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DEPARTMENT OF  
FINANCE

CITY OF SACRAMENTO  
CALIFORNIA

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September 4, 1987.

916-449-5736

Budget & Finance Committee  
Sacramento, California

BETTY MASUOKA  
DIRECTOR OF  
FINANCE

Honorable Members in Session:

SUBJECT: UTILITY CUSTOMER INFORMATION SYSTEM

SUMMARY

This report requests that the Budget and Finance Committee recommend the City Council:

1. Adopt the attached resolution amending the FY 1987/88 CIP budget for the Department of Public Works by appropriating \$976,100 to the Utility Customer Information System (UCIS) capital improvement budget and amending the FY 1987/88 operating budget for the department of Public Works by appropriating \$15,000 for travel expenses from the City utility service enterprise funds.
2. Adopt the attached resolution authorizing the City Manager to execute the attached professional services agreement with Actron Information Data Systems, Inc. (ACTRON) to provide a utility customer service information system (UCIS).
3. Adopt the attached resolution authorizing the City Manager to execute the attached agreement with Software AG to provide a data base management system (DBMS) for the City's IBM 4381 mainframe computer.

BACKGROUND

The City is at a critical decision point regarding its present utility billing system because of the planned migration of all automated systems from the present Univac computer to the IBM 4381, which should occur prior to November 1, 1988.

On March 17, 1987 staff presented a report to the City Council which discusses the deficiencies of the present utility billing system and the alternatives available for migration of the City's utility service and billing process. The following is a summary of the information contained in the report.

The major deficiencies noted include:

1. Substantial effort is required to modify the system for changing requirements such as billing for new services, due to inflexible system design and architecture.
2. Considerable manual processing of customer information, service charges and payments exists.
3. No on-line historical billing and service information for management and customer service representatives exists.
4. User unfriendliness - too much use of difficult codes on screens and microfiche.

The result of these deficiencies is the inability to respond to customer inquiries on a timely and accurate basis. For example, to provide a customer with information about the service rendered at a particular address requires referencing the on-line computer files, microfiche, and manual records maintained by each of the utilities. This makes it impossible to respond immediately to the customer. The customer service representatives must conduct the research and either call the customer back or send a letter to provide the requested information. If a customer disputes the City's response, a second contact is necessary. The inefficiency of the present system frustrates the customers and the staff. Moreover, it contributes to the workload of the customer service representatives, which results in increased costs because additional staff is required.

The City is faced with the following alternatives for its utility billing system.

Alternative 1 Convert the present utility billing system from the Univac computer to the IBM 4381 without adding the essential customer information enhancements.

Alternative 2 Convert the present utility billing system from the Univac computer to the IBM 4381 and add the essential customer information enhancement (internal design and development).

Alternative 3 Obtain a packaged UCIS which includes utility billing that is designed for the IBM 4381.

Alternative 1 was estimated to cost approximately \$208,000. This was composed of \$158,000 in Data Management Department staff and processing costs for the conversion effort plus \$50,000 for additional data storage. The \$208,000 investment would not result in improved service and would not take advantage of the strengths of the IBM 4381 processing environment.

Alternative 2 (internal design and development) was estimated to cost between \$699,000 and \$825,000. Based upon current staffing authorizations, this alternative would require several years to implement. A breakdown of the estimated costs is as follows:

<u>Task</u>	<u>City Staff</u>	<u>Equipment</u>
Initial conversion	\$158,000 to \$158,000	\$ -0-
Modify to include customer information	366,000 to 467,000	-0-
Add customer history	<u>125,000</u> to <u>150,000</u> <u>\$649,000</u> to <u>\$775,000</u>	<u>50,000</u> <u>\$50,000</u>

Alternative 3 (packaged UCIS) was estimated to cost between \$693,000 and \$997,000. A breakdown of the estimated costs is as follows:

<u>Task</u>	<u>City Staff</u>	<u>Outside Vendors</u>	<u>Equipment</u>
Packaged software acquisition & modification	\$102,500 to \$119,000	\$478,000 to \$753,000	\$ -0-
Add customer history	<u>62,500</u> to <u>75,000</u> <u>\$165,000</u> to <u>\$194,000</u>	<u>-0-</u> <u>\$478,000</u> to <u>\$753,000</u>	<u>50,000</u> <u>\$50,000</u>

The March 17, 1987 report indicated that staff would issue a request for proposals (RFP) to determine the actual cost of a packaged UCIS prior to recommending a specific alternative to the City Council.

#### UCIS PROJECT RFP PROCESS

On April 17, 1987 the City released a RFP for a UCIS to twenty potential consultants. Subsequent to the release, several other potential consultants requested and received copies of the RFP. A non-mandatory meeting was held on May 8, 1987 with interested potential consultants prior to the submission deadline in order to fully clarify the City's requirements.

The City received seven UCIS proposals on May 29, 1987. Based upon confidential evaluation criteria filed with the City Manager prior to the UCIS proposal submission deadline date, a screening and evaluation committee (consisting of staff from the Department of Data Management, the Department of Public Works and the Department of Finance) selected proposals from Actron Data Information Systems Inc., (ACTRON), Computer Systems and Applications of California, and UIS/Digital Systems Inc., for in-depth review. These companies were invited to make an on-site demonstration of their UCIS.

Subsequent to these demonstrations, the screening and evaluation committee thoroughly analyzed and investigated each proposal. This process included checking each company's references, analysis of the professional staffing and financial condition of each company, a thorough review of the specifics of each company's proposal, and an on-site due diligence verification of ACTRON's UCIS. The on-site due diligence verification, conducted totally at City expense, was necessary because their UCIS is a relatively new offering. The UCIS's of the other two companies have been utilized by utility companies for years and have demonstrated capabilities. Following the analyses, the screening and evaluation committee again invited each company to a final conference to discuss the proposals.

Each of the three companies has a viable UCIS to offer the City. A detailed cost comparison is difficult because of the different approaches used by the companies for system development. Each company starts with a core system and then enhances or modifies the core to a specific utility's needs.

The screening and evaluation committee determined that the system proposed by ACTRON most closely meets the City's present and anticipated needs because:

1. ACTRON's system, the newest of the three, has the most extensive capabilities and consequently requires fewer modifications to the core system necessary to meet the City's specific and unique needs. The result is a more proven system.
2. ACTRON's system architecture is "state of the art" and therefore should remain in the technology mainstream during the ten or more years average life of the system.
3. ACTRON's system provides faster and easier access of customer information to customer service staff.
4. ACTRON offers the best opportunity to meet the City's November 1, 1988 installation date deadline because of fewer modifications; therefore less testing and verification is required.
5. The system has the capacity to readily add or delete charges for additional services (neighborhood cleanup, street lighting, etc.).

#### DISCUSSION

Alternative 1 is not considered a viable alternative. The lack of on-line customer history and informational data in addition to cumbersome manual processes severely limit staff's ability to adequately respond to customer inquiries. The present system will not accommodate charges for additional services. Moreover, the Department of Data Management anticipates that a new system will be required within a few years because the architecture of the present system will become outdated.

KMG Main Hurdman issued a report (Exhibit I) dated February 13, 1987 which discusses the merits of Alternatives 2 and 3. The following summarizes the advantages and disadvantages of Alternatives 2 and 3 as specified in the report.

### Alternative 2

#### Advantages

The functions of the current system do work and users are familiar with the system procedures. Users will not have to learn new methods for billing and accounts receivable functions.

The converted and enhanced system will fulfill the City's UCIS requirements.

#### Disadvantages

Based on the current budget, the Department of Data Management does not have sufficient personnel resources to develop the UCIS system. Because of the Sperry to IBM system conversion activities for other City computer applications, new development work for this project could not even begin until April of 1988.

Data Management personnel will have to develop many UCIS functions from scratch that would already be found in a packaged software solution.

This strategy will take longer to implement than the option of acquiring and implementing a new software package.

Benefits to be realized from a UCIS will be delayed because of the longer implementation schedule.

The current utility billing system is based on an outdated batch-oriented design architecture. Converting, enhancing, and modifying an already outdated system may present future problems and/or user dissatisfaction.

Converting the base utility billing interactive programs to an IBM mainframe on-line environment is less desirable than implementing packaged UCIS software that was designed for use in the IBM hardware and teleprocessing software environment.

More time will be required of City personnel to assist Data Management programmers and analysts in defining and validating requirements, reviewing project progress, and participating in system tests. This will occur because many functions that are preprogrammed in packaged software will have to be developed from scratch.

Alternative 3

## Advantages

A packaged software solution will reflect current, state-of-the-art system design techniques.

Acquiring packaged software provides a proven solution with the benefit of many worker-years of research, development, and UCIS experience already invested in the software package. City Data Management staff will not have to "re-invent the wheel."

A customized, packaged software system will fulfill the City's UCIS requirements.

No major commitment of City Data Management personnel resources will be necessary.

Benefits will be realized sooner with this solution because of the shorter implementation schedule.

The software vendor and/or implementation support consultants can be contractually held accountable for delivering a fully-functioning system that meets the City's requirements.

A packaged software system will be designed for use in the IBM hardware and teleprocessing software environment.

Less time will be required of City user personnel in this option. This will occur because many functions are pre-programmed in a packaged software solution that will not have to be defined, developed, and tested.

## Disadvantages

Additional training will be required of users and system support personnel for new utility billing software procedures.

The packaged software system is the most expensive alternative.

The KMG Main Hurdman report concluded with the recommendation that the City purchase a packaged UCIS (Alternative 3) for the following reasons.

The advantages of this alternative significantly exceed those associated with converting, modifying, and enhancing the existing utility billing system.

The benefits defined will be realized much sooner with this alternative because of the shorter implementation schedule. Data Management is currently unable to fulfill the UCIS requirements. Researching customer complaints, managing work and repair orders, and gathering management information with the current manual methods will become increasingly more difficult as Sacramento's utility customer base grows.

Implementing a new UCIS within the next 18 months will inhibit the proliferation of nonintegrated independent microcomputer systems. Some special purpose applications such as meter reading data collection and waste collection route modeling are best suited for microcomputers. However, most other applications would best be served by a department-wide integrated UCIS software package.

No major commitment will be required of City Data Management personnel resources. The UCIS implementation will be a major effort to support. Using temporary outside resources eliminates the potential need to hire permanent Data Management employees.

The statements favoring Alternative 3 remain valid. This is the only alternative that will provide the City with the ability to adequately serve its utility customers in a timely manner. The attached professional services agreement with ACTRON projects a completion date of November 1, 1988.

#### DATA BASE MANAGEMENT SYSTEM (DBMS)

The ACTRON UCIS operates on a DBMS. Currently, the City does not have a DBMS installed on the IBM 4381. In its proposal, ACTRON proposed to convert its present UCIS to a virtual storage access method (VSAM) at an estimated cost of \$150,000. The RFP stated that all existing systems would be implemented in a non-DBMS but that if it were determined that a proposed system operated better in a DBMS environment, then a DBMS environment system would be considered.

One main drawback to converting ACTRON's DBMS UCIS to a VSAM UCIS is that the City would be the development site for the project. Development site projects are risky because the methodology used is untested. The Department of Data Management recommends that the City use a DBMS for the UCIS project. The DBMS significantly reduces the downtime in the event of a system failure. The reduced downtime increases the time that the customer service staff can use the system to respond to customer inquiries. In addition, the computer industry is moving towards more DBMS applications. To attract data management professionals, the City must be in the current technological mainstream.

Several companies market DBMS's. The City has not conducted a formal evaluation of its DBMS needs nor has a request for proposals been released to the known DBMS vendors. This process would require at least six months and possibly many

more months to conduct and complete. The UCIS system would have to be delayed for this period unless the City Council elects to suspend competitive procurement procedures for the DBMS. The advantages and disadvantages of the possible delay are:

Advantages

- A formal evaluation of the City's needs would result in the selection of a DBMS that would fulfill all known or anticipated City requirements.
- Competitive bidding may result in cost savings.

Disadvantages

- ACTRON may retract its proposal.
- The City would be required to retain the UNIVAC 90/80 for at least six additional months at a monthly cost of \$13,000 to \$14,000.
- Improved customer service would be delayed for at least six additional months.
- A six-month delay would result in a conversion from bimonthly to monthly customer billings during the annual rate increase period.
- The UNIVAC computer and utility billing system are becoming increasingly unreliable, which results in customer billing errors and inability to promptly and accurately respond to customer inquiries.

