observations and assessments, and NRR provides oversight, licensing and event review for the reactor program. The Office for Analysis and Evaluation of Operational Data (AEOD) provides insights based on performance indicators[2], independent analysis of experience and Accident Sequence Precursors (ASP) that are based on information reported to the NRC.

The SMM process begins with the independent screening of licensee performance by different organizations of the NRC staff. Each organization does some evaluation of the plants' performance. The organizations come together in a prebriefing to form a consensus on the plants for discussion based on input from their respective organizations. Following the prebriefing, the organizations prepare a Senior Management Meeting Executive Summary with written discussions about the performance of selected plants; these contain plant specific discussions and performance indicators. At SMM, the agency develops actions to address performance issues, including additions and deletions of plants from the Watch List.

Following each SMM, the licensees are informed of any NRC decisions or actions that have been taken with respect to their plants or facilities. The Commission is advised of the Watch List status, and reasons for addition or removal from the Watch List at the Periodic Briefing on Operating Reactors and Fuel Facilities. This meeting is transcribed. Following placement on the Watch List, inspection and other regulatory activity is generally refocused on the problems and the licensees generally document their improved performance. Removal of plants from the Watch List is part of the SMM process.

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* There are three categories of Watch List plants: Category 3 are shutdown plants requiring NRC authorization to startup and that the NRC will monitor closely; Category 2 plants are those authorized to operate that the NRC will monitor closely; and Category 1 plants are those removed from the Watch List.

The SMM process is described in detail in Attachments 1 and 2 of SECY-96-093, Guidance for Senior Management Meeting and Plant Evaluation Processes (to be provided upon award).

Senior Management Meeting Performance Indicator Study

The Commission has requested that the staff evaluate the development of improved indicators that can provide a more objective basis for judging whether a plant should be placed on or deleted from the Watch List. The Commission stated that the staff should look at the dominant and recurring characteristics of those plants that have been placed on the Watch List in the past, including 1) a high level of operational events, 2) inadequate engineering and technical support, and 3) management ineffectiveness. These characteristics are to be assessed through objective measures that are directly related to plant performance.

A study shall be completed with the assistance of contractors in response to the Commission request. The study needs to result in better identification of what makes a problem plant; their characterization needs to be more objective, consistent, measurable, and timely. In addition indicators must be developed from performance characteristics and measures in a logical sequence.

For the purposes of this study, the following definitions will apply:

> Characteristics are aspects of a plant's behavior that are important to safety performance.
>
> Measures are aspects of plant operation that are directly observable through data collection or inspection.
>
> Indicators are quantitative combinations or arrangements of measures that suggest or predict a characteristic which affects performance.

The study will involve four components: 1) examination of characteristics and attributes of past problem plants and those associated with good performers which were considered important in past senior management meeting deliberations, 2) identification of objective and timely indicators which relate to those characteristics, 3) correlation of indicators to historic performance trends, and 4) definition of the relationship between the resulting indicators and risk.

The scope of this contract will be to complete components 1 and 2, and to prepare an overall report integrating the results of all four components.

The examination of dominant characteristics (component 1) and the identification of candidate indicators (component 2) shall involve a thorough review of existing records, including the SMM briefing books, transcripts of Commission briefings and past detailed plant reviews including major team inspections and the study of Diagnostic Evaluation Inspection Reports

(DET study). Interviews with senior NRC staff, management, and selected licens
be conducted. The effort shall be performed by an established management consu
AEOD has a study in progress to look at common characteristics and attributes of p
which there was a DET. This will become an input to the contractor effort.

The correlation of indicators to past performance trends (component 3) will proceed in parallel using a technical contractor. The output of that review will be a list of data and information to be gathered in order to support the necessary analysis.

The definition of the relationship between the resulting indicators and risk (component 4) w. be performed by NRC staff. AEOD has a long-term effort in progress to develop risk-based indicators. This work will be used to the extent practical in the current study. It is essential to maintain logical models in which other candidate indicators can be evaluated.

A simple model is shown in Figure 1. The NRC maintains the risk at a particular plant is dominated by the potential for accidents resulting in severe core damage. Probabilistic analyses have shown that such accidents result from a sequence of failures starting with an initiating event which perturbs the plant from its normal operation. Human errors are known to be major contributors to such accidents. Other contributors include design deficiencies and safety system failures, some of which can occur from common causes. Figure 1 shows that the characteristics, measures and indicators of plant performance can be directly related to all of the factors that contribute to risk from core damage accidents. For example, the likelihood of design problems, human errors and equipment failures is strongly affected by the overall performance of the operating organization. The goal of component 4 of this study will be to relate the characteristics, measures and indicators to the risk-significant factors shown in Figure 1.

OBJECTIVE

Identify the characteristics, measures, and indicators that have been, could be, and should be used regarding the placement and removal of plants from the Watch ' Identify the characteristics, measures, and indicators that relate to nuclear safety in a systematic manner and result in the improvement to the objectivity, consistency, quantification, and timeliness of Watch List plant identification. In addition to examining the bases for past NRC decisions, identify new perspectives that can be applied

QUALIFICATIONS REQUIRED

The contractors shall have key personnel whose training, experience, and overall qualifications permit the conduct of an integrated management analysis study. The contractors shall also have personnel with methodological skills to design studies, interface appropriately with and interview executives, develop and deliver data collection instruments, tabulate and statistically present qualitative and quantitative findings, and analyze and interpret such findings into acceptable written report formats. The contractors shall have the ability to rapidly assimilate

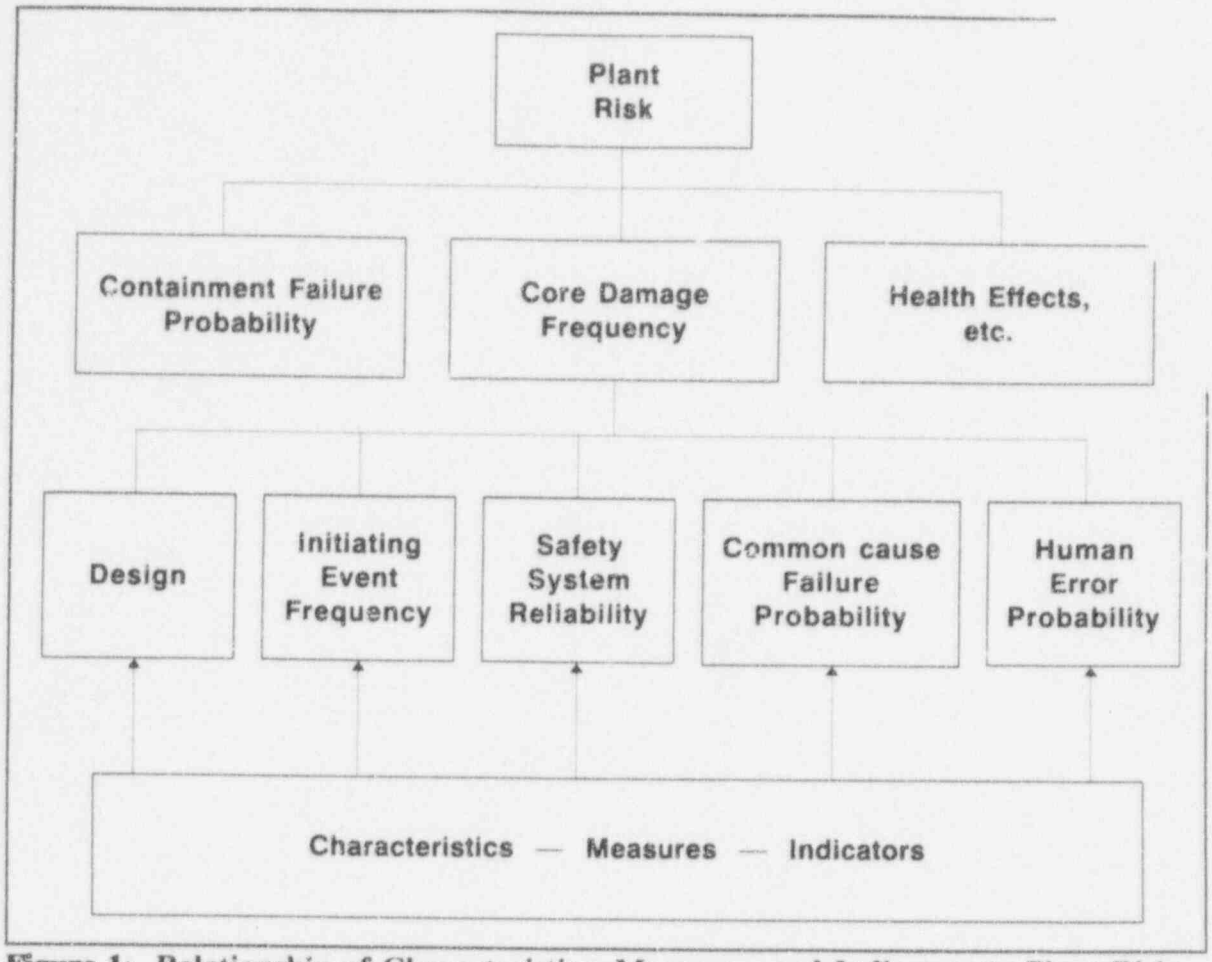

Figure 1: Relationship of Characteristics, Measures, and Indicators to Plant Risk

information associated with the nuclear industry regulatory environment and express findings in the terminology of that environment.

The individual who will direct the task shall have demonstrated the highest degree of professional competence. The individual shall have a minimum of 20 years of professional experience to include 10 years of upper management experience in a large organization. A working knowledge of operating and management processes of an electric utility is desired. The individual shall have had experience with the identification and resolution of significant performance problems in industrial organizations. The individual will also have experience with strategic planning. The individual shall have had the experience with developing performance characteristics, measures, and indicators, and assessing results. A bachelors degree is mandatory and an advanced degree(s) is preferred (e.g., M.B.A., M.S., Ph.D.s in a related technical or business field).

The investigator(s) shall have at least 10 years of professional experience, preferably including experience with the electric utility industry. At least one individual or consultant shall possess a working knowledge of operating and management process of a nuclear electric utility. The

individual shall have had experience with developing performance characteristics, measurement, and indicators in an operating environment and assessing results. A bachelor degree is mandatory and an advanced degree(s) is preferred (e.g., M.B.A., M.S., Ph.D.s in related technical or business field).

WORK REQUIREMENTS

The contractor shall provide the necessary qualified personnel, facilities, materials and services to complete the task. While in Washington, NRC will provide office space and access to NRC documents and information systems. Contractor personnel shall be available to travel and respond to NRC staff questions and comments on all phases of this project throughout the period of performance.

STATEMENT OF WORK

The contractor shall submit a report that identifies the characteristics, measures, and indicators that have been, could be, and are recommended for consideration regarding the placement and removal of plants from the Watch List. The contractor shall identify the characteristics, measures, and indicators that relate to nuclear safety in a systematic manner and result in the improvement to the objectivity, consistency, quantification, and timeliness of Watch List plant identification. The report shall identify characteristics, measures, and indicators that focus on the dominant and recurring characteristics of past Watch List plants. The report should also address leading indicators, measures, and characteristics such as economic stress measures that NRC should observe to increase watchfulness for evidence of safety performance change.

As described in more detail below, the contractor shall integrate the review of NRC information, the interviews, data, analysis, findings, results and recommendations into a single report. The report shall be based on the collective analysis and evaluation of material provided by the NRC, the contractor's participation in interviews of NRC and licensee management, and the contractor's past experience.

Prior to the final report, a draft report shall be issued for NRC comment. The contractor shall address and resolve the comments to the NRC's satisfaction. After issuance of the final report the contractor shall be requested to present the results, possibly in a public forum.

The following work shall be performed and documented in the report:

1. The contractor shall review all the background information provided by the NRC and any material identified as relevant by the contractor.

2. Identify what performance characteristics, measures, and indicators have been used to put a plant on, and remove a plant from, past Watch Lists and analyze the results. This shall be done for the plants identified (Reference 1) from January, 1991, to through January 1996 (exclude Browns Ferry Unit 1). Develop a matrix to show links

between the corresponding characteristics, measures, and indicators. This m. identify gaps in the information. The information shall be analyzed and docu. in the report.

2.1 Using the Senior Management Meeting Executive Summaries (10 summaries abou pages each), the EDO list of dominant and recurring characteristics, Senior Management Meeting Summaries (10 summaries about 30 pages each), the transcript of the Periodic Briefing on Operating Reactors and Fuel Facilities (10 summaries abou 100 pages each), summary information developed for the Senior Management Meeting premeeting (10 packages about 100 pages each), and relevant licensee correspondence (documents to be provided), identify the characteristics, measures, and indicators that have been used to put a plant on, and remove a plant from, the Watch List. Develop a matrix of the corresponding characteristics, measures, and indicators. Analyze the information and document the analysis in the report. The analysis shall discuss the objectivity, consistency, and timeliness of the information.

The example matrix in Figure 2 is provided for illustration. It shows three potentially important characteristics of plant operations; root cause assessment, personnel qualifications and preventive maintenance. For each of these characteristics, at least one measure is listed. Two are given for preventive maintenance. Numerical indicators are given for two of the four measures.

Characteristics	Measures - Indicators
Root Cause Assessments/Corrective Action	Recurring Problems
Personnel Qualifications	Training Program Effectiveness - Requalification Failure Rate
Preventive Maintenance	Equipment Reliability - Safety System Failure Rate - Forced Outage Rate Material Condition

Figure 2: Example Matrix of Characteristics, Measures, and Indicators

2.2 Using the Senior Management Meeting Executive Summaries, identify the characteristics, measures, and indicators that have been used to identify the plants selected for discussion, and highlighted as good performers. Compile the data in a matrix similar to Figure 2. The information shall be analyzed and documented in the

report. The analysis shall discuss how the good performers characteristics, me. and indicators differ from those of the Watch List plants.

2.3 Administer interviews of selected licensees and NRC senior managers. Licensee interviews shall be scheduled and accompanied by an NRC representative. In order meet the tight schedule, parallel interviews and analysis may be necessary. The contractor shall provide and discuss interview questions with the NRC.

2.3.1 Conduct interviews of NRC senior managers to understand the judgements made and information used to evaluate licensee performance; identify what characteristics, measures, and indicators the managers judge to be the most vital in evaluating declining and improving performance.

2.3.2 Conduct interviews at the offices of two licensees of past Watch List plants to understand what characteristics, measures, and indicators they used to measure declining and improved performance. Also, interview one good performer to identify what they consider to be important characteristics, measures, and indicators to maintain good performance. This will require review of background information to be supplied by the NRC.

2.4 Based on the reviews and interviews, provide a summary, discussion, and evaluation of the characteristics, measures, and indicators. Identify those most common, and the most relevant, characteristics, measures, and indicators used as well as gaps in the information. Evaluate the extent to which the Watch List plants distinguish themselves from good plants.

Where there is no link between characteristics, measures, and indicators, identity where additional measures could be applied.

Complete the matrix of the corresponding characteristics, measures, and indicators.

3. Identify characteristics, measures, and indicators that could/should be obtained, and added to the matrix or used to fill in the gaps of information. Identify new perspectives on performance assessment, beyond those which the NRC has used in past decisions. The contractor shall use their (1) observations, analysis, and evaluation of the NRC information; (2) knowledge base from experience with electric utilities and other industries; and (3) experience with the development and analysis of performance factors. The contractor shall add this information to the matrix. Document the findings and observations in the report. Convey description of the characteristics, measures and indicators to the NRC contractor responsible for the third component, 3) correlation of indicators to historic performance trends, and to the NRC for evaluation of the fourth component, 4) definition of the relationship between the resulting indicators and risk.

REPORTING REQUIREMENTS AND DELIVERABLES

All reports shall be sent to the NRC Project Officer with a copy to the NRC Project Manager and Technical Monitor. The contractor shall provide the following:

1. A monthly business letter report shall be submitted detailing schedule and cost status; status of each deliverable, and expenditures versus forecast specified.

2. A detailed plan to include a schedule with milestones, and individual man hour forecast for each task element, 5 days from the start of the contract.

3. Interview questions 10 days before scheduled interviews.

4. An evolving matrix of corresponding characteristics, measures, and indicators in the monthly business letter report as the task progresses.

5. A draft report, which integrates the results of the tasks and subtasks on November 15, 1996.

6. A final report, reflecting NRC comments, December 13, 1996.
The final report will be delivered with a camera ready copy suitable for inclusion in the NRC document control system. The report shall contain an executive summary, summary of findings and observations, conclusions, and recommendations. The format of the reports shall be specified by the NRC Project Officer.

7. The contractor shall deliver electronic discs containing the report to the NRC Project Officer upon completion of the task.

DELIVERABLE	Completion Date
Detailed plan and milestones	5 days after contract award
Interview questions	10 days before conduct of interviews
Notes of Interview	3 days after the interview
Initial Matrix from 2.0	October 11, 1996
Initial Matrix from 3.0	October 25, 1996
Draft Report	November 15, 1996
NRC Comments/Meeting	November 29, 1996
Comment resolution/Meeting	December 9, 1996
Final Report	December 13, 1996
Electronic copy	December 13, 1996

Completion dates based on a start date of September 3, 1996

MEETINGS AND TRAVEL

The following meetings and travel are anticipated:

Up to seven 3-person, 2-day trips; one to each NRC Regional Offices to participate in interviews, and three licensee offices.

At least 10 trips of 4 days to the NRC Headquarters for each senior contractor investigator and the task executive director plus one trip for comment resolution and two trips for presentation of the report.

The contractor shall obtain verbal or written approval of the NRC Project Officer before any travel is undertaken for this project.

ESTIMATED LEVEL OF EFFORT

The estimated level of effort is 2988 man-hours.

PERIOD OF PERFORMANCE

The period of performance shall commence on September 3, 1996 and expire on December 13, 1996.

APPLICABLE SPECIAL PROVISIONS

The work specified in this SOW is not fee recoverable.

It is the responsibility of the contractor to assign staff, employees, subcontractors, or consultants who have the required educational background, experience, or combination thereof to meet both the technical and regulatory objectives of the work specified in this SOW. The NRC will rely on the representations made by the contractor concerning the qualifications of the personnel assigned to this project including assurances that all information contained in the technical and cost proposals, including resumes, is accurate and truthful.

The contractor will make provision to protect the confidentiality of sensitive unclassified material to be used in the conduct of this study, including but not limited to the Senior Management Meeting Summaries and summary information developed for the Senior Management prebriefs.

It is agreed that the Government may work at the contractor's facility during the period of this agreement at no additional cost to the Government, and/or the contractor may work at the Government's facility during the period of this agreement at no additional cost to the Government.

REFERENCES

1. Summary of Senior Management Meeting Results

2. U.S. Nuclear Regulatory Commission, Office for Analysis and Evaluation of Operational Data, "Performance Indicators for Operating Commercial Nuclear Power Reactors, Data Through September 1995, Parts I and II."

3. U.S. Nuclear Regulatory Commission, "Guidance for Senior Management Meeting and Plant Evaluation Processes," Commission Paper SECY-96-093, May 1, 1996.

James F McConnell

Jim McConnell is an experienced manager in Arthur Andersen's Business Consulting practice. He serves clients in the public utility, construction, and manufacturing industries by providing management information and cost accounting solutions to a variety of business issues. Jim has over ten years of experience using financial and operating information on special purpose projects such as operational consulting assignments and business disputes.

RELEVANT EXPERIENCE

Arthur Andersen LLP
Experienced Manager, Business Consulting

- **Electric and Gas Utility**--Developed a refined Asset Management strategy with a large utility that included streamlining reporting and new systems requirements. Implemented a new Units of Property with financial and engineering/operations needs in mind to more efficiently deploy assets and monitor work orders through steam, nuclear, hydro, transmission, distribution, gas and general plant areas. Developed the framework for reorganizing and validating units of property working with engineering and operations personnel.

- **Midwestern utility client** -- Reviewed the project controls during a management prudency review performed for a completing a nuclear generating station. The review included utility budgeting practices, cost and schedule control procedures, work force and productivity planning, and control and management reporting systems.

- **Western utility client** -- Conducted detailed cost growth and schedule extension analyses during a rate case prudency review over the construction costs of a nuclear generating station. Detailed studies analyzing expenditures, work force, productivity, and schedule delays over the course of the project were conducted to associate cost and schedule increases with various project events. Prepared responses to intervenor data requests and prepared formal testimony on behalf of the utility client.

- **Electric Utility** -- Conducted extensive benchmarking reviews and developed activity based performance measures to help this client to improve its competition. Joint Andersen/ client team worked with financial and business unit personnel to re-cost the company's performance measurement system from a department/functional view into a process team oriented system. Capital, O&M and Revenues were combined to form Shareholder Value Added Performance Metrics.

- **Kuwait Oil Company** - Project Manager for an extensive reengineering project to help the company's financial services following the devastation of the Iraq invasion of Kuwait. Recommended and implemented technical and procedural solutions to handle the enormous efforts and costs expended to control the damage caused by Iraq's sabotage of Kuwait's oil fields. Provided assistance in re-staffing and training financial and operations personnel. Worked closely with technical and environmental specialists to assess losses and report on clean-up and reconstruction progress. Calculated weekly cash call requirements and developed procedures and controls to safeguard financial and physical assets.

- **Telecommunications Company** --Lead Analyst on the Administrative and Support Business Value Driver team charged with modeling company costs from functional/department views into process views. Determined significant operational metrics used to measure performance by customer aligned process views versus traditional department budgets in order to help the client achieve improved cost and quality performance. Responsible for training and directing the roll-out of value drivers

(Over please)

over 40 client managers, who in turn championed the program throughout the company.

- Conducted extensive cost and production studies evaluating the impact of a major supplier's poor performance on a new aircraft program. The studies covered all areas of a major commercial aircraft program including engineering and testing, purchasing, industrial and manufacturing engineering, marketing and financial departments. Prepare negotiation packages for senior management to present in meetings that led to a favorable settlement with supplier.

- Reviewed cost allocation methodologies and reported cost overruns on a contract for the manufacture of new rolling stock purchased by the authority. Detailed reviews were conducted for factory overhead, direct labor and materials, engineering and administrative expenses. Extended arbitration was avoided and an equitable contract purchase price adjustment was agreed upon by both parties.

EDUCATION:

M.B.A, Finance, University of Wisconsin
B.B.A, Finance, Marketing and Management, University of Wisconsin

(Over please)

Gary M. Rodrigues

Gary joined Arthur Andersen in mid-1995 from PANGAEA Consulting, an environmental business and strategy consulting firm. Prior to serving with PANGAEA, he served as vice president of Med-Tox Associates, Inc., an environmental, health, and safety consulting firm (Anaheim, CA), director of environmental training and technical services) at Metcalf & Eddy, Inc. (Wakefield, MA), and director of technical services in New England for General Physics Corporation of Columbia, MD.