It appears that the advantages are significantly outweighed by the disadvantages.

City staff has conducted an informal evaluation of the DBMS's that can operate ACTRON's UCIS. The two leading vendors were invited to make a presentation regarding their products to the Department of Data Management technical staff. Based upon this process, staff recommends that the City Council suspend competitive procurement procedures and select Software AG as the provider of the DBMS (Exhibit II).

The initial acquisition of a DBMS for the UCIS will not require additional staff. However, if the City expands the use of the DBMS for other systems, the City will be required to add one or more highly technical positions to the Data Management staff.

FINANCIAL ANALYSIS

The following schedule summarizes the UCIS project costs:

ACTRON UCIS fully installed	\$679,300
City Computer DBMS plus additional storage capacity	259,000
Incidental travel, sales tax and consulting fees	<u>52,800</u>
	<u>\$991,100</u>

The \$679,300 for the UCIS is within \$478,000 to \$753,000 cost range estimated by KMG Main Hurdman in the February 13, 1987 report.

Staff recommends that the City finance the UCIS utilizing a Certificate of Participation. This will allow the project costs to be allocated over a five year period. Both the present and future customers who benefit from the improved customer service will be required to pay for the UCIS. Based upon current interest rates, the UCIS annual cost is estimated to be approximately \$330,000. This represents approximately .8% of the total current billing for utility service charges. Staff included \$250,000 for modifying the utility system in the rate increases for FY 1987/88. Therefore, the UCIS costs will only require a minor increase for the utility service charges beginning FY 1988/89. The unfinancible travel costs (\$15,000) for FY 1987/88 can be absorbed by the utility funds and will not impact customer service charges.

The ACTRON UCIS has an estimated useful life in excess of ten years. Therefore, the system will cost (\$991,100 plus financing and annual maintenance costs) the average customer approximately \$1.66 per year over the system's useful life span. An expenditure of \$1.66 per customer per year to significantly improve customer service is a good investment in customer relations.

The UCIS project costs do not include the "soft dollar" salary costs for the City staff that will participate in the project. It is estimated that the City will assign approximately 5.4 FTE to the project. Exhibit III details the anticipated staff commitments.

RECOMMENDATION

It is requested that the Budget and Finance Committee recommend that the City Council:

1. Adopt the attached resolution amending the FY 1987/88 CIP budget for the Department of Public Works and appropriating \$976,100 to the Utility Customer Information System (UCIS) capital improvement budget and amending the FY 1987/88 operating budget for the Department of Public Works by appropriating \$15,000 for travel expenses from the City utility service enterprise funds.

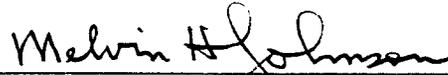
RECOMMENDATION (cont.)

2. Adopt the attached resolution authorizing the City Manager to execute the attached professional services agreement with Actron Information Data Systems, Inc. (ACTRON) to provide a utility customer service information system (UCIS).
3. Adopt the attached resolution authorizing the City manager to execute the attached agreement with Software AG to provide a data base management system (DBMS) for the City's IBM 4381 mainframe computer.

Respectfully submitted,



Betty Masuoka  
Director of Finance

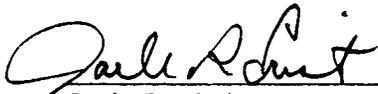


Melvin H. Johnson  
Director of Public Works



James L. Puthuff  
Director of Data Management

RECOMMENDATION APPROVED:



Jack R. Crist  
Deputy City Manager

Attachments

September 15, 1987  
All Districts

 **KMG** Main Hurdman

Certified Public Accountants

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Sacramento, CA 95814

Telephone: (916) 444-2050

February 13, 1987

Mr Melvin H Johnson  
Director of Public Works  
City of Sacramento  
915 I Street, Room 207  
Sacramento, California 95814

Dear Mr Johnson:

We are pleased to present our recommendations regarding the implementation of a proposed Utility Customer Information System. This document presents the alternative strategies available to the Department of Public Works to meet its information processing requirements.

Our recommendations are based on an analysis of the Department's requirements presented in the Utility Customer Information System Needs Assessment Report. We compared your requirements with two basic strategy alternatives:

- . Converting and enhancing your existing software.
- . Acquiring a new packaged software system.

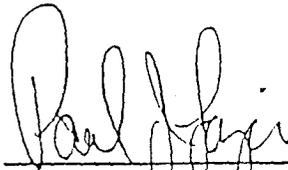
In developing our recommendation, we considered the cost associated with each alternative, the benefits to be derived, and the advantages and disadvantages of each.

We appreciate the efforts and cooperation of City personnel in this project. Please contact us if you have any questions.

Very truly yours,

KMG Main Hurdman

BY



Paul J. Ladio, Principal

CITY OF SACRAMENTO  
UTILITY CUSTOMER INFORMATION SYSTEM (UCIS)

RECOMMENDATIONS REPORT

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## I - INTRODUCTION

The City of Sacramento Department of Public Works (the Department) currently provides five utility services to 114,000 residential and commercial customers. The Department has determined that a new computerized Utility Customer Information System (UCIS) is required to provide better customer service and to automate many cumbersome manual processes.

The City now uses a Utility Billing system operating on a Sperry 90/80 mainframe computer for its billing and accounts receivable processing. The system performs its intended functions in a reliable manner. However, the present system fulfills only a portion of the City's information processing requirements. Fulfilling the requirements to automate other functions will necessitate a larger, integrated information system.

The Department retained KMG Main Hurdman and Peat, Marwick, Mitchell & Co to define requirements for a new system and evaluate the present utility billing system's capabilities.

The results of this effort are presented in the UCIS Needs Assessment Report delivered in February 1987.

We were also asked to define alternative strategies available to the Department to fulfill its information processing needs and then recommend the best strategy. The two strategies available to the Department are:

- Convert and Enhance the Existing Utility Billing System - The present system fulfills only a portion of the Department's current information processing requirements. To fulfill the

Department's needs defined in the Needs Assessment Report would require converting the existing system to the new City IBM mainframe and developing many new functions. The City Data Management Department estimates five to six man-years of effort to develop the new functions.

. Acquire and Implement a New UCIS Software Package - The Department could develop a Request for Proposal (RFP) based on its requirements and submit the RFP to utility information system vendors. The Department would acquire UCIS software and implementation services that would meet the requirements defined in the Needs Assessment Report. This strategy represents a "turnkey" approach in that the system would be fully implemented by outside vendors and/or consultants. Data Management staff resources would not be required.

This report presents our analysis and recommendations regarding these alternatives. It is organized into the following sections:

- . Introduction
- . Requirements Definition
- . Alternative Strategy Analysis
- . Recommendations

Although basic information processing requirements are outlined in this report, the UCIS Needs Assessment Report (provided under separate cover) defines the requirements in greater detail.

## II - REQUIREMENTS DEFINITION

### A - UTILITY CUSTOMER INFORMATION SYSTEM (UCIS) REQUIREMENTS

This section outlines the functional requirements of a UCIS system required by the Department. A detailed presentation of these requirements is found in the UCIS Needs Assessment Report dated February 1987. The requirements for a UCIS are:

#### Customer Information

- .. New Account (Service Location) Records
- .. New Customer (Property Owner) Records
- .. Close Accounts
- .. Query Customer Information
- .. Change Customer/Account Information
- .. Commercial Water Consumption Read Information
- .. Audit Trails

#### Work and Repair Order Management

- .. On-Line Processing
- .. Batch Processing
- .. Work and Repair Order Processing
- .. Management Reporting
- .. Supplemental Billing
- .. Table Maintenance

#### Solid Waste Route Scheduling

- .. Schedule Table Inquiry
- .. Schedule Planning System Interface

#### Billing

- .. Maintain Billing Tables
- .. Billing Table Modeling
- .. Commercial Metered Water Consumption Calculations
- .. Bill Calculations
- .. Delinquency Notices
- .. Time Pay Agreement Notices
- .. Supplemental Billing
- .. Final Bills
- .. Accounts Receivable Interface

. Accounts Receivable

- .. Payment Processing Service Bureau Interface
- .. Payment Processing
- .. Refund Processing
- .. Adjustment Processing
- .. Suspense Processing
- .. Transaction Audit
- .. General Ledger Interface
- .. Lien Processing

. Time Pay Agreements

- .. New Time Pay Agreement
- .. Time Pay Payments

. Meter Activities

- .. Meter Reading Subsystem Interface
- .. Upload Meter Data to Mainframe

. Management Reporting and Analysis

- .. Operations Summary Reporting
- .. Management Reporting
- .. Ad Hoc Reporting
- .. Mailing Lists/Labels by Council District,  
Collection Routes

Although the current Utility Billing System accomplishes the billing and accounts receivable functions adequately, many information needs are unmet because of the system's limited scope. A new UCIS would automate many manual processes and offer an integrated systems approach for providing information to City management, staff, customers, and City Council members.

The major deficiencies of the current system can be characterized as follows:

. Substantial effort is now required to modify the system for changing requirements such as billing for new services, due to inflexible system design architecture.

- . Five to six man-years of system development effort would be required to modify and enhance the present system to fulfill current needs.
- . Considerable manual processing still exists.
- . No on-line historical billing and service information for management and staff users.
- . "User-unfriendliness"--too much use of difficult codes on screens and microfiche.

## B - BENEFITS

The benefits to be derived from a new UCIS system presented in this report are, by necessity, more generic than quantifiable. If a new system is implemented, or the current system converted and enhanced, then quantification of benefits will be more precise. The benefits presented imply reductions in cost and increases in the level of service.

The benefits to be derived from a new system fall into the following categories:

- . Faster response on customer billing inquiries and complaints.
- . Quicker action on service complaints for missed garbage pickups and other service problems.
- . Customer service operators will be able to handle more complaint calls per day.
- . Fewer complaints to City Council members from customers.
- . Improved cash flow.
- . Reduced outstanding accounts receivable.
- . Reassignment of current system maintenance resources to new system development.
- . Reassignment of current system clerical resources to new system analytical needs.

. Additional and more customized information available for direction, control, and performance of utility services.

### III - ALTERNATIVE STRATEGY ANALYSIS

This section describes the two viable alternatives for implementing a Utility Customer Information System:

- . Convert and enhance the existing billing system.
- . Acquire and implement a new UCIS software package.

Each strategy's associated conversion and implementation activities; cost and time estimates; and advantages and disadvantages are described.

#### ALTERNATIVE 1 - CONVERT AND ENHANCE EXISTING BILLING SYSTEM

The first alternative strategy available to the City to satisfy its UCIS requirements is to convert and enhance the existing Utility Billing system.

##### A - Conversion and Implementation Activities

The current Utility Billing system consists of 29 batch and one interactive programs. Converting the original Utility Billing system programs from the Sperry Univac to the IBM computer system will involve the following activities:

- . Loading, compiling, and testing batch COBOL programs from the Sperry to the IBM system.

- . Rewriting interactive on-line programs to function in an IBM teleprocessing (CICS) environment.
- . Compiling and testing the new interactive on-line programs.

The tasks required to enhance the current Utility Billing system to meet the defined UCIS functional requirements will include:

- .. Develop Work and Repair Order Sub-System
  - .. Analyze user requirements
  - .. Define file requirements
  - .. Design maintenance criteria
  - .. Design screens
  - .. Write, test, document, and implement programs
- . Expand records to allow more services
  - .. Redesign the Utility Billing master record
  - .. Modify all programs that access the Utility Billing record
- .. Develop comment history file of customer calls
  - .. Analyze user requirements
  - .. Design history file
  - .. Develop file maintenance procedures
  - .. Design screens
  - .. Write, test, document, and implement programs

- . Develop on-line rate change function with testing and budget forecasting
  - .. Create screen to allow the user to input new rates
  - .. Modify existing test program
  - .. Create on-line budget forecasting criteria
  
- . Modify billing programs for monthly (currently bimonthly) cycles
  - .. Modify receipt and prorating programs
  - .. Modify meter reading program
  - .. Modify billing process
  - .. Modify screens
  
- . Develop on demand billing function
  - .. Develop proration program
  - .. Develop printer interface
  - .. Maintain internal customer record function
  
- . Develop route and day changes by address range functions
  - .. Create route file
  - .. Create route sub-system interface
  - .. Interface with Geo-code file
  
- . Redesign screens for better readability
  - .. Rewrite codes into English
  - .. Program code conversion table
  - .. Redesign screens for extra characters

- . Write automatic lien clear program
  - .. Develop internal record maintenance function
- . Develop message printing function on bills by customer type
  - .. Devise criteria for different types
  - .. Create an on-line screen to maintain messages
- . Develop interface with LGFS (City Financial System)
- . Develop 3 years of on-line billing history
  - .. Design file specifications
  - .. Design file maintenance program
  - .. Design file access screens
- . Develop service history by location (regardless of owner)
  - .. Define history requirements
  - .. Design services history file
  - .. Design purge criteria
  - .. Design chaining mechanism
- . Develop meter information history file and inquiry capability

B - Cost and Time Estimates

Each major task is listed below with an estimate of Data Management and City User staff hours required to complete the task:

<u>Task</u>	<u>Data Management</u>	<u>User Staff</u>
Project Administration and Control	500-600	500-600
Conceptual Design	200-300	200-300
Develop Work and Repair Order Sub-System	1,700-1,900	425-475
Expand records to allow more services	1,400-1,600	350-400
Develop comment history file of customer calls	400-600	100-150
Develop on-line rate change function with testing and budget forecasting	700-1,000	175-250
Modify billing programs for monthly (currently bimonthly) cycles	300-500	75-125
Develop on demand billing function	300-500	75-125
Develop route and day changes by address range functions	500-800	125-200
Redesign screens for better readability	1,100-1,400	275-350
Write automatic lien clear program	100-200	25- 50
Develop message printing function on bills by customer type	200-400	50-100
Develop interface with LGFS (City Financial System)	100-200	25- 50
Enter 3 years of on-line billing history	1,000-1,200	4,000-4,800
Develop service history by location (regardless of owner)	900-1,000	225-250
Develop meter information history file and inquiry capability	900-1,000	225-250
User Documentation and Training	<u>500-600</u>	<u>2,000-2,400</u>
Total	<u>10,800-13,800</u>	<u>8,850-10,000</u>

The estimates of time required to complete these tasks were provided by Data Management personnel. Although time and costs are not directly charged to user departments, Data Management uses \$25 per hour as a basis for estimating project cost. The extended cost for Data Management to complete the modifications and enhancements of the Utility Billing system ranges from \$270,000 to \$345,000.

For the purposes of this analysis, we also calculated the value of City user staff time devoted to this project at \$25 per hour. The cost for user staff time ranges from \$221,000 to \$272,000.

These costs must be added to the estimate for converting the existing software from the Sperry to the IBM system. Data Management provided a cost estimate of \$158,000 to convert the existing software.

The cost estimate for the City to convert, modify, and enhance the current system to fulfill the UCIS requirements would range between \$649,000 to \$775,000.

Hardware costs for additional disk storage devices (estimated to be \$50,000) and terminals will be equal for both alternative strategies. Therefore, this comparative analysis does not include hardware costs.

### C - Advantages and Disadvantages

Alternative Strategy #1 has the following advantages:

- . The functions of the current system do work and users are familiar with the system procedures. Users will not have to learn new methods for billing and accounts receivable functions.
  
- . The converted and enhanced system will fulfill the City's UCIS requirements.

- . More time will be required of City personnel to assist Data Management programmers and analysts in defining and validating requirements, reviewing project progress, and participating in system tests. This will occur because many functions that are pre-programmed in packaged software will have to be developed from scratch.

#### ALTERNATIVE 2 - ACQUIRE AND IMPLEMENT A NEW UCIS SOFTWARE PACKAGE

The second alternative strategy available to the Department to satisfy its UCIS requirements is to acquire and implement a new UCIS software package. The Department would acquire UCIS software and implementation services that would meet the requirements defined in the Needs Assessment Report. This strategy represents a "turnkey" approach in that the system would be fully implemented by outside vendors and/or consultants with annual commitment of Data Management staff resources.

Although the City has some unique information processing requirements including lien processing and partial payment distribution, our experience indicates that software packages do exist that could meet Sacramento's needs. Some software modification would be necessary, but this is typical for any UCIS software installation. We recommend that the City also evaluate some of its utility billing procedures to determine if some might be changed to better fit a software package.

This section describes the associated conversion and implementation activities; implementation schedule; cost and time estimates; and advantages and disadvantages.

This option has the following disadvantages:

- . Based on the current budget, the Data Management Department does not have sufficient personnel resources to develop the UCIS system. Because of the Sperry to IBM system conversion activities for other City computer applications, new development work for this project could not even begin until April of 1988.
- . Data Management personnel will have to develop many UCIS functions from scratch that would already be found in a packaged software solution.
- . This strategy will take longer to implement than the option of acquiring and implementing a new software package.
- . Benefits to be realized from a UCIS will be delayed because of the longer implementation schedule.
- . The current Utility Billing system is based on an outdated batch-oriented design architecture. Converting, enhancing, and modifying an already outdated system may present future problems and/or user dissatisfaction.
- . Converting the base Utility Billing interactive programs to an IBM mainframe on-line environment is less desirable than implementing packaged UCIS software that was designed for use in the IBM hardware and teleprocessing software environment.

## A - Implementation Activities

The tasks associated with implementing new UCIS software include:

- . Project Administration and Control
  - .. Orientation and Start-Up
  - .. Management and Control
- . Initial Software Package Installation and Test
  - .. Prepare technical environment for baseline package installation and test
  - .. Install baseline package
  - .. Execute installation test
  - .. Review installation test results
  - .. Installation test sign-off and approval
- . Detail Design and Requirements Validation
  - .. Design/modify system output
  - .. Design/modify system input
  - .. Design/modify database structure
  - .. Design/modify functional processing modules
  - .. Design/modify system interfaces
  - .. Design input, output, processing, and system controls for the automated data conversion
  - .. Prepare design report
- . Prepare Detail Modification Specifications
  - .. Analyze processing modules to determine changes to individual programs

- .. Prepare modification specifications
- .. Review specifications
- .. Review and update programming schedule

#### Development and Implementation Plans

- .. Prepare plans for modification and development activity
- .. Develop overall strategy and approach for systems and acceptance testing
- .. Prepare overall plan for training
- .. Develop approach and plan for conversion and implementation activities

#### Development (Programming and Unit Test)

- .. Prepare for development
- .. Modify/code program modules
- .. Conduct unit test for each program
- .. Document test results
- .. Resolve unit test difficulties

#### Conduct Subsystem Tests

- .. Review and confirm test plan
- .. Develop test environment
- .. Execute string test
- .. Conduct quality assurance review

#### Documentation

- .. Review package documentation
- .. Update system documentation
- .. Update program documentation
- .. Update operator documentation
- .. Review and finalize documentation

. User documentation and training

- .. Prepare user documentation
- .. Review training plans
- .. Develop training material
- .. Identify supervisory personnel to be trained as trainers
- .. Execute Training Plan
- .. Finalize user documentation
- .. Conduct specialized training for analysts
- .. Conduct specialized training for computer operations

. Integrated System Test

- .. Review and revise test plan
- .. Establish system test environment
- .. Execute system test
- .. Validate system test
  
- .. Review system test results with user divisions
- .. Execute acceptance test
- .. Review acceptance test results

. Conversion

- .. Review conversion work plan and assign responsibilities
- .. Prepare detail conversion specifications
- .. Develop conversion programs
- .. Unit, String, and system test conversion programs
- .. Verify and validate existing data
- .. Perform manual entry of newly required data
- .. Enter 3 years of on-line billing history

. Implement software

- .. Prepare for implementation
- .. Install new system
- .. Convert data files
- .. Conduct system cutover
- .. Commence initial operation

. Post implementation support

- .. Support initial operations
- .. Resolve problems/provide functional support

B - Implementation Schedule

Exhibit 1 provides a schedule of the elapsed time required to acquire and implement the new UCIS software.



C - Cost and Time Estimates

We estimate that a project of this scope will require significant effort. Based on our experience with other metropolitan UCIS implementations, we have estimated the hours required for a project of this scope.

This strategy represents a "turnkey" approach in that the system would be fully implemented by outside vendors and/or consultants. Implementation of major systems require careful planning and monitoring. Each major task is listed below with an estimate of Vendor/Consultant and City User staff hours required to complete the task:

<u>Task</u>	<u>Vendor/ Consultant</u>	<u>User Staff</u>
Project Administration and Control	350-420	350-420
Initial Software Package Installation and Test	200-250	100-125
Detail Design/Requirements Validation	600-700	200-233
Prepare Detail Modification Specifications	200-300	
Development and Implementation Plans	200-300	25-37
Development (Programming and Unit Test)	400-500	
Conduct Subsystem Tests	200-250	
Documentation	200-300	
User documentation and training	700-800	2,800-3,200
Integrated System Test	200-250	100-125
Conversion	260-300	520-600
Enter 3 years of on-line billing history		2,500-3,000
Implement software	120-160	
Post implementation support	<u>400-500</u>	
Total	<u>4,030-5,030</u>	<u>6,595-7,740</u>

We estimate that between 4,030 and 5,030 vendor and consultant hours will be required to support a UCIS implementation. At an average industry rate of \$100 per hour, including expenses, the fees would range between \$403,000 and \$503,000.

The cost of user staff time for this project, at \$25 per hour will range from \$165,000 to \$194,000.

Packaged UCIS software systems range in price from \$75,000 for packages that do not include Data Base Management System (DBMS) to \$250,000 for those that do include DBMS. Although using a DBMS within the application software system will cost more for the DBMS purchase and in-house technical support staff. It may offer advantages to the City, such as easier reporting capability and faster maintenance.

The projected cost of this option will range between \$643,000 and \$947,000.

#### D - Advantages and Disadvantages

Alternative Strategy #2 has the following advantages:

- . A packaged software solution will reflect current, state-of-the-art system design techniques.
  
- . Acquiring packaged software provides a proven solution with the benefit of many man-years of research, development, and UCIS experience already invested in the software package. The City Data Management staff will not have to "reinvent the wheel."

- . A customized, packaged software system will fulfill the City's UCIS requirements.
- . No major commitment of City Data Management personnel resources.
- . Benefits will be realized sooner with this solution because of the shorter implementation schedule.
- . The software vendor and/or implementation support consultants can be contractually held accountable for delivering a fully-functioning system that meets the City's requirements.
- . A packaged software system will be designed for use in the IBM hardware and teleprocessing software environment.
- . Less time will be required of City user personnel in this option. This will occur because many functions are pre-programmed in a packaged software solution that will not have to be defined, developed, and tested.

This option has the following disadvantages:

- . Additional training will be required of users and system support personnel for new utility billing software procedures.

#### IV - RECOMMENDATION

We recommend that the City acquire and implement a UCIS software package. We contend that this alternative will best serve the City's interest for the following reasons:

- . The advantages of this alternative significantly exceed those associated with converting, modifying, and enhancing the existing utility billing system.
  
- . The benefits defined will be realized much sooner with this solution because of the shorter implementation schedule. Data Management is currently unable to fulfill the UCIS requirements. Researching customer complaints, managing work and repair orders, and gathering management information with the current manual methods will become increasingly more difficult as Sacramento's utility customer base grows.
  
- . Implementing a new UCIS within the next 18 months will inhibit the proliferation of non-integrated independent microcomputer systems. Some special purpose applications such as meter reading data collection and waste collection route modeling are best suited for microcomputers. Although not a problem now, staff frustrated with manual methods often find ways to procure microcomputers and software to automate their unique applications. A Department-wide integrated UCIS software package will provide the automated methods needed now.

No major commitment required of City Data Management personnel resources. The UCIS implementation will be a major effort to support. Using temporary outside resources eliminates the potential need to hire permanent Data Management employees.

The recommended strategy cost estimate exceeds that of the first alternative by approximately 20%. We believe that the additional cost for the recommended strategy is justified considering the fact that the City will realize the full benefits of the new system much sooner.