In more than fifteen years of consulting, Gary has served on or managed several dozen strategic or performance related consulting engagements with clients in government and industry, including: environmental engineering (water, wastewater, and hazardous waste), environmental technology, oil and petrochemical, manufacturing, electric utility (nuclear and fossil power), biotechnology, and many other industries.

Functional Expertise:

- Performance Improvement
- Strategic Planning
- Environmental, Health and Safety Management Systems
- Training Systems Development
- Business Process Reengineering
- Business Integration

Industry Expertise:

- Environmental Technology
- Environmental Services
- Electric Utility(Nuclear and Fossil)
- Oil/ Petrochemical
- Manufacturing
- Government

RELEVANT EXPERIENCE:

Arthur Andersen LLP
Senior Manager, Environmental Services

- Completed a study of the U.S. market for radioactive wastes generated by commercial nuclear power plants for a leading environmental waste technology-based firm. Defined the size and scope of the market, current waste disposal practices and options, key industry players, competitive industry characteristics, and the forces driving change in that industry.
- Provided quality and performance improvement related consulting services on more than a dozen engagements at nuclear power plants operated by Boston Edison, Vermont Yankee, GPU-Nuclear, and Taiwan Power. Major projects included serving as project manager and lead instructor for Pilgrim's Institute of Nuclear Power Operations' accredited program for
- Certified as Quality Assurance/Quality Control Inspector (ANSI, Level II) at Pilgrim Nuclear Power Station. Conducted a comprehensive audit of Pilgrim's materials management and spare parts program.
- Recently performed comprehensive environmental management system reviews for both a major electric utility and a major U.S. defense contractor using key elements of ISO-14001 and U.S. DOJ Sentencing Guidelines as the primary criteria against which the review was performed.

and U.S. DOJ Sentencing Guidelines as the primary criteria against which the review was performed.

- Served as Project Manager for the design and development of a $1.2 million environmental management program developed for the executive committee and Tier 1 managers at one of the world's largest petrochemical companies.
- Currently managing a scope of work focused on the redesign of key permitting and compliance and enforcement business processes for a state environmental agency's water quality division. Project work includes the design of eighteen new opportunities aimed at assisting the state agency transition into a more risk-based and customer-focused organization.
- Work includes cost-benefit and service level impact analyses, development of performance measures, and preparation of detailed implementation plans for each of the opportunities, and pilot implementation of selected opportunities. Managed an earlier scope of work which assessed the adequacy of the state's Water Quality Point Source Program.

EDUCATION:

Executive M.B.A. Business management /strategic planning, Pepperdine University.
United States Navy's nuclear power program, University of Massachusetts at Amherst.

Rilick G. Noel

Rilck Noel is a Senior Manager in the Arthur Andersen Business Consulting Group with 14 years of utility and utility-related experience. He has managed and conducted several studies related to performance improvement, benchmarking, management reviews and litigation support for gas and electric utilities, and non-utilities. He spent eight of the fourteen years working for Southern California Edison and Commonwealth Edison Company in performance improvement and power generation, respectively.

RELEVANT EXPERIENCE

Arthur Andersen LLP
Senior Manager, Business Consulting Group

- Assisted a major midwestern electric utility with the development of its strategic plan. Directed scenario analyses related to the impact of various productivity initiatives on the company's cost structure.
- Directing ongoing review of the construction services procurement process of a Nevada gas utility for fairness, competitiveness, efficiency and effectiveness. This engagement also includes assisting the company with the implementation of the recommendations from the review.
- Assisting a major southern California utility with the outsourcing study of its QF contracts department. The engagement encompasses the identification of the scope of services to be outsourced, the identification of potential suppliers, and the selection of the winning supplier(s).
- Directing the selection and automation of key business processes at a non-regulated entity of a holding company. The engagement involves the automation of financial and accounting processes as well as the development of a strategic systems plan for the future automation of key processes.

Southern California Edison Company:

- Under the guidance of two senior executives, directed a cadre of internal and external consultants in successfully designing and implementing a customer-focused and process-based productivity improvement project that resulted in 30% cost savings and significant effectiveness improvement in several organizations and processes, including Customer Billing, Information Technology, Corporate Communications, Shareholder Services, Corporate Security and Nuclear Security .
- Led a corporate-wide productivity improvement project with the support of both internal and external consultants and guidance from senior executives. Significant efficiency and effectiveness opportunities have been identified as a result of this project.

Big Six Firm:

In the Utility, Telecommunication and Energy Transportation Group of a Big Six Firm, Rilck managed and conducted studies related to performance improvement, benchmarking, management reviews and litigation support. These studies included the following:

Performance Improvement

- Process Improvement activities at Baltimore Gas & Electric Company as commissioned by the company. Assisted the Company with a Baldrige award assessment at its nuclear plant. Specific activities included interviews of plant executives and team members, facilitation of team meetings and analysis of assessment survey data.
- Process Improvement/Reengineering at Public Service Electric & Gas (PSE&G). He trained and facilitated PSE&G nuclear organization teams tasked with improving the obsolete spare parts procurement, the nuclear technician training, and the design change processes.
- Process Improvement/Reengineering implementation at Niagara Mohawk as commissioned by the company. Specific responsibilities include preparing and conducting team training and benchmarking the fossil power production units performance and practices against other utilities.
- Southern California Edison (SCE) 1995 General Rate Case corporate benchmarking testimony. As the Big Six Firm project manager, he developed the corporate benchmarking exhibit for the 1995 general rate case. He also advised several SCE organizations of their benchmarking testimony write-ups to ensure consistency.
- Benchmarking study of international utilities on behalf of the World Bank. As the project manager, he was responsible for comparing the Indian Power sector's operational and financial performance to a group of other countries.
- Wisconsin Gas process reengineering effort as commissioned by the company. He was responsible for training and facilitating two teams tasked with assessing the service delivery and the after sales support processes.
- Benchmarking study of planning and budgeting practices in different industries as commissioned by a confidential combination utility client. He analyzed the budgeting and planning practices of several companies to identify the best ones.
- Benchmarking study commissioned by a group of utilities forming the Big Six Firm Utility Benchmarking Consortium. He developed several of the performance indicators and analyzed the data being collected by the utilities to identify best practices.
- Process Reengineering Training at Babcock and Wilcox as commissioned by the company. Specific responsibilities include preparing and delivering TQM/Continuous Improvement presentations and education modules to B&W team members.

Demand-Side Management Studies

- Assistance in the design of a demand-side management program for Washington Gas. He analyzed the potential reduction in consumption to be derived from using high efficiency food service gas equipment, and the impact on consumption levels of demand side management pilot programs.

- Assistance to Union Gas in analyzing potential peak shifting techniques. Specific responsibilities included the performance of a feasibility study of gas thermal storage compared to electric thermal storage.

General Management Studies

- Assistance to the Southeast Compact Commission for Low-Level Radioactive Waste in performing a diagnostic review of the North Carolina low-level radioactive waste site. As a lead consultant, his specific responsibilities included analyzing project management, the contract between the state of North Carolina and the prime contractor, and schedule delays.
- Management audit of Duquesne Light Company as commissioned by the Pennsylvania Public Utility Commission. Specific responsibilities included the analysis of the management of the nuclear operations and maintenance.
- Assistance in producing "A Guide to Marketing Information Systems of Electric Utilities," for the Electric Power Research Institute. He performed a survey of electric utilities to determine the state of the art and identify successful marketing information systems development practices.
- Prospective management review of Jersey Central Power and Light as commissioned by the Board of Regulatory Commissioners. As a lead consultant, his specific responsibilities included the analysis of division operations, transmission and distribution operations, and engineering, as well as support services including legal, insurance and claims, fleet management, procurement and materials management, facilities management, and real estate.
- Prospective management review of South Jersey Gas Company as commissioned by the Company. Specific responsibilities included analyzing the construction program and the materials management process.
- Focused management review of Commonwealth Electric Company as commissioned by the Department of Public Utilities of Massachusetts. Specific responsibilities included analyzing the management of outside services area and the budget development and control area.

Litigation Support

- Prudence audit of the South Texas Nuclear Project as commissioned by the Public Utility Commission of Texas. He assisted in writing portions of the final report, and also interviewed Houston Lighting & Power officials. Specific responsibilities in this engagement included the analysis of engineering management.
- owner versus a major utility. He reviewed the actions of the utility's senior management with respect to their impact on the nuclear power plant's extended outage.
- Litigation support of a nuclear plant minority owner versus the plant operator and majority owner. He analyzed the possible breach of

contractual obligations by the plant operator as suggested by the plant operation and maintenance performance.

- Assistance to a nuclear plant minority owner contesting the costs associated with its share of the plant. He analyzed the plant operations and maintenance costs in relation to a group of similar plants and to the national average of such costs.
- Assistance to a gas utility intervening in an electric utility's rate case proceedings. He analyzed the electric utility's revenue requirements model to determine excessive seasonal variations of the proposed rate increase.
- Prudence audit of Commonwealth Edison's Byron Nuclear Station as commissioned by the Illinois Commerce Commission. Performed a survey of nuclear plant construction sites manpower levels to determine the availability of craft to nuclear projects at given periods.

Commonwealth Edison Company:

For six years, Rilck was involved in the nuclear power industry at Commonwealth Edison. His responsibilities included the following:

- Managing multimillion dollar engineering modifications and other projects necessary to restart or operate Dresden and Quad cities nuclear power plants, including interacting with the U.S. Nuclear Regulatory Commission as a project manager in nuclear engineering services.
- Leading engineering groups performing system tests as a start-up group leader at the Braidwood Nuclear Station.
- Performing technical review of test procedures as a member of the design review group at Braidwood Nuclear Station.
- Performing testing of various plant electro-mechanical systems and instructing systems personnel on inspection procedures and criteria as a system test engineer at the Byron Nuclear Station.

[redacted]

EDUCATION

- Master of Management degree, Finance and M.I.S.,
  J.L. Kellogg Graduate School of Management, Northwestern University
- B.S., Thermo-Mechanical Engineering, University of Illinois at Chicago
- Certificate in business French from the Paris Chamber of Commerce
- Completed Part I of the Professional Engineering Exam, Engineering-in-Training

Fluent in French and Spanish

LAWRENCE M. OLIVA
Arthur Andersen
Principal

Lawrence Oliva has substantial experience in assisting senior management with the analysis and implementation of strategies in a competitive market. He has served clients in infrastructure, energy and regulated industries, law firms and government agencies for over 20 years.

Mr. Oliva is an expert in energy markets, competition and regulatory policy. He has provided public testimony, given numerous speeches and seminars and written extensively on infrastructure and competitive market issues, most recently on electric industry restructuring. His latest article, "The New Information Utilities: How Will the ISO and PX Actually Work," was published as part of Arthur Andersen's "Power Thinking Series."

REPRESENTATIVE ENGAGEMENTS - ENERGY AND ENVIRONMENTAL POLICY ANALYSIS

Mr. Oliva has performed numerous engagements for government clients and industry organizations in energy, environment and housing matters. These have mostly involved commercial strategies for emerging industries, such as recycling and energy recovery from waste, and the impact of new government policies on commercial development.

- He assisted a blue ribbon panel appointed by an Assistant Secretary for the U.S. Department of Energy in evaluating strategic, organizational, market and production planning of the U.S. Uranium Enrichment Enterprise.

- For an electric utility organization he analyzed policy options concerning pricing, marketing strategy and advanced technology selection related to the enrichment of uranium for commercial power plants.