We recommend that the City acquire and implement a UCIS software package. The City should proceed to issue a Request for Proposal for UCIS software and implementation support services.



DEPARTMENT OF  
DATA MANAGEMENT

CITY OF SACRAMENTO  
CALIFORNIA

819 TENTH STREET  
SACRAMENTO, CA  
95814-2601

916-449-5763

JAMES L. PUTHUFF  
DIRECTOR

ALFRED S. ORTIZ  
INFORMATION SYSTEMS  
MANAGER

TOBA L. GODDARD  
COMPUTER OPERATIONS  
MANAGER

DEAN W. DAVIS  
TECHNICAL SYSTEMS  
MANAGER

September 3, 1987  
DD-03

MEMORANDUM

TO: UCIS Screening and Evaluation Committee  
FROM: James L. Puthuff, Director of Data Management  
SUBJECT: UCIS DATA BASE MANAGEMENT SYSTEM

SUMMARY

This report recommends that the City of Sacramento acquire Software AG's product "ADABASE" as the data base management system (DBMS) for ACTRON's UCIS (utility customer information system) software.

BACKGROUND

The Data Management Department has investigated and evaluated data base management systems which operate ACTRON's CSS (Customer Service System) product as requested by the UCIS Screening and Evaluation Committee. This request was based upon the need for an installed DBMS in order to begin installing the ACTRON's UCIS product CSS.

ACTRON's UCIS is available in four different data base versions. These versions are:

IDMS	from Cullinet
IMS/DL1	from IBM
ADABASE	from Software AG
DATACOM	from Applied Data Research

In addition to evaluating the data base products from a technical viewpoint, Data Management's evaluation was also based on positioning the City for future use of a DBMS, as well as being able to properly support the DBMS once in place. Although the UCIS system will be the only application initially installed on the DBMS, at some point in time a decision may be made to develop other City applications on the DBMS.

## DISCUSSION

During the Department's review and evaluation of the four DBMS products, the following information and data was obtained:

1. CULLINET's IDMS:

ACTRON does not currently support CSS Release 1.2 (the latest version of their UCIS) on IDMS. ACTRON stated "It would require additional effort to add the features of CSS 1.2 to the IDMS version now supported by ACTRON. The cost to do this has not been included in the pricing furnished to date."

2. IBM's IMS/DL1:

These are IBM's original DBMS product. IBM is not recommending IMS/DL1 and will eventually drop support of these products; instead IBM is recommending their new DBMS DB2. ACTRON does not have their CSS package available for DB2.

3. SOFTWARE AG's ADABASE:

This is a widely used DBMS in the Sacramento area. Eight local users are:

State of California, Teale Data Center  
County of Sacramento  
State Franchise Tax Board  
California Lottery Commission  
Public Employees Retirement System  
Health and Welfare  
Wickland Oil Company  
Farm Credit Bureau

This large use of ADABASE throughout the Sacramento data processing community provides an established base of trained personnel available for assistance and for possible future employment with the City of Sacramento.

Software AG has a local technical office available to the user community 24 hours a day to provide assistance as required, including assistance to the City in implementing ACTRON's CSS software.

4. APPLIED DATA RESEARCH's DATACOM:

There are two users in the Sacramento area, McClellan AFB and E.D.S. ADR does not have a local technical support office. Consequently, for development and implementation purposes, there is limited experience and trained personnel available locally.

Based upon the proceeding information, Data Management invited both Software AG and Applied Data Research to make presentations and to submit price quotes regarding their product. Both companies responded and have products that can fulfill the City's needs. However, Data Management has determined that Software AG's ADATABASE best fits the City's needs for the following reasons:

1. Software AG submitted the lowest price quote (see attachment 1)
2. There is a large base of Software AG DBMS users in the Sacramento area from which to obtain operational information and perhaps to draw on for permanent City staff.
3. Software AG has a technical support office in Sacramento.
4. Software AG provides consolidated training for State, County, and Private Companies in the Sacramento area. This would significantly reduce the City's training costs by eliminating travel expenses.
5. Software AG's data base will efficiently process the ACTRON CSS.

RECOMMENDATION

Data Management recommends that the UCIS Screening and Evaluation Committee recommend the selection of Software AG's ADATABASE for the UCIS project. Further, in order to meet the planned implementation date for the UCIS of November 1, 1988, it will be necessary for the Committee to recommend that formal competitive procurement be waived.

*Jim Puthuff / Jg*

Jim Puthuff  
Director of Data Management

CITY OF SACRAMENTO  
 DATA MANAGEMENT DEPARTMENT  
 PRICE QUOTES FOR  
 DATA BASE MANAGEMENT SYSTEM

1. APPLIED DATA RESEARCH

Datacom/DB	\$119,000
Datadictionary	39,600
ADR/Ideal	97,900
CICS Service Facility	<u>20,500</u>
	\$277,000
Less 35% Discount	<u>-96,950</u>
	\$180,050
Tax	<u>10,803</u>
Total License Fee	\$190,853
(Includes first year maintenance cost)	

Maintenance cost for 4 years	<u>\$197,982</u>
------------------------------	------------------

Total 5 year Applied Data Research data base cost	<u>\$388,835</u>
--	------------------

2. SOFTWARE AG

ADABASE	\$100,000
Natural	35,000
Predict	<u>15,000</u>
	\$150,000
Tax	<u>9,000</u>
Total License Fee	\$159,000
(Includes first year maintenance cost)	

Maintenance cost for 4 years	<u>\$114,725</u>
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Total 5 year Software AG data base cost	<u>\$273,725</u>
--	------------------

NOTE: The above two quotations provide equivalent functionality for City applications use.

CITY OF SACRAMENTO  
UCIS Project - Staff Assignments  
September, 1987

<u>Department</u>	<u>Position Assigned</u>	<u>FTE</u>
Data Management	Programmer Analyst (A)	2.00
	Technical Services Manager	<u>.10</u>
Total Data Management		<u>2.10</u>
Finance	Revenue Officer	.20
	Office Supervisor	.80
	Senior Programmer Analyst (B)	<u>1.00</u>
Total Finance		<u>2.00</u>
Public Works	Senior Administrative Services Officer	.20
	Office Supervisor	.30
	Water Supervisor	.10
	Administrative Assistant (C)	.50
	Street Cleaning General Supervisor	.05
	Refuse Collection General Supervisor	.10
	Typist Clerk III	<u>.05</u>
Total Public Works		<u>1.30</u>
Total		<u><u>5.40</u></u>

- (A) Assignment of these currently budgeted positions to the UCIS will not detract from the UNIVAC to IBM conversion project currently underway.
- (B) Assigned to Finance for project management; position is a Data Management position.
- (C) .3 FTE Solid Waste, .1 FTE Flood Control and Sewer Division, .1 FTE Water Division

# RESOLUTION NO.

ADOPTED BY THE SACRAMENTO CITY COUNCIL ON DATE OF

RESOLUTION AMENDING THE 1987-88  
CIP BUDGET FOR THE UTILITY  
CUSTOMER INFORMATION SYSTEM PROJECT

BE IT RESOLVED BY THE COUNCIL OF THE CITY OF SACRAMENTO:

- The 1987-88 Capital Improvement Budget is hereby amended to include \$976,100 for the Utility Customer Information System (UCIS) project. The UCIS project will be debt financed based on the following distribution:

Water	(Debt)	\$224,505
Sewer	(Debt)	146,415
Solid Waste	(Debt)	390,440
Storm Drainage	(Debt)	<u>214,740</u>
Total Project		\$976,100

- The 1987-88 Operating Budget is hereby amended to cover non-debt financed operating cost as follows:

Enterprise Funds - Transfer of \$15,000 to General Fund

			Dec	Inc
Water Fund	Contingency	413-710-7012-4999	<3,450>	
	Transfer/Type 1	413-310-3151-4376		3,450
Sewer Fund	Contingency	414-712-7012-4999	<2,250>	
	Transfer/Type 1	414-310-3161-4376		2,250
Solid Waste Fund	Contingency	415-710-7012-4999	<3,300>	
	Transfer/Type 1	415-310-3141-4376		3,300
Storm Drainage Fund	Contingency	425-710-7012-4999	<6,000>	
	Transfer/Type 1	425-310-3161-4376		<u>6,000</u>
			<\$15,000>	\$15,000

General Fund - Transfer of \$15,000 from Enterprise Fund to General Fund and Augment Public Works Administration budget by \$15,000.

		Dec	Inc
General Fund Revenue	101-310-3110-3666		\$15,000
General Fund Contingency	101-710-7012-4999		\$15,000

Transfer to Public Works Administration

General Fund Contingency	101-710-7012-4999	<\$15,000>	
Public Works Admin.	101-310-3110-4261		<u>\$15,000</u>
		<\$15,000>	\$15,000

---

Mayor

ATTEST:

---

CITY CLERK

# RESOLUTION NO.

ADOPTED BY THE SACRAMENTO CITY COUNCIL ON DATE OF

A RESOLUTION AUTHORIZING THE CITY MANAGER TO EXECUTE  
THE ATTACHED PROFESSIONAL SERVICES AGREEMENT WITH  
ACTRON INFORMATION DATA SYSTEMS, INC., TO PROVIDE A  
UTILITY CUSTOMER INFORMATION SYSTEM

BE IT RESOLVED BY THE COUNCIL OF THE CITY OF SACRAMENTO:

That the City Manager is hereby authorized to execute the attached  
Professional Services Agreement with Actron Information Data Systems, Inc., to  
provide a utility customer information system.

---

MAYOR

ATTEST:

---

CITY CLERK

CITY OF SACRAMENTO

PROFESSIONAL SERVICES AGREEMENT

THIS AGREEMENT is made at Sacramento, California, as of September 24, 1987, by and between the CITY OF SACRAMENTO, a municipal corporation hereinafter referred to as "CITY" and Actron Information Data Systems, Inc., 2212 Arlington Downs Road, Suite 100, Arlington, Texas 76011, a privately held corporation, hereinafter referred to as "ACTRON", who agree as follows:

1. Definitions. As used in this Agreement and, except to the extent otherwise defined therein, each Exhibit hereto:
  - (a) The term "RFP" shall mean the "REQUEST FOR PROPOSAL UTILITY CUSTOMER INFORMATION SYSTEM" issued on April 17, 1987 by the CITY's Department of Public Works attached hereto as Exhibit "F".
  - (b) The term "Proposal" shall mean the "PROPOSAL FOR THE CITY OF SACRAMENTO DEPARTMENT OF PUBLIC WORKS" dated May 28, 1987 as submitted by ACTRON to the CITY in response to the RFP and as amended by the Addendum thereto dated August 10, 1987, all as attached hereto as Exhibit "G".
  - (c) The term "CSS" shall mean the proprietary computer software system known as the Customer Service System more particularly described in the Proposal.
  - (d) The term "UCIS" shall mean the CSS as modified and enhanced to incorporate the additional features and functions described in the Proposal as revised in accordance with this Agreement or by the mutual agreement of the parties.
  - (e) The term "Licensed Materials Agreement" shall mean the agreement attached hereto as Exhibit "H".
  - (f) The term "CSS Maintenance Agreement" shall mean the agreement attached hereto as Exhibit "I".

Other terms used in this Agreement are defined in the context in which they are used and shall bear the meanings there indicated.

2. Services. Subject to the terms and conditions set forth in this Agreement, ACTRON shall provide to CITY the services described in Exhibit "A". ACTRON shall provide said services at the time, place, and in the manner specified in Exhibit "A" and, except as otherwise provided in Exhibit "A" or pursuant to this Agreement, in accordance with the Proposal, RFP (but only to the extent expressly incorporated into the Proposal), Licensed Materials Agreement, and CSS Maintenance Agreement. In the event of any conflict between the provisions of this Agreement and the provisions of the RFP (to the extent incorporated in the Proposal), the Proposal, the Licensed

Materials Agreement or the CSS Maintenance Agreement, the provisions of this Agreement shall supersede them only to the extent of such conflict. The failure to mention any material from the RFP, Proposal, the Licensed Materials Agreement, or CSS Maintenance Agreement in this Agreement shall not be deemed a conflict. ACTRON shall not be compensated for services outside the scope of Exhibit "A" unless prior to the commencement of such services: (a) ACTRON notifies the CITY that such service is deemed an additional service and ACTRON estimates the additional compensation required for this activity; and (b) the CITY, after notice, approves, in writing, the additional service and amount of compensation therefor.