- Mr. Oliva evaluated natural gas price forecasts related to a municipal utilities' concern about electricity generation alternatives to a nuclear power plant, and provided expert testimony regarding the same.

- For the Electric Power Research Institute, he reviewed a commercialization program funded by the utility industry on multi-megawatt fuel cells.

- Mr. Oliva assisted the U.S. Department of Energy in analyzing policy options for regulating electric utilities, including regulating at the regional level and deregulating the generation component of the industry.

- For a federal agency he analyzed the net fuel use effects of cogeneration and examined whether cogeneration could defer future utility coal plants in the United States.

- For a law firm he analyzed the effects of a Special Marketing Program proposed by the Federal Energy Regulatory Commission on interstate gas pipelines.

- For the Edison Electric Institute, he managed a project evaluating regulatory treatment of electric utility fuel adjustment clauses and affiliated transactions on a nationwide, state-by-state basis.

REPRESENTATIVE ENGAGEMENTS - REGULATED INDUSTRY COMPETITION AND BUSINESS STRATEGY

Mr. Oliva has assisted energy utilities in matters concerning emerging competition, innovative regulatory approaches and business strategy. He has worked closely with utility company executives in forecasting the effects of deregulation on key economic parameters including fuel costs, spot energy markets, and competitor response. Also, he has analyzed economic issues related to rate design and filed expert comments with regulators.

- Mr. Oliva consulted to electric utility companies' legal teams in four separate regulatory proceedings involving the prudence of management decisions to complete nuclear power plants. Those proceedings involved the econometric analyses of cost and operational performance of nuclear units in the United States.

- Mr. Oliva provided planning and economic analysis and litigation support to a major electric utility company in a regulatory proceeding concerning the decision to restart construction of a partially completed nuclear power plant.

- He assisted a municipal power agency and a generation/transmission cooperative in analyzing the economic benefits of creating a joint operating agency. The analysis included evaluating savings in reduced generation reserves due to non-coincident peak, energy saving from combined dispatch, and operations savings from eliminating redundant functions. The companies used the analysis to get approval from their respective boards for the venture. In early 1996, the companies announced that they successfully negotiated a joint operating business venture. This is the first business combination of this type in the new era of electric industry restructuring.

- He assisted a investor-owned utility in analyzing a potential acquisition. He assisted the firm in devising a plan for analyzing plant acquisition, assessed the value of the facilities, prepared fuel and energy forecasts used in the financial analysis and performed a screening study that provided results for management decision making and action.

- Mr. Oliva directed an engagement for a local gas distribution company that involved an evaluation of competitive pricing of natural gas sold to California by

producers in Alberta, Canada. The study included an econometric analysis of all natural gas exports from Canada to the United States over a three-year period. This work was done in collaboration with Professor William W. Hogan, who filed testimony covering the study's results, before the California Public Utilities Commission.

- Mr. Oliva directed an engagement for an interstate gas transmission company and analyzed the benefits of a main-line expansion to rate payers. The analysis was used to evaluate approaches to regulated rates for the expansion.

- He directed several assignments for interstate pipeline companies and a local gas distribution company that involved the evaluation of the economic and policy tradeoffs among interstate gas transportation rate making methods, i.e., "rolled-in vs. "incremental" approaches for pipeline expansions. He co-authored comments on the issue with Colin C. Blaydon which were filed at the Federal Energy Regulatory Commission.

- He analyzed the economic benefits of uniform "postage-stamp" rates for natural gas transportation compared to zonal "distance-sensitive" rates, for an interstate pipeline company.

- In two separate litigation support engagements for local telephone exchange carriers, Mr. Oliva studied antitrust issues concerning deregulation of inside wire maintenance and repair. On behalf of counsel, Mr. Oliva supported economic experts in evaluating market power, competition, fraud and damages.

- For a large electric utility, Mr. Oliva directed an engagement that involved litigation support, expert testimony and analysis of economic issues concerning alleged breach of contract between the utility and a geothermal steam supplies. The dispute involved several hundred million dollars of alleged underpayments to geothermal steam suppliers in California.

- For outside counsel to an electric utility, Mr. Oliva directed the research of outside experts in a multi-billion-dollar breach of contract matter concerning the purchase of electric generation energy and capacity. The principle issues included fraud and damages mitigation analyses. The research team included 10 experts and over 30 full-time analysts.

- On behalf of a California natural gas distribution company, he directed a study of whether long-term gas contracts should be priced at a premium above short-term "spot" sales and presented a paper to the California Public Utilities Commission.

- For a law firm he analyzed liabilities and damages in a breach of contract dispute between the builder and an agricultural waste-fueled power plant developer.

- For an electric utility's legal staff, Mr. Oliva analyzed a breach of contract and fraud dispute. The plaintiff was a high-tech mushroom grower in the utility's service area.

- For a law firm representing a landfill operator, he analyzed damages to property values and the economic development potential of a municipality due to contamination of a bedrock aquifer caused by leachate from hazardous waste.

- He directed an engagement on behalf of United Airlines that provided analysis and expert testimony in State Court concerning the damages resulting from a breach of contract. The contract covered responsibilities of two airlines and involved a computer reservations system.

REPRESENTATIVE ENGAGEMENTS - PROJECT FEASIBILITY AND STRATEGY

Mr. Oliva has assisted project developers, commercial clients and government managers in evaluating economic feasibility, planning and design strategies. His academic training in engineering and urban planning, complemented by his consulting experience in economic and business strategy, provide the multi-disciplined perspective required in any major development project.

- Mr. Oliva provided economic and strategic counsel to a development consortium formed to build advanced technology rail transportation in Los Angeles. As a senior team committee member, Mr. Oliva directed economic studies and assisted in the conceptual design of the project, which involved commercial and institutional infrastructure along the rail corridor.

- For a large commercial developer, Mr. Oliva managed a team of analysts charged with identifying a potential toll road project. Under California law AB680, private developers could propose a build-operate-transfer toll road project under a public/private partnership. Mr. Oliva developed the design concept ultimately selected by the State Department of Transportation.

- For a private developer, he evaluated the feasibility of two grain-to-alcohol fuel plants in the United States and Egypt.

- For an independent power plant developer, he analyzed fuel trend issues, especially concerning natural gas supplies to the Northeast.

- He evaluated a hazardous waste facility operator's financial ability to comply with regulatory cleanup requirements.

- He developed and maintained a program and member subscription service to compile, analyze and monitor energy fuel market forecasts for an electric utility organization.

- For a major U.S. chemical company, Mr. Oliva analyzed a venture to produce and market a new synthetic diesel fuel worldwide.

EMPLOYMENT HISTORY AND EDUCATION

Mr. Oliva joined Arthur Andersen & Co. in October 1995. Previously, he was a partner and director of Putnam Hayes & Bartlett, Inc. (PHB), an international consulting firm specializing in economic and management counsel to companies and governments. Prior to joining PHB in 1984, Mr. Oliva was an associate at Resource Planning Associates, Inc., an international consulting firm that focused on strategic planning for commercial and government decision makers. Mr. Oliva began his consulting career in 1974 as a staff engineer for SCS Engineers, Inc.

Mr. Oliva's education includes a B.S. with honors in civil engineering from Southern Methodist University and a M.Arch. in urban design from the Virginia Polytechnic Institute and State University (all but major paper). Mr. Oliva is an associate member of the American Bar Association and a licensed professional engineer. In 1992, he was appointed to a California State Senate Subcommittee on Environmental and Economic Improvement in Los Angeles.

LAWRENCE M. OLIVA REPRESENTATIVE CLIENTS

Southern California Edison Company, Pacific Gas & Electric Company, Northwest Pipeline Corporation, Virginia Natural Gas Compnay, Unicom Corporation, United Power Association, City of Pasadena Water and Power Department, Southern Minnesota Municipal Power Agency, Tucson Electric Power Company, U. S. West, South Central Bell, Great Lakes Gas Transmission Limited Partnership, Philadelphia Electric Company, Gulf States Utilities Company, United Airlines, Dewey Ballantine, Gibson, Dunn & Crutcher, Davis, Graham & Stubbs, Morgan, Lewis & Bockius, Ross, Marsh & Foster, Cadwalader Wickersham & Taft, Hogan & Hartson, Electric Power Research Institute, Edison Electric Institute, U.S. Department of Energy, U.S. E.P.A.

April 15, 1996

Harold A. Valentine

Mr. Valentine has more than twenty-five years experience in public and private sector consulting. He has expertise in management systems, strategic planning, quality management, organizational development, health care issues and performance management. Mr. Valentine's experience includes heading a GAO Issue area and managing the efforts of more than 100 GAO managers and staffers conducting studies related to performance management and measurement.

RELEVANT EXPERIENCE:

Arthur Andersen LLP, Washington, D.C.
Senior Manager, Office of Government Services
Managed engagements for the Nuclear Regulatory Commission, the National Oceanic and Atmospheric Administration, and the Department of Veterans Affairs. For these and other clients his work has focused on issues of quality management, reengineering, privatization, and performance management. Managed a major project for the Department of Commerce to implement a new financial and administrative management system called CAMS. He managed a recently completed study for the VHA which recommends conversion of the VHA to a government corporation. He has also participated in several studies focusing in the area of health care reform. His recent focus for federal government clients has been in the areas of performance management, privatization, reengineering, operations improvement, and change management.

Associate Director
U.S. General Accounting Office
Helped develop and implement a strategic planning process for GAO and its 36 issue areas. Also assisted in the implementation of a total quality management program and in the reengineering of major GAO projects and financial systems. Also, managed a variety of studies which focused on workforce productivity and performance management in the criminal justice environment.

Managed an issue area with over 100 staff years dedicated to conducting a variety of studies on performance issues for the US Congress. These studies related to efficiency, effectiveness, and productivity issues impacting selected federal agencies and departments. Testified before Congressional committees eleven times, summarizing GAO reports and findings. Helped develop GAO's transition series reports which identified major management problems and the need for better internal controls in the Federal Government. Managed several studies concerning performance indicators for debt collection and testified before the Senate Banking Committee on the issue of management and measurement.

Vice President for Strategic Planning
NVR Corporation
Responsible for strategic planning functions for the NVR Company, at that time the largest homebuilding and development company in the nation with over 2,500 employees in nine states. The company had annual revenues of over $1.4 billion. Directed the strategic planning process for four separate subsidiary companies and a mortgage company. Developed format and structure for the holding company's strategic plan and provided facilitation, communications, and coordination in support of the strategic planning process. Also responsible for identifying and recommending process reengineering efforts company-wide.

Principal
Ernst and Young
Conducted studies for the Department of Energy, the Environmental Protection Agency, the Department of Housing and Urban Development, and the Nuclear Regulatory Commission in the areas of planning, performance measurement, process improvement, and systems analysis. Specifically, with the Department of Energy, managed several studies to assist organizational effectiveness and management practices of DOE components. Specifically, evaluated employee relations and morale issues. Also conducted studies focused on performance management.

Associate
Booz-Allen and Hamilton
Managed a study examining the operations and efficiency of two federal court districts in Southwestern Illinois. Recommendations addressed improvements in the day to day operations of these court systems.

Managed several engagements for corporate clients explaining systems impacting their retail operations and profit projections. Worked in the area of customer surveys and satisfaction indices. Was also involved in several studies for international clients in the areas of strategic planning and marketing.

Managed several assignments for the Department of Transportation, focusing on management processes, systems improvement, and continuous improvement.

Managed several studies for the Department of Defense to analyze affirmative action planning conducted in the Army , Navy, and Air Force.