3. Payment. The CITY shall pay ACTRON for services rendered pursuant to this Agreement and for the license granted to CITY pursuant to the Licensed Materials Agreement at the times and in the manner set forth in Exhibit "B". Except with respect to payments for maintenance services rendered pursuant to the CSS Maintenance Agreement, the payments specified in Exhibit "B" shall be the only payments to be made to ACTRON for services rendered pursuant to this Agreement unless, pursuant to Section 2 above or Section 12 of Exhibit "D" hereto, the CITY approves additional compensation for additional services. ACTRON shall submit all billings for said services to the CITY in the manner specified in Exhibit "B".
4. Survival. In the event this Agreement is terminated, expires or for any reason is not longer in effect, the Licensed Materials Agreement (Exhibit "H") shall survive and remain in effect subject to the provisions of Section 8 of Exhibit "D" hereto. Any term or terms and any other portion of this Agreement which are in conflict with the Licensed Materials Agreement shall also survive and remain in effect for purposes of interpreting the Licensed Materials Agreement and it is expressly agreed that such conflicting term or terms shall prevail over the term or terms contained in the Licensed Materials Agreement.
5. Facilities and Equipment. The CITY shall furnish to ACTRON only the facilities, equipment, and resources listed in Exhibit "C" according to the terms and conditions set forth in Exhibit "C".
6. General Provisions. The general provisions set forth in Exhibit "D" are part of this Agreement.
7. Insurance Coverage Requirements and Provisions. The CITY's general insurance coverage requirements and provisions set forth in Exhibit "E" are part of this Agreement.
8. CITY Representative. The CITY Representative specified in Exhibit "A", or the representative's designee, shall administer this Agreement for the CITY.
9. Exhibits. All exhibits referred to herein and attached hereto are by this reference incorporated herein.

EXECUTED as of the day first above stated.

CITY OF SACRAMENTO,  
A Municipal Corporation

ACTRON INFORMATION DATA  
SYSTEMS, INC.

By: \_\_\_\_\_  
CITY Manager (or Designee)

By: \_\_\_\_\_

By: \_\_\_\_\_

APPROVED AS TO FORM:

\_\_\_\_\_  
DEPUTY CITY ATTORNEY

ATTEST:

\_\_\_\_\_  
CITY CLERK

EXHIBIT A	EXHIBIT C	EXHIBIT E	EXHIBIT G	EXHIBIT I
EXHIBIT B	EXHIBIT D	EXHIBIT F	EXHIBIT H	

EXHIBIT A

PROFESSIONAL SERVICES AGREEMENT

WITH ACTRON INFORMATION DATA SYSTEMS, INC.

REPRESENTATIVES AND SERVICES TO BE PROVIDED

1. Representatives:

The CITY Representative for this Agreement is:

Mike Medema  
(Name)

Revenue Officer  
(Title)

(916) 449-5854  
(Telephone)

All consultant questions pertaining to this Agreement will be referred to the above named person, or the representative's designee.

All correspondence to the CITY will be addressed to:

Mike Medema, Revenue Officer  
City of Sacramento  
Department of Finance  
915 I Street, Room 104  
Sacramento, CA 95814

The ACTRON Representative for this Agreement is:

Jerry L. Duvall  
(Name)

V.P. Sales & Marketing  
(Title)

(817) 649-1866  
(Telephone)

All CITY questions pertaining to this Agreement will be referred to the above named person.

All correspondence to ACTRON will be addressed to:

Jerry L. Duvall, V.P. Sales & Marketing  
ACTRON INFORMATION DATA SYSTEMS, INC.  
2212 Arlington Downs Road, Suite 100  
Arlington, Texas 76011

2. Services to be provided are as specified below:

I. SCOPE OF WORK AND DELIVERABLES

"Completion Date"

The overall objective of this Agreement is the successful installation of the CSS and implementation of the modifications to the CSS in order to create the UCIS, all within 390 days of the date of this Agreement and in accordance with this Exhibit "A".

(1) Implementation Plan

Within fifteen (15) days after the date of this Agreement, ACTRON will meet with the CITY to prepare an implementation plan. This plan will include a review to finalize and agree upon the specifics of how the CSS will be adapted to CITY's needs in terms of:

- Customer Information
- Utility Billing
- Accounts Receivable
- Work and Repair Order Management
- Solid Waste Routing Interface
- Time Pay Agreement
- Meter Read Interface
- Management Reporting and Analysis
- System interface (including the Parcel File and LGFS), technical requirements, and timing schedules
- Impact on Data Management, Finance, and Public Works Departments and other related organizations, forms, and data flow
- Steps required to implement the UCIS to production operations
- Steps required to effect the conversion of system interfaces to production operations
- Production scheduling
- Acceptance testing, and
- Training on all phases of the CSS

Should this review result in a request by the CITY for modifications or services which are in addition to or outside the scope of the modifications and services set forth in the Proposal, the terms upon which such additional modifications and services will be included within the scope of work defined by this Exhibit "A" will be negotiated in accordance with Section 12 of Exhibit "D" of this Agreement entitled "Modifications and Changes in Scope".

(2) License Agreement for Software

Contemporaneously with the execution of this Agreement, ACTRON and CITY have entered into the Licensed Materials Agreement attached hereto as Exhibit "H" pursuant to which ACTRON grants CITY a perpetual license for use of the CSS and the modifications to the CSS made pursuant to this Agreement in order to create the UCIS, all of which will be deemed "Licensed Materials" as defined therein. The license granted to CITY pursuant to the Licensed Materials Agreement, with respect to the CSS, will be effective upon acceptance of the CSS installation as provided below and, with respect to the modifications thereto, will be effective as of the final acceptance date of the UCIS. To the extent of any express conflict or inconsistency between the terms of this

Agreement and the terms of the Licensed Materials Agreement, the terms of this Agreement shall prevail.

(3) Installation of the CSS

ACTRON will install the CSS on the CITY's computer in accordance with a mutually agreed upon schedule that will be developed and set forth in writing as part of the implementation plan.

ACTRON agrees to provide the following documentation to CITY:

- a. Copies of object code on the appropriate storage media (tape).
- b. Copies of source code on the appropriate storage media (tape).
- c. One complete copy of the CSS User Reference Material and System Reference Material, as defined in 6.0 Appendix of the Proposal, to include documentation diskettes.
- d. User and technical documentation for all enhancements, modifications, and improvements to the CSS making up the current release of licensed materials at the time of execution of the Agreement and subsequent enhancements available to the City.
- e. Any other documentation or manuals as specified in the Licensed Materials Agreement.

At the conclusion of the CSS installation, the CSS will be tested by ACTRON using test data supplied by ACTRON. Completion of the testing and installation will be documented by a Software Installation Acceptance Test Letter by ACTRON summarizing the installation process and including test output as appendix material.

(4) Modification of Software

Under the current Scope of Work, ACTRON will be responsible for the installation of the CSS and the implementation of the modifications to the CSS required to create the UCIS in accordance with the Proposal.

Modifications performed by ACTRON to the CSS or to the Job Control Language (JCL) required to create the UCIS will be designed and implemented by ACTRON in accordance with the implementation plan. Where modifications to the CSS are determined to be required and within the then-current Scope of Work, all coding, testing and documentation will be done by ACTRON.

(5) Training Programs

ACTRON will conduct the training programs for CITY personnel as provided in the Proposal and in accordance with the implementation plan.

(6) System Briefing

ACTRON will conduct briefings for CITY personnel determined in accordance with the implementation plan.

(7) ACTRON Implementation Assistance

ACTRON will provide CITY with professional services in the form of implementation assistance. The service will be as defined in the Proposal.

## II. CONTRACT MODIFICATION AND CHANGES OF SCOPE

The terms, scope, and conditions of this Agreement may be modified only by written notification signed by authorized representatives of both CITY and ACTRON, as outlined in Section 12 of Exhibit "D".

## III. CITY PARTICIPATION

CITY will actively participate and cooperate with ACTRON to ensure the successful implementation of the UCIS. This includes:

- (1) Designation of a CITY project team including representatives from the Finance, Data Processing, and Public Works Departments.
- (2) Installation of the CSS. The CITY will advise ACTRON of the CITY's guidelines relating to the operational environment required for effective installation of the CSS and implementation of the modifications required to create the UCIS, including necessary environmental requirements. ACTRON and the CITY will work together to ensure that the UCIS meets the CITY's requirements as contemplated by this Agreement.
- (3) Testing. The CITY will be responsible for preparing all test cases to be used in conjunction with modification and conversion testing and for verification of test results prior to beginning production operation, other than that used in the software installation acceptance test.
- (4) Timely and Adequate Response and Decision-making by CITY's staff so as to facilitate the provision of the services by ACTRON hereunder will be provided on all key issues presented by ACTRON, within three (3) CITY working days.

#### IV. PERSONNEL COMMITMENTS

ACTRON warrants that all personnel assigned to this project shall be qualified for the assignments to be undertaken. Specifically, ACTRON agrees to assign the following key personnel to the project team:

William Dow	Project Director
David Cox	Project Manager

In the event that any of these persons become unavailable due to resignation, sickness or other factors outside ACTRON's control, ACTRON shall be responsible for timely provision of adequately qualified replacements. All such replacements shall be subject to the prior written consent of the CITY.

In the event that CITY desires the removal of any person or persons assigned by ACTRON to perform services pursuant to this Agreement, it shall be done in accordance with Section 6 of Exhibit "D".

ACTRON assures that all its employees and agents assigned or involved under this Agreement will learn and comply with the security policies and procedures in effect in the CITY throughout the term of this Agreement.

ACTRON and ACTRON's assigned personnel shall access or handle restricted or confidential data only as required for performance of the assigned duties. ACTRON and ACTRON's assigned personnel shall disseminate such data only to personnel specifically authorized in writing by CITY, and in no event shall ACTRON or ACTRON's assigned personnel discuss or disseminate any data or information, whatsoever, to any unauthorized person. Nor shall such data or information be used for any purpose except that purpose for which it was intended, as authorized or directed by the CITY.

#### V. WARRANTIES

In addition to and supplementing the warranties expressed by ACTRON in the Licensed Materials Agreement (Exhibit "H") and subject to the disclaimers and limitations set forth therein and elsewhere in this Agreement, ACTRON provides to the CITY the following warranties:

- (1) ACTRON warrants that the CSS, as initially installed and prior to the modification thereof as contemplated by this Agreement, will perform and conform to ACTRON's published documentation.
- (2) ACTRON warrants that the UCIS will perform as specified in the RFP to the extent such specifications are expressly incorporated into the Proposal and except to the extent such specifications are further modified pursuant to the implementation plan.
- (3) ACTRON warrants that the UCIS will be free of any known program coding errors when installed. Any errors will be corrected in

accordance with Section 2.I (4) of Exhibit "A" of this Agreement.

- (4) ACTRON warrants that the CSS is compatible with CITY's operating environment hardware as specified in Exhibit "A" of the Licensed Materials Agreement.
- (5) ACTRON warrants that the CSS does not violate or infringe upon any patent, copyrights, trade secret, or other proprietary rights of any other person or entity. ACTRON agrees to defend and indemnify CITY, at ACTRON's sole expense, in the event that a claim is filed or a suit is brought against CITY or any of its officers, employees, or authorized agents, for the use of the software due to a patent or copyright infringement by the CSS. ACTRON further agrees that if any portion of the CSS is found to be infringing, ACTRON will, within one hundred twenty (120) days:
  - a. Modify such infringing portion, at ACTRON's expense, so it becomes non-infringing, or
  - b. Replace such infringing portion, with comparable non-infringing software, at ACTRON's expense, or
  - c. Procure, at ACTRON's expense, the necessary licenses for CITY to continue using such infringing portion.
- (6) ACTRON warrants that the UCIS when installed will not contain any timers, counters, or preprogrammed devices that will cause the software to become erased, inoperable, or incapable of processing.
- (7) ACTRON warrants that the CITY will have membership in the ACTRON's CSS user's group.
- (8) ACTRON agrees to maintain, as long as the CSS Maintenance Agreement is in effect, the UCIS to operate on upgrades of the hardware product line and operating system used by CITY as specified in the CSS Maintenance Agreement.
- (9) ACTRON warrants that the UCIS when installed will contain a security and control system for the purpose of protecting the software and the data from unauthorized use, as defined in ACTRON's published documentation.
- (10) ACTRON warrants that its personnel will not, without prior authorization of the CITY, access, manipulate or disclose to any third parties the CITY's confidential data.

#### VI. CONTINUING MAINTENANCE

ACTRON will provide continuing maintenance services with respect to the UCIS to the CITY for so long as the CSS Maintenance Agreement remains in effect.

VII. FINAL ACCEPTANCE AND SUCCESSFUL IMPLEMENTATION OF SOFTWARE

The CITY will deliver to ACTRON written acknowledgement of the successful implementation of the UCIS within 15 days after the first ninety (90) days of production operation in accordance with the applicable specifications established in the implementation plan and such acknowledgement will constitute final acceptance of the UCIS.

EXHIBIT B

PROFESSIONAL SERVICES AGREEMENT

WITH ACTRON INFORMATION DATA SYSTEMS, INC.

FEE SCHEDULE/MANNER OF PAYMENT

Except as hereafter amended as authorized in this Agreement, ACTRON's charges for the license and services provided hereunder will not exceed a total of \$679,300 and will be determined as follows:

1.	A.	CSS software license fee (includes initial installation)	\$250,000
	B.	Professional Services (includes:	268,400
		1) Project administration and control	
		2) Requirements match	
		3) Detail design modification specifications	
		4) Modifications	
		5) Development and implementation plans	
		6) Development	
		7) Subsystem testing	
		8) Documentation	
		9) User documentation and training	
		10) Integrated system testing	
		11) Conversion	
		12) Software implementation	
		13) Post implementation support)	
	C.	Contract Contingency	35,800
	D.	ACTRON Computer Time	48,000
	E.	Per Diem and Travel Expense	<u>77,100</u>
		TOTAL	<u>\$679,300</u>

2. The CSS software license fee shall be due and payable upon the occurrence of the following events:

Execution of this Agreement	\$125,000
Installation of the CSS	\$100,000
First Day of Live Production	
Operation of UCIS	\$ 25,000

The CITY shall pay ACTRON for professional services, computer time and travel expenses rendered or incurred pursuant to this Agreement as the project milestones identified on Table I are completed or interim

measurements of progress towards completion are achieved. Interim measurements of progress towards completion of the project milestones in order for ACTRON to submit monthly invoices for services rendered will be mutually developed during the requirements match phase of the project. Invoices for professional services, computer time and travel expenses shall be payable monthly in arrears and shall be due and payable within thirty (30) days after receipt. CITY shall verify each such invoice within five (5) CITY working days after receipt and either approve such invoice or notify ACTRON in writing of the grounds upon which such approval is being withheld within such five (5) day period. CITY shall pay an amount not to exceed a maximum total of \$679,300, including "Computer Time" and "Travel" expenses, for services as detailed in this Agreement.

Ten percent (10%) of all professional services payments will be withheld pending final acceptance of the UCIS and will be due and payable upon final acceptance of the UCIS in accordance with Section VII of the Exhibit "A".

The Contract Contingency amount will only be available for the cost of minor system modifications within the scope of this Agreement and for actual computer time and travel beyond that already identified in Section 1 above. Payments will not be made from the Contract Contingency unless ACTRON notifies the CITY that such modifications and/or expenses will be incurred and the CITY, after notice, approves in writing, the additional modifications and/or expenses and amount of compensation.

"Computer Time" expenses will be payable monthly in arrears as expenses are accrued.

"Travel" expenses will be payable monthly in arrears as expenses are accrued.

Billable professional service hours will be billed based upon the following schedule of consulting fees:

Executive Consultant	\$125/hour
Project Director	\$100/hour
Project Manager	\$ 80/hour
Senior Systems Programmer	\$ 80/hour
Systems Programmer	\$ 70/hour
Senior Systems Analyst	\$ 70/hour
Systems Analyst	\$ 60/hour
Technical Specialist III	\$ 55/hour
Technical Specialist II	\$ 45/hour
Technical Specialist I	\$ 40/hour

Request for payment shall be sent to:

Susan Davidson, Sr. Administrative Services Officer  
Department of Public Works  
City Hall, Room 207  
Sacramento, California 95814

Ref: UCIS Project

TABLE I  
MILESTONE COMPLETION AND ANTICIPATED PAYMENT SCHEDULE

OCTOBER 1987	CSS INSTALLATION, ACCEPTANCE, AND USER TRAINING	PROFESSIONAL SERVICES* EXPENSES	18,800 7,200
NOVEMBER 1987	50% REQUIREMENTS MATCH	PROFESSIONAL SERVICES* EXPENSES	30,000 8,000
DECEMBER 1987	75% REQUIREMENTS MATCH	PROFESSIONAL SERVICES* EXPENSES	26,000 7,200
JANUARY 1988	100% REQUIREMENTS MATCH	PROFESSIONAL SERVICES* EXPENSES	18,800 7,200
FEBRUARY 1988		PROFESSIONAL SERVICES* EXPENSES	22,900 8,000
MARCH 1988	DETAIL DESIGN	PROFESSIONAL SERVICES* EXPENSES	22,800 8,000
APRIL 1988		PROFESSIONAL SERVICES* EXPENSES COMPUTER TIME	22,200 4,400 12,000
MAY 1988		PROFESSIONAL SERVICES* EXPENSES COMPUTER TIME	22,200 4,400 12,000
JUNE 1988		PROFESSIONAL SERVICES* EXPENSES COMPUTER TIME	22,200 4,400 12,000
JULY 1988	UCIS MODS COMPLETED	PROFESSIONAL SERVICES* EXPENSES COMPUTER TIME	29,000 6,200 12,000

AUGUST 1988

USER TRAINING

PROFESSIONAL SERVICES\*  
EXPENSES

16,500  
6,200

SETEMBER 1988

PROFESSIONAL SERVICES\*  
EXPENSES

7,700  
2,600

OCTOBER 1988

ACTUAL PRODUCTION  
WRAP-UP

PROFESSIONAL SERVICES\*  
EXPENSES

9,300  
3,300

\* 10% OF AMOUNT DUE WILL BE WITHHELD IN ACCORDANCE WITH THE TERMS OF THIS EXHIBIT B

EXHIBIT C

PROFESSIONAL SERVICES AGREEMENT

WITH ACTRON INFORMATION DATA SYSTEMS, INC.

FACILITIES AND EQUIPMENT TO BE PROVIDED BY CITY

The CITY shall provide to the ACTRON Project Team customary office environment facilities such as desks, office space, telephone and conference space. In addition, the CITY will provide access to computer resources including the use of terminals, disk storage, data entry, and processing time to permit ACTRON to complete all tasks within the agreed-upon time frame. At the inception of the project, both parties will mutually agree in writing on what shall constitute timely and adequate access to computer resources.

No other CITY resources in terms of facilities or equipment will be allocated.

EXHIBIT D

PROFESSIONAL SERVICES AGREEMENT

WITH ACTRON INFORMATION DATA SYSTEMS, INC.

GENERAL PROVISIONS

1. Independent Contractor. At all times during the term of this Agreement, ACTRON shall be an independent contractor and shall not be an employee of the CITY. ACTRON, its employees and its agents shall neither hold themselves out as nor claim to be officers, agents, or employees of the CITY for any reason or purpose, including, but not limited to, Worker's Compensation coverage, unemployment benefits, social security, or retirement membership or credit. CITY shall have the right to control ACTRON only insofar as the results of ACTRON's services rendered pursuant to this Agreement; however, CITY shall not have the right to control the means by which ACTRON accomplishes services rendered pursuant to this Agreement.
2. Licenses; Permits; Etc. ACTRON represents and warrants to CITY that it has all licenses, permits, qualifications and approvals of whatsoever nature which are legally required for ACTRON to practice its profession. ACTRON represents and warrants to CITY that ACTRON shall, at its sole cost and expense, keep in effect or obtain at all times during the term of this Agreement any licenses, permits, and approvals which are legally required for ACTRON to practice its profession.
3. Time. ACTRON shall devote such time to the performance of services pursuant to this Agreement as may be reasonably necessary for satisfactory and timely performance of ACTRON's obligations under this Agreement. Neither party shall be considered in default of this Agreement to the extent performance is prevented or delayed by an act, present or future, which is beyond the reasonable control of the party. Such acts shall include, but not be limited to, acts of God, strikes, lockouts, riots, acts of war, epidemics, government regulation superimposed after the fact, fire, communications line failure, power failure, earthquakes, or other disasters.
4. ACTRON Not Agent. Except as CITY may specify in writing, ACTRON shall have no authority, express or implied, to act on behalf of CITY in any capacity whatsoever as an agent. ACTRON shall have no authority, express or implied, pursuant to this Agreement to bind CITY to any obligation whatsoever.
5. Assignment Prohibited. No party to this Agreement may assigned any right or obligation pursuant to this Agreement. Any attempted or purported assignment of any right or obligation pursuant to this Agreement shall be void and of no effect.
6. Personnel. ACTRON shall assign only competent personnel to perform services pursuant to this Agreement. In the event that CITY, in its sole discretion, at any time during the term of this Agreement, desires the removal of any person or persons assigned by ACTRON to perform pursuant to this Agreement.

ACTRON shall remove any such person immediately upon receiving notice from CITY of the desire of CITY for the removal of such person or persons. In the event ACTRON personnel are removed from the project, ACTRON will replace them with other qualified personnel as soon as possible. All such replacements shall be subject to the prior written consent of the CITY, which consent will not be unreasonably withheld. ACTRON agrees not to subcontract any work authorized hereunder without the prior written consent of the CITY, which consent will not be unreasonably withheld.

7. Standard of Performance. ACTRON shall perform all services required pursuant to this Agreement in the manner and according to the standards observed by a competent practitioner of the profession in which ACTRON is engaged. All products of whatsoever nature which ACTRON delivers to CITY pursuant to this Agreement shall be prepared in a professional manner and conform to the standards of quality normally observed by a competent practitioner of the profession in which ACTRON is engaged. Nothing in this Section 7 shall impair or otherwise reduce the express disclaimers and limitations set forth elsewhere in this Agreement.

8. Termination. The CITY reserves the right to terminate this Agreement at any time after installation of the CSS and payment to ACTRON of the entire CSS software license fee in the event it shall abandon or indefinitely postpone the project. Such termination shall be accomplished by written notice to that effect delivered to ACTRON. Upon receipt of such notice, ACTRON shall immediately cease work and deliver to CITY all completed or partially completed work. Payment to ACTRON shall be made for all work performed prior to receipt of ACTRON of such termination notice and ACTRON shall have no claim for loss of anticipated profits or any additional compensation.

In the event that either party materially or repeatedly defaults in the performance of any of its duties or obligations under this Agreement which default shall not be substantially cured within thirty (30) days after written notice specifying the default is given to the defaulting party, then the party not in default may, by giving written notice thereof of the defaulting party, terminate this Agreement as of such date specified in the notice of termination.

In the event ACTRON becomes or is declared insolvent or bankrupt, this Agreement shall automatically terminate.

Upon such termination for cause or insolvency, ACTRON shall immediately cease work and deliver to CITY all completed or partially completed work. Payment to ACTRON shall be made for all work performed prior to termination.

Notwithstanding any other provisions hereof, upon CITY's payment of the CSS software license fee, CITY shall be entitled to a perpetual license to the CSS and modifications thereto (including all completed and partially completed work delivered to CITY in connection with the termination of this Agreement) in accordance with the terms and conditions of the Licensed Materials Agreement and subject to termination only for material breach of the Licensed Materials Agreement. Termination of this Agreement on other grounds shall not affect the perpetual license.