Managed a major training effort for the EPA which involved training over 1500 mid-level and senior managers in performance management, planning, and re-engineering issues.

EDUCATION:

M.P.A., Public Administration, Syracuse University
B.A., Political Science, Georgetown University

Ira Goldstein

Ira Goldstein is the Partner in Charge of the Federal Government Practice of Arthur Andersen's Office of Government Services. He has 24 years experience working with and for government agencies. Mr. Goldstein has led many of Andersen's efforts in Total Quality Management, Business Process Reengineering, Activity Based Costing, benchmarking, independent audit, change management, and training and facilitation. Previously Mr. Goldstein was the Assistant Comptroller General at the U.S. General Accounting Office.

EXPERIENCE

Arthur Andersen LLP

Partner-in-Charge, Federal Government Practice **1991 - Present**

- Provides overall leadership for Arthur Andersen's Federal Industry work. Clients have included most federal agencies, including particularly relevant experience at the U.S. Department of Education, U.S. Department of Treasury, U.S. Geological Survey, and U.S. Department of Defense.

- Partner-in-Charge of Arthur Andersen's service delivery of TQM services for the federal government. Includes administrative responsibility for delivery from any of Arthur Andersen's 324 offices worldwide, using different skills for different agency needs. Achieves this service delivery under a GSA supply schedule arrangement. Responsible for a wide range of services, from customer service consulting to process reengineering, program evaluation, enhanced efficiency and performance measures.

- **U.S. Department of Energy, Richland Operations Office/Hanford Site, Washington State** -- Partner responsible in assisting the Department of Energy's (DOE) Richland Operations Office with the measurement and verification of cost savings related to its Hanford Site activities. This engagement verifies the cost savings for FY 1995 as part of a four-year DOE effort to reduce costs by $2.3 billion and improve efficiency at the former nuclear weapons production site. The cost savings verification is part of a plan issued by DOE officials, regulators and contractors to drive down costs and focus on results at Hanford. Hanford is the largest environmental restoration effort in the nation. The mission of the Richland Operations Office is to clean up the site, provide scientific technological excellence to meet global needs, and partner in the economic diversification of the region. DOE's Hanford Site supports programs in waste management, environmental restoration, science and energy. It has a workforce of approximately 18,000 and an annual budget of about $2 billion.

- **U.S. Department of Energy, Uranium Enrichment Enterprise Options Study** -- Engagement partner to review the planning system used by its $2.5 billion Uranium Enrichment program. This extensive systems-based planning model was used to control production and operations, as well as client relationships. The Andersen Team was asked to validate and analyze its outputs. Analysis involved identifying interfaced

financial impact and evaluating the extent to which the model and program experienced such impact.

- **U.S. Department of Energy, Isotope Production and Development Program** -- Engaged by the Energy Department to perform a major organizational program analysis to develop and produce isotopes for industrial, research, and medical needs. Included clarification of conflicting missions as well as review of costs for support functions, leading to recommendations for organizational restructuring recommendations, and quality improvement as well as ways to achieve goals more effectively and efficiently.

- **U.S. Department of Defense-Defense Financial Accounting Service (DFAS)** Engagement partner to assist with reviewing DFAS' departmental accounting functions. Departmental accounting consists of the rollup and reporting of financial information for the various DoD departments (Army, Navy, Air Force, etc.) The work on this project utilizes parts of the Business Process Reengineering methodology including process mapping, the Global Best Practices Knowledge Base, and Activity Based Costing.

- **U.S. Department of Defense-Defense Financial Accounting Service (DFAS)** At DFAS' request, provided briefing for newly-created DFAS senior educational managers on Arthur Andersen's successful approach and program for career education training.

- **U.S. Department of Defense/OSD** -- Provided financial and cost accounting support for research on the Defense information infrastructure in association with DMRD 918 and 924. As a subcontractor, analyzed and compiled costs of central design and information processing activities, addressing the financial issues involved with governmental budget and cost accounting policies and procedures. Prepared a cost baseline of the current budget to aid management in deciding future action. Assessed Defense capacity ... tracking actual program costs and wrote a report section for decision-making on adoption of enhanced cost tracking system and procedures.

- **U.S. Department of the Army** -- Supervised the provision of financial management services to the Assistant Secretary of the Army, Financial Management and Comptroller (ASA (FM&C), through an analysis of the Conventional Ammunition Working Capital Fund (CAWCF). Directed analysis of the automated management systems and development of alternatives to improve the Fund's accounting and inventory practices to satisfy Congressional concerns

  Work consisted of interviews, site visits and research, including interaction with the Defense Finance and Accounting Service (DFAS), the Armament, Munitions and Chemical Command (AMCCOM), the ASA, FM&C, the Systems Integration and Management Activity (SIMA) and Congressional staff. Analyzed numerous DoD systems, including several DFAS migratory systems, and commercial off-the-shelf software products.

  Directed the analysis of the Fund's structure, business processes and accounting policies. Supervised the identification of several areas requiring improvement

including, revising the inventory valuation policy to conform with Federal Accounting Standards Advisory Board Statement Number 3, revising the Fund's revenue recognition methodology, and revising the Fund's support costs and surcharge policies. Oversaw the identification of issues impacting the Fund's financial management practices.

- **U.S. Department of Education** -- Partner responsible for contract to serve as Department of Education's (ED's) financial advisor. Involved multiple subcontractors performing numerous task orders and using a wide variety of skills. Managed the successful proposal effort and satisfied ED's contractor requirements, which involved knowledge and use of project management tools and significant project management skills. Served as project director for all task-order contracts and responsible for monitoring the budget and adherence to deadlines. In most task orders, coordinated the work of multiple subcontractors, including quality control over deliverables.

- **U.S. Geological Survey (USGS), Washington Administrative Service Center** -- Led project to assist this finance service center in identifying its costs to service outside agency users and construct a cost structure to equitably provide quality financial service to outside agency users at reasonable cost.

U.S. Treasury Department -- Responsible for review of the processes and procedures used in the Financial Management Service in compiling the U.S. Government's 1993 prototype consolidated financial statements. Involved in review of FMS's activities and actions in collecting Federal agency data and consolidating it as well as making recommendations for improved work flow. Analyzed financial management issues in performing this compilation. Helped establish debt collection processes and procedures, supporting the goal to provide debt collection services to federal agencies. Developed and proposed a pilot debt collection program.

U.S. GENERAL ACCOUNTING OFFICE (GAO) **1982 - 1991**

- **Assistant Comptroller General for Operations** -- Overall responsibility for management of GAO operations, including education and training programs; financial management and accounting systems; research and consulting projects; management of government contracts; publishing functions; and other management functions. These included accounting and cost management, budget/resources, staff and organization management, recruitment, ADP/information resources, product communications, and operation enhancements. Developed strategies and set direction for GAO operations, including launching GAO's adoption of agency-wide automated network and management information system. Instrumental in formulating key federal financial legislation leading up to the Chief Financial Officers' Act of 1990.

- **Deputy Director for Operations, Human Resources Division** -- Managed the operations for the GAO programming division having oversight of Federal human resources departments and programs, including Education program,. Provided oversight of reviews of education program administration issues and participated in

numerous reviews of elementary, secondary and post-secondary education programs as well as adult and special education.

- **Director of Quality Assurance** -- Created and managed GAO's Office of Quality Assurance. Duties included establishing agency quality standards and reviewing major reports and other work products to assure adherence to the standards. Established significant agency-wide quality work reforms to improve quality of GAO operations. Created and launched GAO's Training Institute, consolidating education and training programs into a newly targeted, customer-oriented organization.

SOCIAL SECURITY ADMINISTRATION

- **Associate Commissioner of Social Security for Family Assistance (Acting)** -- Managed the $14 billion Aid to Families with Dependent Children and $2 billion Low Income Energy Assistance programs.

- **Director of Policy, Office of Family Assistance** -- Overall responsibility for setting and writing policies and issuing rules for State administration of the Federal government's cash welfare program.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE (HEW)

- **Director, Secretary's Policy Statement Staff** -- Worked with HEW Secretary on policy/program analyses charting national and Department directions in key areas, including education, vocational training, and adult continuing education.

- **Executive Assistant to the Assistance Secretary for Planning and Evaluation** -- Helped formulate HEW program policy and supported research, planning, and evaluation activities.

- **Legislative Coordinator** -- Coordinated development of the Department's yearly legislative program.

HAZELTINE CORPORATION

- **Program Manager** -- Worked with defense program management. Responsible for program and business management within Hazeltine's Infiltration Surveillance Product Line. Responsibilities included large project and contract management in various Department of Defense areas. Extensive use of large-scale project management tools.

PROFESSIONAL AFFILIATIONS

- Principal in the Council on Excellence in Government

- Member of the U.S. Military Controllers from its inception. Frequent speaker at group meetings
- Board Member, National Council for Public-Private Partnership
- Member, Association of Government Accountants
- Vice-President for Professional Development of the Institute of Internal Auditors

EDUCATION

M.B.A. Harvard University
B.S. Electrical Engineering, University of Pennsylvania

DONALD E. BENNETT, JR.

Principal

Don Bennett, a principal with Arthur Andersen's National Utility Consulting Group, has over 24 years of experience working in every aspect of utility finance, including managing both the corporate finance and financial planning functions at The Southern Company. Mr. Bennett managed from its inception The Southern Company's Management Information Reporting System (MIRS) project, an integrated performance management initiative affecting every business function in the company. MIRS is widely regarded as the most ambitious and innovative performance management system in the energy utility industry.

Mr. Bennett's consulting practice is focused generally on management practices and processes leading to improved utility strategy development, performance management, financial management, and related issues. Using a variety of tools and approaches, including activity-based costing and shareholder value-based management, he has assisted utilities on every continent in achieving a transformation to competitive business practices. Mr. Bennett is an industry leader in the development and application of business performance measures and other issues related to performance management with the utility industry. He brings to a client a unique insight based on many years of experience within the industry, as a manager in key functions for an industry-leading utility, as well as consulting experience with many leading utilities.

Mr. Bennett holds a BS degree in industrial management from Georgia Institute of Technology and an MBA with a concentration in finance from the University of North Carolina at Chapel Hill.

RELEVANT EXPERIENCE

- Responsible for the MIRS project, a performance management project developing performance measures, analytical information and decision support tools, including a management accounting system and various types of non-financial and financial information for use throughout The Southern Company. The MIRS Project is bringing about a major change in management attitudes and practices by focusing managers on business results within their functions and relating their own performance to corporate results.

- Responsible for a broad range of financial functions, including analysis and recommendation of capital structure, dividend policy and capital structure. Played a lead role in the analysis of business combinations and other strategic policies and initiatives.

- Authored a briefing paper on the financial impacts of deregulation of the natural gas industry, with a focus on lessons learned for the electric utility industry.

- Developing transfer pricing concepts for the cost of electricity and transportation for use in business unit management at a major North American electric utility.

- Leading a project to develop and implement shareholder value management concepts at a diversified holding company, including its major local gas distribution subsidiary.

- Developed an innovative performance management system for power plant management to simulate competitive pressures on power plant management and develop a business-focused culture throughout the power supply organization. Project included assessment of high-level value drivers and activity-based costing within the power plant and the power supply function.

- Participated in the development of a process costing methodology for large gas utility, to be used to assess value added for various business functions.

- Developed financial performance management system for retail business function of large midwestern electric utility. Project developed business unit profitability measures as well as an analytical methodology to determine shareholder value impact of alternative capital expenditures.