9. Indemnity and Hold Harmless. Notwithstanding the provisions of Section 10 hereof to the contrary, each party shall assume the defense of, indemnify and save harmless the other party, its officers, employees, and agents, and each and every one of them from and against all actions, damages, costs liability, claims, losses, and expenses of every type (including attorney fees reasonably incurred) arising out of damage to property and/or injury to persons, including death, resulting from the negligent or willful acts or omissions of the indemnifying party, its employees, or its agents, acting within or without the scope of their authority or this Agreement.

It is a conditions of the obligation of either party to indemnify the other that the indemnifying party be given prompt notice of any claim asserted against the indemnified party for which a right of indemnification is claimed hereunder. The indemnifying party shall be entitled to conduct the defense of any claim arising hereunder and to settle or compromise such claims as it shall see fit. The indemnified party shall cooperate fully in the defense of any claim subject hereto.

10. Definition of Liability. Except as to matters described in Section 9 hereof and except with respect to any breach by CITY of its obligations under the Licensed Materials Agreement or its payment obligations under this Agreement in the event either party shall be liable to the other party on account of the liable party's performance or nonperformance of its obligations under this Agreement, whether arising by negligence, intended conduct, or otherwise, (i) the amount of damages recoverable against ACTRON for all events, acts, or omissions shall not exceed in the aggregate the amount then previously paid to ACTRON pursuant to this Agreement, (ii) the amount of damages recoverable against CITY for all events, acts or omissions shall not exceed in the aggregate the total amount of the contract fee (\$679,300 as adjusted by any amendments), less the amount then previously paid to ACTRON pursuant to this Agreement, and (iii) THE MEASURE OF DAMAGES SHALL NOT INCLUDE ANY AMOUNTS FOR INDIRECT OR CONSEQUENTIAL DAMAGES OF ANY PARTY, INCLUDING THIRD PARTIES. In connection with the conduct of any litigation with third parties relating to any liability of either party to the other or to such third parties (excluding matters described in Section 9), the liable party shall have all rights (including the right to accept or reject settlement offers and to participate in such litigation) which are appropriate to its potential responsibilities or liabilities.

11. Ownership of Materials. Any and all materials developed by ACTRON and the CITY pursuant to this Agreement shall be owned by ACTRON or its designee, subject to a nontransferable, nonexclusive license for the CITY's internal use subject to the Licensed Materials Agreement. These materials shall include, but not be limited to, all designs, working papers, computer code, narrative descriptions, reports, and data. The nontransferable, nonexclusive license for the City's internal use grated to the CITY pursuant to the Licensed Materials Agreement shall remain in effect, subject to the terms and the Licensed Materials Agreement, with no additional charge except for maintenance if the CITY elects to participate.

12. Modification and Changes of Scope. The terms, scope, and conditions of this Agreement may be modified only by written notification signed by authorized representatives of both the CITY and ACTRON.

In the event the CITY desires to modify ACTRON's Scope of Work as specified in Exhibit "A" of this Agreement by adding, modifying or deleting responsibilities and/or deliverable products, the CITY shall so notify ACTRON. Upon receipt of any such written notification, ACTRON shall evaluate such requested change and notify the CITY in writing of any adjustment to the implementation schedule or amounts payable to ACTRON beyond the contingency amount provided as part of this Agreement in Exhibit "B" and, upon receipt of the CITY's agreement in writing to such adjustment, ACTRON will implement such requested change. In the event that any such change(s) result in an increase in ACTRON's responsibilities and/or Scope of Work beyond that specified in Exhibit "A", ACTRON agrees to provide additional services at the rates identified in Exhibit "B" plus out of pocket expenses and associated computer time.

13. Equal Employment Opportunity. During the performance of this Agreement, ACTRON, for itself, its assignees and successors in interest, agrees as follows:

A. Compliance with Regulations. ACTRON shall comply with the Executive Order 11246 entitled "Equal Employment Opportunity", as amended by Executive Order 11375, and as supplemented in Department of Labor regulations (41 CFR Part 60), hereinafter referred to as the "Regulations".

B. Nondiscrimination: ACTRON, with regard to the work performed by it after award and prior to completion of the work pursuant to this Agreement, shall not discriminate on the ground of race, color, religion, sex, national origin, age, marital status, physical handicap or sexual preference in the selection and retention of subcontractors, including procurement of materials and leases of equipment. ACTRON shall not participate either directly or indirectly in discrimination prohibited by the Regulations.

C. Solicitations for Subcontractors, including Procurement of Materials and Equipment: In all solicitations either by competitive bidding or negotiations made by ACTRON for work to be performed under any subcontract, including procurement of materials or equipment, each potential subcontractor or supplier shall be notified by ACTRON of ACTRON's obligation under this Agreement and the Regulations relative to nondiscrimination on the ground of race, color, religion, sex, national origin, age, marital status, physical handicap or sexual preference.

D. Information and Reports: ACTRON shall provide all information and reports required by the Regulations, or orders and instructions issued pursuant thereto, within the time frames required of the CITY by regulatory agencies, and will permit access to its books, records, accounts, other sources of information and its facilities as may be determined by the CITY to be pertinent to ascertain compliance with such

Regulations, orders and instructions. Where any information required by ACTRON is in the exclusive possession of another who fails to or refuses to furnish this information, ACTRON shall so certify to the CITY, and shall set forth what efforts it has made to obtain the information.

E. Sanctions for Noncompliance. In the event of noncompliance by ACTRON with the nondiscrimination provisions of this Agreement, the CITY shall impose such contract sanctions as it may determine to be appropriate including, but not limited to:

(1) Withholding of payments to ACTRON under the contract until ACTRON complies;

(2) Cancellation, termination, or suspension of the Agreement, in whole or in part.

F. Incorporation of Provisions. ACTRON shall include the provisions of Paragraphs A through E in every subcontract, including procurement of materials and leases of equipment, unless exempt by Regulations, order, or instructions issued pursuant thereto. ACTRON shall take such action with respect to any Regulations, order or instructions issued pursuant thereto. ACTRON shall take such action with respect to any subcontract or procurement as the CITY may direct as a means of enforcing such provisions including sanctions for noncompliance; provided, however, that in the event ACTRON becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, ACTRON may request the CITY to enter such litigation to protect the interests of the CITY.

14. Governing Law/Venue. This Agreement shall be governed by the laws of the State of California and any suit arising out of dispute thereunder shall be litigated in Sacramento County, California or the U.S. District Court for the Eastern District of California.

15. Severability. Should any provision of this Agreement contravene any law or valid regulation of any regulatory agency or self-regulatory body having jurisdiction over either party hereto, or should any provision otherwise be held valid or unenforceable by a court or other body of competent jurisdiction, then each such provision shall be automatically terminated and performance by both parties waived; provided, however, that should such provision reasonably be considered by either party to be an essential element of this Agreement, and the parties be unable to agree upon the terms of an alternative provision within ninety (90) days following the contravening provision's termination, then this Agreement may be terminated in its entirety at the option of either party, which termination shall be effective upon the giving of notice thereof of the other party.

16. Notices. All notices, demand and other communications required or permitted by this Agreement shall be in writing, and delivered or mailed by first class mail, postage prepaid, addressed to the other party's principal place of business as identified in Exhibit "A", subject to the right of either party to change its address by ten (10) days' prior written notice to the

other party. Service of any notice shall be deemed complete upon delivery or mailing.

17. South Africa Policy. ACTRON must certify that the goods/services being sought are neither manufactured nor produced within the Republic of South Africa or Namibia as attested to in the affidavit attached as (Attachment A) to Exhibit "D".
18. Entire Agreement. This Agreement constitutes the entire agreement between the parties hereto with respect to the subject matter hereof, and, except to the extent that prior written agreements or written representations or undertakings are expressly incorporated herein, this Agreement supersedes all prior agreements and understandings with respect to the subject matter hereof.

EXHIBIT D  
ATTACHMENT A

CITY OF SACRAMENTO  
SOUTH AFRICA DIVESTMENT AFFIDAVIT

The undersigned hereby declares, under penalty of perjury, as follows:

My name is \_\_\_\_\_  
(Please Print)

I am employed by \_\_\_\_\_, hereafter referred to below as "the firm".

I am the \_\_\_\_\_ of the firm, and as such I am authorized to make this declaration.

The firm does not have and does not contemplate any outstanding loan or letter of credit to:

South Africa or Namibia, or any business firm organized under the laws of south Africa or Namibia, or any business firm for the express purposes of doing business with, conducting business operations in, or trading with any private or public entity located in South Africa or Namibia.

The firm is not organized under the laws of South Africa or Namibia. The firm does not have and does not contemplate having business arrangements or business operations in South Africa or Namibia, as those terms are defined in City of Sacramento Ordinance No. 86-126.

The firm is not proposing to sell, as part of this bid, products which have been manufactured or produced in South Africa or Namibia.

If the firm, after the date of this declaration, changes its policy in any manner which would render this declaration no longer entirely accurate, the firm will no notify the Treasurer of the City of Sacramento.

I declare under penalty or perjury that the foregoing is true and correct.

Executed on \_\_\_\_\_, at \_\_\_\_\_.

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Title)

EXHIBIT E

PROFESSIONAL SERVICES AGREEMENT

WITH ACTRON INFORMATION DATA SYSTEMS, INC.

INSURANCE COVERAGE REQUIREMENTS AND PROVISIONS

Insurance Requirements. During the duration of this Agreement ACTRON shall maintain the following noted insurance:

	<u>Required</u>	<u>Not Required</u>
Coverage - Broad Form Comprehensive Liability	<u>X</u>	_____
Business Auto Liability	<u>X</u>	_____
Workers' Compensation & Employers' Liability	<u>X</u>	_____
Professional Liability (Errors and Omissions)	_____	<u>X</u>

A. Minimum Scope of Insurance

Coverage shall be at least as broad as:

- (1) Insurance Services Office form number GL 0404 (Broad Form Comprehensive General Liability);
- (2) Insurance Services Office form number CA 0001 (Ed. 1/78) (Automobile Liability, code 1 "any auto");
- (3) Workers' Compensation as required by the Labor Code of the State of California, and Employers' Liability insurance.

B. Minimum Limits of Insurance

ACTRON shall maintain limits no less than:

- (1) Comprehensive General Liability: \$1,000,000 combined single limit per occurrence for bodily injury, personal injury and property damage.
- (2) Automobile Liability: \$1,000,000 combined single limit per accident for bodily injury and property damage.
- (3) Workers' Compensation and Employers' Liability: Workers' compensation limits as required by the Labor Code of the State of California and Employers' Liability limits of \$1,000,000 per accident.

C. Deductibles and Self-Insured Retentions

Any deductibles or self-insured retentions must be declared to and approved by the CITY.

D. Other Insurance Provisions

The policies are to contain, or be endorsed to contain, the following provisions:

(1) General Liability and Automobile Liability Coverages

- a. The CITY, its officials, employees and volunteers are to be covered as insured as respects: liability arising out of activities performed by or on behalf of ACTRON; products and completed operations of ACTRON; premises owned, leased or used by ACTRON; or automobiles owned, leased, hired or borrowed by ACTRON. The coverage shall contain no special limitations on the scope of protection afforded to the CITY, its officials, employees or volunteers.
- b. ACTRON's insurance coverage shall be primary insurance as respects the CITY, its officials, employees and volunteers. Any insurance or self-insurance maintained by the CITY, its officials, employees or volunteers shall be excess of ACTRON's insurance and shall not contribute with it.
- c. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the CITY, its officials, employees or volunteers.
- d. Coverage shall state that ACTRON's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

(2) Workers' Compensation and Employers' Liability Coverages

The insurer shall agree to waive all rights of subrogation against the CITY, its officials, employees and volunteers for losses arising from work performed by ACTRON for the CITY. This requirement may, however, be waived in individual cases at the discretion of the CITY.

(3) All Coverages

Each insurance policy required by this Agreement shall be endorsed to state that coverage shall not be suspended, voided, cancelled, reduced in coverage or in limits except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to the CITY.

E. Acceptability of Insurers

Insurance is to be placed with insurers with a Bests' rating of not less than A:XIII. This requirement may, however, be waived in individual cases; provided, however, that in no event will a carrier with a rating below A:X be acceptable.

F. Verification of Coverage

ACTRON shall furnish the CITY with certificates of insurance and with original endorsements effecting coverage required by this clause. The certificates and endorsements for each insurance policy are to be signed by a person authorized by the insurer to bind coverage on its behalf. The certificates and endorsements are to be on forms provided by the CITY and are to be forwarded to the CITY representative named in Exhibit "A".