- Performed analysis of the information needs of the competitive electric utility company. Investigated information strategies of companies within and outside of the electric utility industry to develop conclusions and recommendations as part of this EPRI-funded study.

- Performed assessment of industry trends as they pertain to the distribution business strategy for a major electric utility and, for the same company, performed a review of the wholesale business strategy, including a market profile.

- Performed an analysis of the budget and resource allocation process for a major gas distribution utility, provided recommendations for improvement to better align budgeting and resource allocation with attainment of the company's strategic objectives.

- Developed profit center approach, including cost analysis, market profile and business plan, for production service center of an Eastern US utility.

- Performed an analysis of the financial and accounting functions of a major international utility, including a best practices analysis of key financial management functions. Recommended adoption of management practices tailored to the needs of the client company.

- Performed an assessment of the information needs for a small electric utility, based upon changing competitive conditions. Analysis included an assessment of current information requirements as well as an assessment of requirements in the future, based on an assessment of management decision-making in a much more competitive environment.

- Co-authored a white paper on the incorporation of risk factors into the investment hurdle rates for international electric power projects for a major international electric utility.

- Prepared an assessment of the cost information requirements of a large electric utility holding company as the company shifts its focus to competitive business practices. Recommended an activity-based costing solution utilizing off-the-shelf PC software.

- Participating in a transformation project for a small local gas distribution company. Will provide shareholder value and other financial expertise to the project team.

- Analyzed synergies arising from potential merger of two utilities. Developed innovative analysis of Clean Air Allowance trading issues.

- Developed and delivered seminar on strategic issues with respect to privatization of a national utility industry. Seminars focused on issues surrounding management in increasingly competitive markets.

- Performed in-depth analysis of a very successful executive management information system for a major national utility. Wrote case study as result of analysis.

- Developing valuation of merchandising and billing and collection as a case study to demonstrate shareholder value analytical techniques for a major gas distributor.

- Providing advice on implementation of shareholder value management concepts to a major electric holding company.

REPRESENTATIVE CLIENTS

- British Columbia Hydro and Power Company
- Brooklyn Union Gas Company
- Centerior Energy Company
- Central and South West Corporation
- CMS Energy Corporation
- Consumers Gas Company
- Electric Power Research Institute (EPRI)
- Entergy
- Florida Power Corporation
- Louisville Gas and Electric Company
- Northern Indiana Public Service Company
- Potomac Electric Power Company
- Southern California Gas Company
- The Southern Company
  - Alabama Power Company
  - Georgia Power Company
  - Gulf Power Company
  - Mississippi Power Company
  - Savannah Electric and Power Company
  - Southern Company Services
  - Southern Electric International
- United Cities Gas Company
- United Illuminating Company
- WICOR
- Wisconsin Electric Power Company
- Wisconsin Public Service Company
- Yankee Energy
- China Light & Power (Hong Kong)
- ESKOM (South Africa)
- Slovakian Electric Power Company (SEP)
- Turkish Electric Authority (TEK)

Kathryn M. Kelly

Kathryn Kelly recently joined Arthur Andersen's Office of Government Services as a senior consultant. Ms. Kelly has six years experience leading teams in analyzing and improving the operations, performance measurement systems, organization, policies, and processes for a variety of government organizations.

RELEVANT EXPERIENCE:

Arthur Andersen LLP, Washington, D.C.
Senior Consultant, Office of Government Services

- **Department of Energy** - Ms. Kelly has participated in two engagements for this major client. In an ongoing engagement, she is assisting DOE in integrating the cultural and strategic changes necessary to transition to a new type of management contract for the multi-billion dollar Hanford Site. This transition requires a major cultural and organizational shift. Ms. Kelly is mapping the steps to take in the transition, identifying strategic integration issues, and assisting in developing performance measures and building an internal controls system to ensure the transition is on-track.

  In a prior engagement, Ms. Kelly has assisted DOE in developing an integrated performance measurement system for the Hanford site to ensure that their site management contract and performance measures are aligned with the Hanford mission and strategic goals.

- **U.S. Marshals Service** - Ms Kelly has played a key role in this ongoing engagement to improve the quality of the Marshals Service's Seized Assets Division. Ms. Kelly: analyzed and mapped the seizure, forfeiture, and property management processes at several district offices; interviewed more than 30 Justice Department officials to obtain a clear idea of the processes and problems of seized asset management; and evaluated the control systems in place.

U.S. General Accounting Office
Senior Policy Analyst

- **Federal Supply Service** - Ms. Kelly led and conducted an organizational analysis of the Federal Supply Service, an agency that contracts for over $2 billion in goods and services for the federal government. Ms. Kelly analyzed alignment of operational goals, performance measures and incentive systems and discovered misalignments that led the agency to award over $1 billion in contracts to vendors with histories of poor performance. Ms. Kelly developed recommendations and authored a report of her results

Kathryn M. Kelly (Con't)

- **Governmentwide** - Designed and managed a study of excess personal property management involving multiple agencies with widely different information systems. The engagement included legislative analysis, process mapping, and modeling supply and demand flows for over $2.5 billion in excess property inventory.

- **General Accounting Office** - As part of a Total Quality Management team , Ms. Kelly surveyed staff to identify needs for technical support, assessed available support and implemented training networks to ensure that staff were skilled in efficient data analysis and presentation techniques. In commenting on the team's results, top management wrote that the team's work gave them a strategic "blueprint for action" to improve GAO's technical capabilities.

- **General Services Administration** - Ms. Kelly managed a review of the Office of Finance to determine their effectiveness and efficiency in making and collecting millions in damage claims. The engagement included management interviews, systems flow analysis, process analysis and an internal controls assessment. This project caused the agency to streamline their claims processes and establish an integrated information system.

- **Military Academy** - Ms. Kelly assisted in assessing the quality of the officers produced by the Military Academy. This year-long study involved interviews with top brass, analysis of cost data and review of historical reports. The conclusions of this study were incorporated into testimony before the Senate Armed Services Committee.

- **Postal Service** - Ms. Kelly conducted an analysis of the costs and benefits of the Postal Service's sponsorship of the Olympic Games. The review included both qualitative and quantitative factors and included interviews, analysis of sponsorship materials and a compliation of revenues and costs.

EDUCATION:

M.B.A., Management, Stern School of Business, New York University
B.A., Political Science, Vassar College

Veronica R. Gilbert

Ms. Gilbert is a senior consultant with Arthur Andersen's Office of Government Services. Her expertise is in program assessment, organizational and process analysis, and strategic management. She also has international work experience, mainly in Latin America, and is fluent in Spanish.

ARTHUR ANDERSEN EXPERIENCE

Administrative Office of U.S. Courts (AOUSC) -- Financial Training Needs Assessment

Ms. Gilbert is presently on a team which is conducting financial training needs assessment for the AOUSC. The assessment covers all Circuits, District and Bankruptcy Courts, and Probation and Pre-trial Services. It entails interviewing Federal Court personnel, including judicial officers and court unit executives, across the country involved in finance, budget and accounting functions. Additionally, for this project Ms. Gilbert assists with the facilitation of focus groups and nominal groups designed to elicit maximum information and insight from court personnel. The outputs of the project are a roster of competencies; a curricula for financial training for the next 3-5 years; and a plan for implementation of the curricula.

U.S. Marshals Service -- Seized Assets Division Quality Management Program

Ms. Gilbert is assisting with the design and implementation of a quality management program for the Seized Assets Division for the USMS. In addition to conducting research and analysis on major program areas, Ms. Gilbert provides facilitation assistance for Quality Management Steering Committee meetings.

Defense Finance And Accounting Service (DFAS) -- Study of Departmental Accounting and Cash Accountability

Ms. Gilbert worked on a project to assist with reengineering DFAS' departmental accounting and cash accountability functions. Departmental accounting consists of the rollup and reporting of financial information for the various DoD departments (Army, Navy, Air Force, etc.) Cash accountability is the consolidated reconciliation and reporting of cash data to Treasury. The work on this project utilized parts of our Business Process Reengineering methodology including process mapping, the Global Best Practices Knowledge Base, and Activity Based Costing.

Federal Aviation Administration (FAA)

Ms. Gilbert worked on this Arthur Andersen engagement to assess and propose cost accounting systems and billing and collection systems in support of FAA user fees. Ms. Gilbert was responsible for estimating the operating and staffing requirements to operate the billing and collection systems. This task involved review of procedures, obtaining cost estimates on training and temporary/contracted personnel, consulting with FAA personnel on new processes and projected staffing, and obtaining billing and collection services information from banks. For the cost accounting component of the project, Ms. Gilbert interviewed senior managers and program experts at the FAA to determine their programmatic cost accounting needs.

Department of Transportation (DOT)

Ms. Gilbert worked on this Arthur Andersen engagement to review the non-technical, non-military training program. This review considered many aspects of DOT training including training policy, methods of procuring training, cost of training, and training evaluation. Ms. Gilbert assisted in developing the recommendations for improving the non-technical, non-military training.

Defense Industrial Supply Center (DISC)

For this engagement at DISC, which is a high velocity purchaser and supplier of industrial materials needed by the military for weapon and non-weapon systems, Ms. Gilbert and the Arthur Andersen team helped analyze distribution systems that could potentially provide more efficient deliveries to DISC customers. Additionally, she assisted with developing recommendations and methodologies for DISC to improve its services to military customers.

Prior coming to Arthur Andersen, Ms. Gilbert worked as policy analyst on a **US Agency for International Development** project, performing research and analysis on the strategic management of policy implementation, including macroeconomic, environmental and governance policies, in developing countries. Additionally, Ms. Gilbert prepared budgets and recruited teams for project assignments in Latin America and Africa.

EDUCATION

M.A. Yale University
B.A. Stanford University
[redacted] Universidad de Salamanca, Spain

NUCLEAR REGULATORY COMMISSION

PERFORMANCE INDICATORS FOR WATCH LIST PLANTS

August 20, 1996

ARTHUR ANDERSEN

STATEMENT OF WORK

Perform a study for the NRC leading to the development of improved indicators that can provide a more objective basis for judging whether a plant should be placed or deleted from the Watch List. The study involves four components:

- examination of characteristics and attributes of past problem plants and those associated with good performers
- identification of objective and timely indicators which relate to those characteristics

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STATEMENT OF WORK (cont.)

- correlation of indicators to historic performance trends
- definition of the relationship between the resulting indicators and risk.

Arthur Andersen will complete components 1 and 2 and prepare an overall report integrating the results of all four components.

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ARTHUR ANDERSEN WORLDWIDE

We deliver "Real World" Solutions to Improve Performance!

The Andersen Worldwide Organization comprised of our two strategic business units, Arthur Andersen and Andersen Consulting, is one of the world's leading providers of professional services. Our "one-firm" network of 80,000 professionals in 72 countries provides you:

- Access to information resources and professional expertise throughout a worldwide network.
- Integrated knowledge of specific industries, business functions, business process reengineering, systems integration and other problem-solving methodologies.
- The expertise of the Office of Government Services, organized to exclusively serve the Federal government.

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ARTHUR ANDERSEN SELECTED EXPERIENCE IN THE ENERGY FIELD

- **NRC (OIG)** - Assistance in developing strategic plan and performance indicators

- **DOE (Richland Operations Office)** - verification and measurement of cost savings related to Hanford Site Activities

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ARTHUR ANDERSEN EXPERIENCE (cont.)

- **DOE (Isotope Production and Development)** - Clarify program mission and strategy. Perform organization review and analysis
- **DOE (Uranium Enrichment Enterprise)** - Assist management with identifying cost reduction opportunities
- **DOE (INEL)** - Analyze performance incentives and performance indicators
- **British Energy (Nuclear/Electric)** - Assist in business planning and valuations. Develop service specifications, grouping by category and the development of performance criteria.

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ARTHUR ANDERSEN SELECTED EXPERIENCE:PERFORMANCE MANAGEMENT/MEASUREMENT

- **GSA** - Assist in benchmarking, best practices, and performance measurement
- **GAO** - Assist in process reengineering, performance measurement, and best practices
- **Defense Industrial Supply Center (DISC)** - Assist in business process reengineering, benchmarking, performance metrics for DoD supply chain

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ARTHUR ANDERSEN SELECTED EXPERIENCE:PERFORMANCE MANAGEMENT/MEASUREMENT (cont.)

- **DOT** - Analyze training operations and benchmark commercial best practices
- **Defense Finance and Accounting Service (DFAS)** - Analyze performance measurement implications of consolidating service accounting systems

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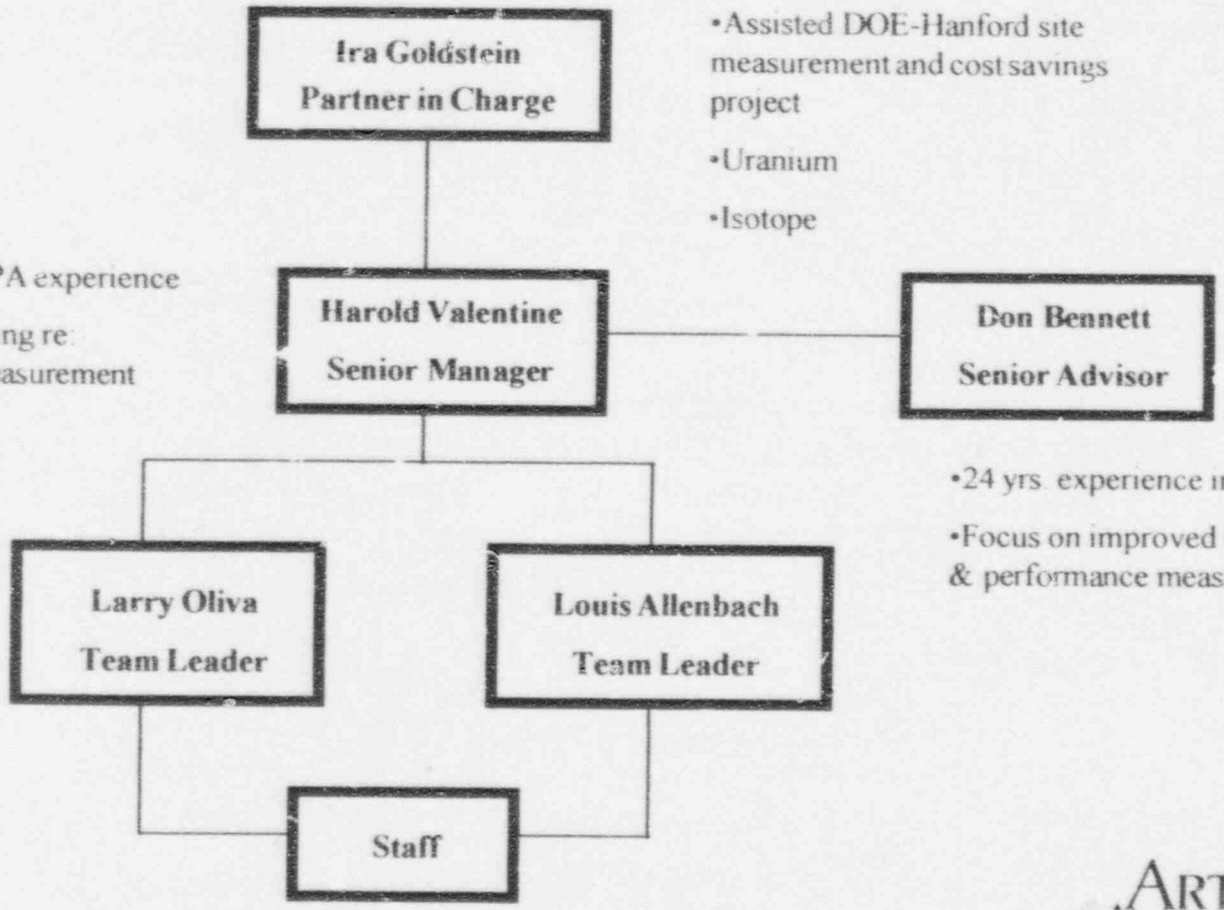
ENGAGEMENT TEAM PROPOSED



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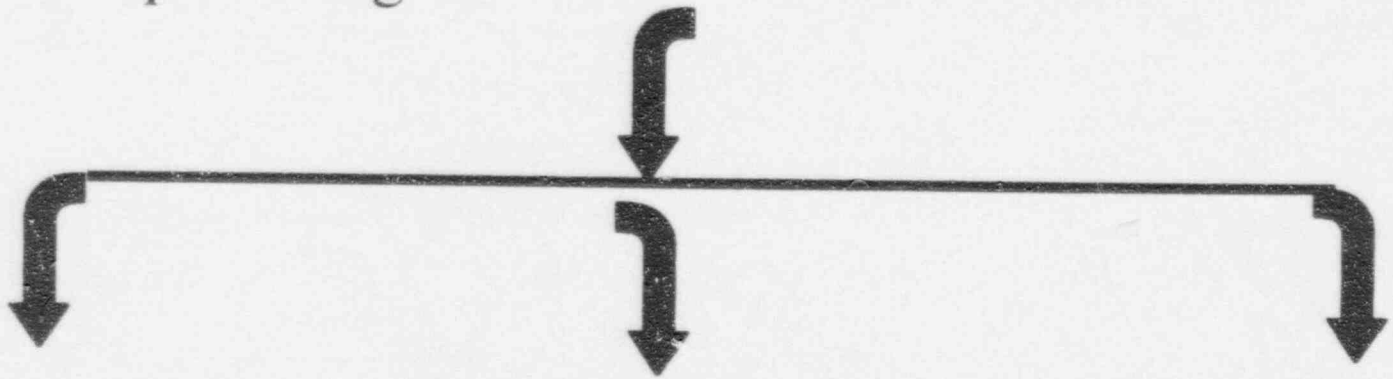
PERFORMANCE MEASUREMENT- SOME FUNDAMENTALS

Performance Measure

- a quantification of how well activities within a process or the outputs of a process achieve a specified goal



Quality based measures - examine how well products or services meet customer needs

Cost based measures - address the financial side of performance

Time based measures - focus on speed and responsiveness

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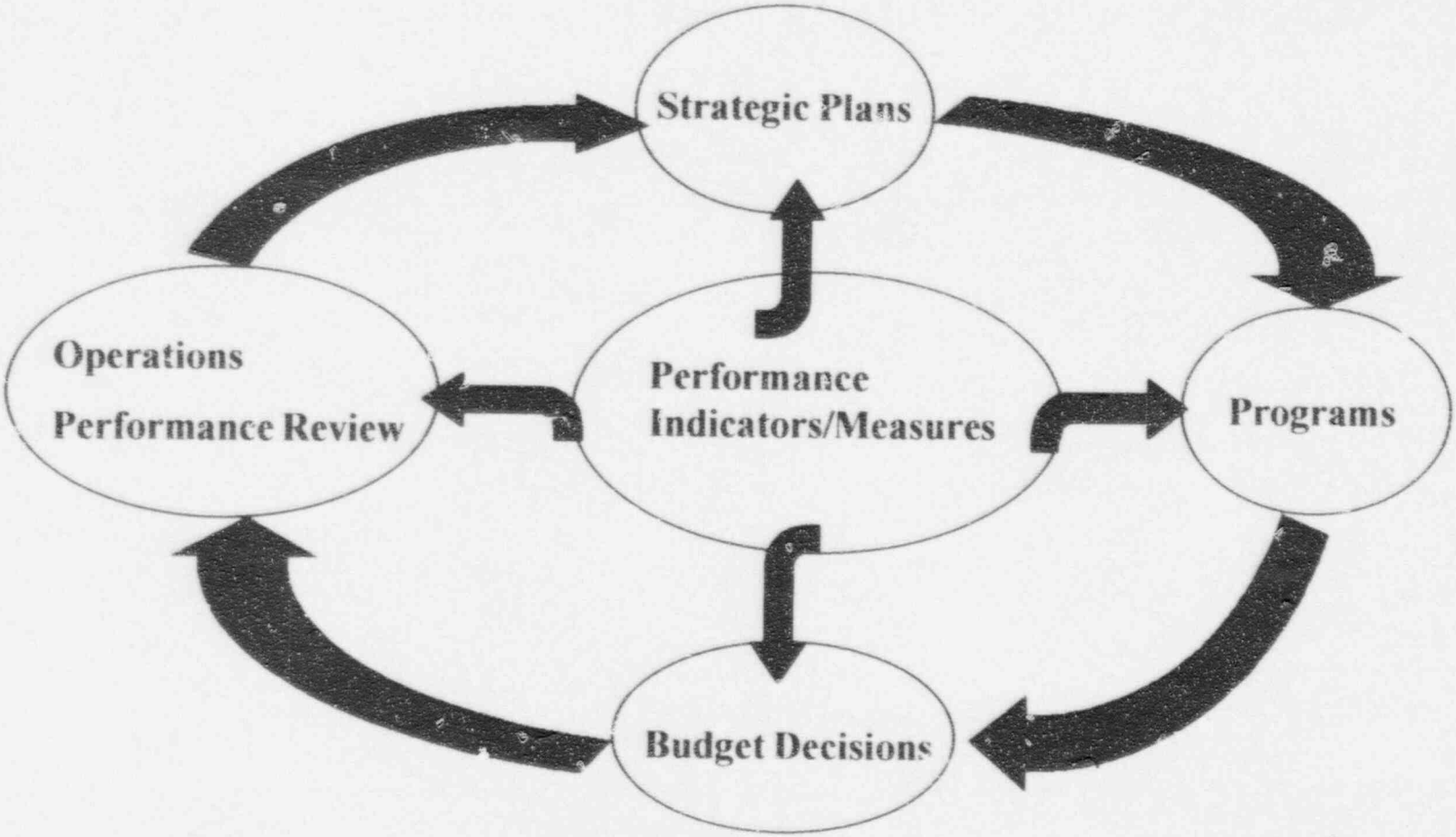
PERFORMANCE MEASUREMENT: STRATEGIC MANAGEMENT MODEL



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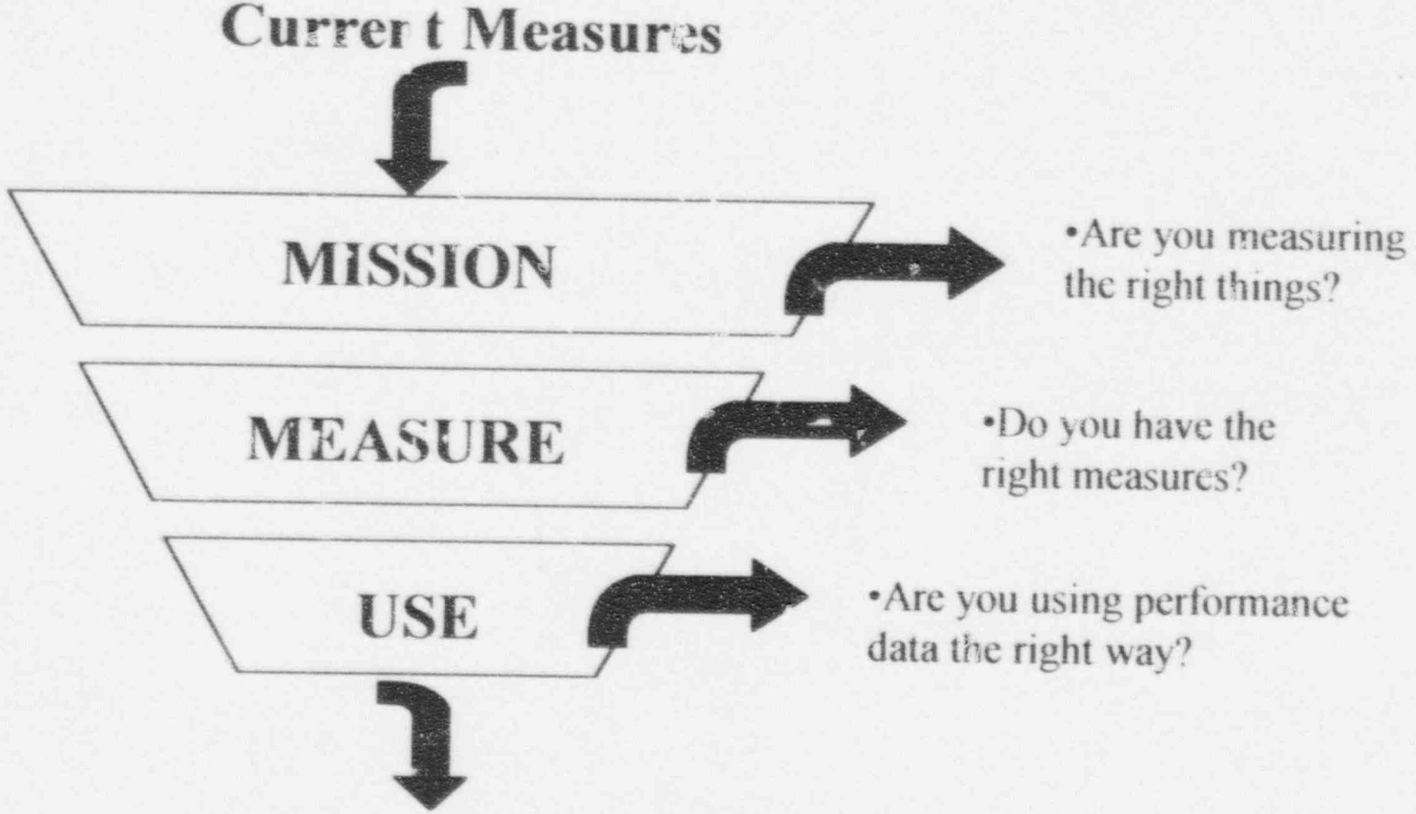
PERFORMANCE MEASUREMENT EVALUATION MODEL



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EFFECTIVE PERFORMANCE MEASURE INDICATORS

- Focus efforts and provide direction
- Monitor progress
- Benchmark against others
- Stimulate change and continuous improvement

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EARLY WARNING SIGNS

- Measures do not tie to outcomes
- Measures do not reflect satisfaction of customer needs
- Measures of not capture process improvements
- Measures are expressed as absolute numbers
- Measures are limited to available data

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PERFORMANCE MEASUREMENT: EFFECTIVENESS CRITERIA

	Equipment Effectiveness	Process Effectiveness	Leadership Effectiveness
Stage 1	Reactive	Multiple Approaches	Individualistic
Stage 2	Time/Pattern Based	One Standard	Leader Centered
Stage 3	System Optimization	Best Practices	Distinctive Leadership
Stage 4	Redesign out failures	Quality redesign	Self-directed

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THE ARTHUR ANDERSEN ADVANTAGE

- Engagement Team Proposed
- Best Practices Data Base
- Relevant Experience
- Committment to Client Satisfaction .
- Track Record of Performance

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SELECTED RELEVANT EXPERIENCE

APPENDIX A PROJECT SUMMARIES

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PROJECT SUMMARIES

Program Evaluation, Management, and Analysis

Internal Revenue Service

The Internal Revenue Service (IRS) initiated a comprehensive reengineering effort within its Chief Management and Administration area. Arthur Andersen was retained to facilitate this project in the functional areas of Managing Human Resources, Real Estate Planning and Management, and Corporate Education.

The approach involved supporting 11 project teams located in cities across the country by providing a reengineering methodology and technical expertise to each team. It also provided integration and coordination support to the overall National Office for initiative management. The Andersen role in this project included:

- Supporting the identification and selection of candidate processes for reengineering and team staffing as well as advising in the development of project charters
- Coaching IRS personnel in reengineering planning, staffing, and management and coordination functions
- Developing and conducting training and workshop sessions for project team leaders, team members and regional IRS management
- Facilitating the initiative's communication planning and change management efforts
- Supporting all phases for reengineering projects including current process assessment, new process design, performance measurement development, and prototyping the pilot design and rollout

This successful reengineering process was due to effective training, clear communication planning, efficient change management and thorough support of all reengineering phases.

Department of Energy/Isotope Production and Development

The Department of Energy's (DOE) Isotope Production and Development Program (IPDP) was faced with high product development costs and expenditures which outpaced cash receipts. DOE asked Arthur Andersen to perform a significant organizational analysis to help IPDP become efficient and sustainable. Specific tasks included:

- Interviewing IPDP and DOE personnel for financial and operating information
- Conducting process analysis and organizational structure reengineering
- Determining benchmarking standards
- Conducting "Best Practices" research
- Reviewing the program's financial experience and status
- Analyzing market position, costs, pricing policies and profitability
- Reviewing its operation and business practices to provide a basis for recommendations

After reviewing financial and operational information, the project team made recommendations to clarify the program's mission and strategy, how to strengthen the organizational structure, how to cut costs and establish market pricing and how the program could move towards "Best Practices." Recommendations related to financial activities were: to reduce and stabilize overhead costs, reduce costs for unprofitable capacity, manage profitability as opposed to cost and establish business-oriented financial reporting.

Department of Energy/Richland Operations Office

The Department of Energy (DOE) Richland Operations Office is responsible for the management of the 560 mile Hanford Site near Richland in southeastern Washington State. Plutonium for the nation's defense program was produced at this site for more than 40 years. As a result, many areas within the site's boundaries are contaminated by chemical or radioactive waste. Today, Hanford is the largest environmental restoration effort in the nation. Arthur Andersen has been engaged by DOE's Richland Operations Office to assist with the measurement and verification of costs savings related to its Hanford Site activities. Specific tasks include:

- Establishing cost savings measurement and definitions
- Reviewing the FY95 baseline for identification and documentation of cost savings
- Assisting in identifying, compiling and reporting cost savings realized in FY95 and providing the model for this type of work in the future
- Recommending a process framework to identify, collect, compile and report cost savings in FY96 using lessons learned from the FY95 cost savings review

The detailed cost saving review identified an approximate $80 million reduction in reported savings by the site in 1995 which was addressed when DOE-Richland did a comprehensive year-end savings review. Additionally, this effort will reduce the incentive fee to the contractor by over $10 million. As a result of this cost savings review, DOE Headquarters is encouraging other DOE sites to conduct similar cost saving reviews with AA.

General Services Administration

The General Services Administration (GSA) engaged Arthur Andersen as a consultant to their business line analysis. The scope of this engagement is to develop an alternative decision analysis model which considers options such as outsourcing and privatization that can be applied to the various business lines. Andersen is providing training and consultation to GSA in their approach to restructure the Agency, as well as facilitating the process to obtain external private industry measures to help perform benchmark comparisons. Specific engagement tasks include:

- Facilitate the gathering and analysis of costing data to evaluate the costs and benefits of various alternatives
- Prepare a task milestone calendar
- Develop training on privatization and outsourcing
- Establish benchmarks with private industry
- Develop and direct focus groups to insure that strategic issues are addressed

The project has been successful in helping GSA understand how to deliver service to its customers at the lowest cost to taxpayers. Five complex business lines have been analyzed to date and numerous presentations have been made to the Office of Management and Budget and various congressional oversight committees. Andersen's objectivity and independence have been important to GSA regarding the integrity of this restructuring process with the oversight groups.

General Accounting Office

In recent years the General Accounting Office (GAO) has been committed to Total Quality Management Principles and to redesigning its work processes and programs to reflect these principles. A major component of this effort is to evaluate and reengineer its polices and processes in order to shorten the time it takes to complete work, to streamline its processes and to increase efficiency of staff utilization. Arthur Andersen is helping the GAO achieve its evaluation and reengineering objectives. Specific tasks include:

- Assisting with implementing reforms in the job management process
- Quantifying expected staff time and savings
- Identifying additional opportunities for procedure improvement
- Developing a plan to foster commitment to planned changes in policies and practices
- Conducting an activity analysis that includes an assessment of the demands placed on GAO personnel

Producing a report on the best practices employed in the areas relevant to GAO's internal process improvement program

Federal Aviation Administration

For the Federal Aviation Administration (FAA), the Andersen Team was engaged to develop a financial plan to restructure the air traffic control system into a government corporation, Air Traffic Services Corporation (ATS). To develop this plan, the Andersen Team worked closely with the FAA Corporation Assessment Task Force. The ultimate goal was to create a self-sustaining entity, no longer dependent on government appropriations. Specific tasks included:

- Participating in organizational structure deliberations
- Developing a business plan and evaluating and making recommendations about key assumptions underlying the projected financial statements for an ATS Corporation
- The analysis of the projected financial statements included how the FAA budget costs are converted to corporate expenses and recorded on corporate financial statements; the analysis of the construction of financial projections to include key forecast variables; capital expenditure assumptions and presentations; underlying financing assumptions; and transition issues.

Department of Commerce/Bureau of Census

Arthur Andersen is supporting the Department of Commerce--Bureau of Census with its conversion to the Core Financial System (CFS) by assisting with the review and analysis of its "Interfund" Overhead Cost Distribution process. The Andersen approach includes:

- Determining the Auditor's and Census Personnel's concerns/problems with the current process
- Reviewing policies and procedures and recommending alternatives
- Identifying significant risks of implementing recommended alternatives
- Preparing initial draft reports and reviewing with Bureau personnel designated by the Bureau's Comptroller
- Finalizing the report

Based on this evaluation, Arthur Andersen is recommending changes and enhancements that would improve, streamline and simplify the process in preparation for the conversion to the CFS.

Financial Management, Internal Controls and Systems Design

Department of Defense/Defense Finance and Accounting Service

Arthur Andersen was awarded a contract with the Department of Defense (DoD)/ Defense Finance and Accounting Service (DFAS) to assist with reviewing their departmental accounting functions. Departmental accounting consists of the rollup and reporting of financial information for the various DoD departments (Army, Navy, Air Force, etc.) The work on this project will utilize parts of our Business Process Reengineering methodology including process mapping, the Global Best Practices Knowledge Base, and Activity Based Costing. DFAS' objectives are to:

- Determine the most efficient manner of performing these functions
- Provide for consolidated financial statements
- Analyze whether or not to consolidate the locations performing the functions

Currently, the Andersen Team has traveled to DFAS centers in Denver, CO, Kansas City, KS, Columbus, OH, Cleveland, OH and Indianapolis, IN to facilitate process groups with subject matter experts; documenting process maps for the "as is" business procesesses; collecting cost and workload data which will be incorporated into the "as is" in the final report. The next step will be to review and analyze the information to prepare a report on the "to be" or the vision for the future.