G. Payment Withhold

The CITY will withhold payments to ACTRON, if certificates of insurance and endorsements required in paragraph F above have not been provided.

Exhibit F

Exhibit F is on file with the City Clerk.

Exhibit G

Exhibit G is on file with the City Clerk.

Exhibit H

Exhibit H is on file with the City Clerk.

Exhibit I

Exhibit I is on file with the City Clerk.

# RESOLUTION NO.

ADOPTED BY THE SACRAMENTO CITY COUNCIL ON DATE OF

A RESOLUTION AUTHORIZING THE CITY MANAGER TO EXECUTE THE ATTACHED AGREEMENT WITH SOFTWARE AG TO PROVIDE A DATA BASE MANAGEMENT SYSTEM

WHEREAS, the City desires to implement a new utility customer information system (UCIS) by November 1, 1988; and

WHEREAS, the selected UCIS vendor's system operates utilizing a data management base system (DBMS) computer operating system; and

WHEREAS, City staff have informally reviewed the DBMS that operates the UCIS selected; and

WHEREAS, Software AG submitted the lowest informal price quote for its DBMS; and

WHEREAS, utilizing the competitive procurement procedures would delay the UCIS project by six months; and

WHEREAS, a six-month delay in the UCIS project would:

1. Cost \$14,000 to \$16,000 monthly in unnecessary costs for the UNIVAC 90/80 computer.
2. Delay improved customer service.
3. Possibly jeopardize the City's agreement for services with the UCIS vendor selected; and

WHEREAS, it is in the City's best interest to suspend competitive procurement procedures.

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF SACRAMENTO THAT:

1. Competitive procurement procedures are hereby suspended for the purpose of obtaining a DBMS; and
2. The City Manager is authorized to execute the attached agreement with Software AG to provide a DBMS.

ATTEST:

\_\_\_\_\_  
MAYOR

\_\_\_\_\_  
CITY CLERK

# PRODUCT ATTACHMENT TO AGREEMENT FOR LICENSE OF PROPRIETARY SOFTWARE PRODUCTS (Purchase of License)

- This Product Attachment is an attachment to the Agreement for License of Proprietary Software Products, [Agreement], between Software AG of North America, Inc., [Software AG], and \_\_\_\_\_  
CITY OF SACRAMENTO  
\_\_\_\_\_, [Licensee], dated September 3, 1987
- All Articles of the Agreement are extended to include this Product Attachment.
- Licensee orders: ADABAS, NATURAL, PREDICT \_\_\_\_\_, [Product(s)]  
for the MVS operating system.
- Licensee agrees to pay Software AG One hundred and fifty thousand dollars.  
United States Dollars, (\$ 150,000.00 ).
- Software AG grants to Licensee a perpetual license to use the Product at Licensee's computer installation  
located at: 819 Tenth Street  
Sacramento, CA 95814
- An installation for this Product is defined as one computer at above specified location.
- The license of the Product includes:
  - One Magnetic Tape
  - The following classes for up to twenty people:
    - 1 - 2 day on-site ADABAS / Concepts and Facilities Workshop
    - 1 - 3 day on-site NATURAL / Application Workshop
    - 1 - Tuition only ADABAS / DBA Skills Workshop
- \*These classes may be taught at any time following the installation of SOFTWARE AG products.
- Software AG agrees to provide Technical Services for the first year following the Product's installation date at no charge.\*After the first year, Licensee agrees to pay, annually to Software AG, the then current price of Technical Services for the Product. Payment is due in advance on the installation date anniversary.
- Delivery of Product. Product will be shipped within 30 days after confirmation of order, subject to conditions beyond Software AG's control.
- This Agreement not binding until accepted by Software AG.
- \* See Attachment 1

Licensee

Software AG of North America, Inc.

By: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

101 California Street  
Suite 3750  
San Francisco, CA 94111-5877  
(415) 989-5010

A T T A C H M E N T 1

Product Attachment  
To Agreement for License  
of Proprietary Software Products  
between the CITY OF SACRAMENTO  
and SOFTWARE AG

SOFTWARE AG agrees to provide the CITY OF SACRAMENTO software maintenance at no charge for the first year from the signing of this contract. The following years maintenance (second year) will be \$24,720.00. SOFTWARE AG agrees to only raise maintenance by 10% for the next three years. The term of this maintenance agreement is five years.



**AGREEMENT  
FOR LICENSE OF  
PROPRIETARY  
SOFTWARE PRODUCTS**

# AGREEMENT FOR LICENSE OF PROPRIETARY SOFTWARE PRODUCTS

Agreement is made this \_\_\_\_\_ day of \_\_\_\_\_,  
19 87, by and between **Software AG of North America, Inc. (Software AG)**, a Virginia corporation having its principal office at 11800 Sunrise Valley Drive, Reston, Virginia 22091, and \_\_\_\_\_  
CITY OF SACRAMENTO

\_\_\_\_\_, (Licensee),  
having its principal office at \_\_\_\_\_  
819 Tenth Street  
Sacramento, CA

**Software AG**, together with its subsidiaries and affiliated organizations, is the manufacturer and supplier, worldwide, of proprietary software products. By execution of this Agreement, **Licensee** orders a license to use each proprietary software product (**Product**) described in each duly executed **Product Attachment** to this Agreement.

In consideration of their mutual promises contained herein, the parties agree as follows:

**1. GRANT OF LICENSE.** By this Agreement **Software AG** grants to **Licensee** a non-transferable and non-exclusive license to use **Product** solely in the conduct of **Licensee's** internal business. Subject to the terms and conditions hereinafter set forth, **Licensee** is authorized to use **Product**, while this Agreement is in effect, only at those locations or on those computers designated by **Licensee** in the **Product Attachment(s)** and in accordance with the definition of "installation" described in the **Product Attachment(s)**.

**Licensee** agrees to use **Product** only under the operating system specified in the **Product Attachment(s)** and agrees to pay any additional fee for operating system upgrade specified in the current Price Schedule. **Licensee** acknowledges that by virtue of this Agreement, **Licensee** acquires only the right to use **Product** while this Agreement is in effect and does not acquire any rights of ownership in **Product**. This Agreement and the license granted pursuant hereto may not be assigned, sublicensed, or otherwise transferred by **Licensee** without prior written consent from **Software AG**.

Notwithstanding the above, **Licensee** may move **Product** to another **Licensee** location which physically replaces the original location upon prior written notice to **Software AG**. In addition, if for any reason **Licensee** reasonably determines that the location referred to herein is unavailable, **Licensee** may, on a temporary basis, use **Product** at any substitute location selected by **Licensee**.

**2. PAYMENT FOR LICENSE.** In consideration of **Licensee's** use of **Product** pursuant to the license granted herein and in consideration of **Software AG's** performance of its obligations hereunder, **Licensee** agrees to pay **Software AG** for all installations ordered and performed in accordance with the attached **Product Attachment(s)**.

If any payment (including lease payments) provided for herein shall remain unpaid for forty-five (45) days following the date upon which that payment is due, **Licensee** shall be deemed in default of this Article and license will be terminated. In addition, the amount of all remaining payments shall then be due and owing. Upon written notification of this termination, **Licensee** agrees to return to **Software AG** the **Product** and all related materials or **Software AG** may enter the premises where the **Product** is located and take possession of or disable any part or all of the **Product**, without demand or notice, without any court order or other processes of law and without liability for any damage occasioned by taking possession. In that event, **Licensee** agrees to reimburse **Software AG** for any reasonable expenses incurred in the collection of the remaining payments, including, but not limited to, attorney's fees.

**3. PAYMENT OF TAXES.** All local personal property, sales, use, excise taxes and/or any taxes based on gross revenue are the responsibility of the Licensee. If **Software AG** is held responsible for such taxes, **Licensee** agrees to indemnify **Software AG**.

**4. INSTALLATION OF PRODUCT.** **Software AG** agrees to install **Product** for use of **Licensee** at its designated location. Installation of **Product** shall consist of a version that will perform in accordance with the corresponding documentation of **Product**. Installation of **Product** shall include a demonstration of **Product** features and functions using the **Software AG** standard demonstration procedure on **Licensee's** computer system.

**Licensee** shall conduct acceptance tests of **Product** during the fifteen (15) days following the installation of **Product** by **Software AG**. If, during this acceptance period, **Licensee** finds that the **Product** does not correspond to the then current **Product** documentation, **Licensee** may cancel the requested installation at no cost to **Licensee**.

**5. TECHNICAL SERVICES.** **Software AG** agrees to provide, during the term of this Agreement, the following technical services at the specified location:

- **System Updates** — To supply any subsequent modification of **Product** to operate under new releases of the computer manufacturer's operating system specified in the **Product** Attachment(s);
- **Systems Versions** — To supply updated versions of **Product** which encompass improvements and other changes which **Software AG**, at its discretion, deems to be logical improvements or extensions of the original products supplied to **Licensee**;
- **Documentation** — To supply all updates of the basic **Product** documentation.

**Licensee** agrees to pay **Software AG** for these technical services in accordance with the then current Price Schedule.

In addition to the above, **Software AG** agrees to correct any **Product** system errors, if they arise, in a current version of **Product**.

Field technical support is provided, without additional charge, with system errors corrected as soon as solutions are available. Such solutions are grouped periodically into a System Modification (SM) and distributed to all installations. **Licensee** agrees to apply the SM as soon as reasonably possible.

**Software AG** agrees to notify **Licensee** in writing, ninety (90) days prior to removal of a version of **Product** from *current* status. At the end of the ninety (90) day period, **Software AG** is no longer responsible for maintenance of the no longer current **Product**. **Software AG** agrees that it will respond to **Licensee's** request for service within a reasonable time considering all of the circumstances at the time of the request, including the nature of the service required. Notwithstanding the foregoing, **Licensee** specifically agrees that if the error in the system or problem in the use thereof is determined by **Software AG** to be of user origin, **Licensee** will pay **Software AG** an additional fee to cover **Software AG's** time, material and expenses. Such fee shall be based on **Software AG's** then current standard Technical Assistance rates.

## **6. CONFIDENTIALITY.**

**6a. OF PRODUCT.** **Licensee** agrees that **Product**, together with all materials and knowledge related thereto obtained by **Licensee** shall be held in confidence and shall not be made available in any form for the use or benefit of any person or entity other than **Licensee**, without the express written consent of **Software AG**. Notwithstanding the foregoing, **Software AG** agrees that **Licensee** shall be permitted to disclose relevant aspects of **Product** to its employees and its agents to the extent that such disclosure is reasonably necessary to **Licensee's** use of **Product**, provided that **Licensee** shall take all reasonable steps to ensure that **Product** is not disclosed or duplicated in contravention of the provisions of this Agreement, by such employees or agents. **Licensee** shall not allow an attachment, levy, or execution upon or against the **Product**.

**6b. OF AGREEMENT.** **Licensee** further agrees not to discuss or reveal the terms and conditions of this Agreement with anyone other than (1) employees of **Licensee** who acquire knowledge of such terms and conditions in the ordinary course and scope of their employment and (2) agents (including underwriters of securities of **Licensee** and their counsel), consultants and advisors (including legal counsel, accountants and management consultants) whose assigned duties reasonably require that such disclosure to be made or the extent that such disclosure is reasonably necessary to **Licensee's** use of **Product**.

**6c. OF LICENSEE'S INFORMATION.** During the installation and subsequent support of **Product**, **Software AG's** employees and agents may be exposed to **Licensee's** proprietary and confidential information. **Software AG** agrees that its agents and employees will not use, nor disclose to third parties such proprietary information without prior written permission from **Licensee**. It is **Software AG's** policy for all of its officers, employees and agents to adhere to this confidentiality obligation. However, this obligation shall not apply to information which is: (1) readily available to the general public in the form as disclosed by **Licensee** without fault of **Software AG**; (2) actually and demonstrably known by **Software AG** before being obtained from **Licensee**; or (3) obtained or acquired by **Software AG** in good faith and not accompanied by an obligation of secrecy from a third party who has the same in good faith and is not under any obligation to **Licensee** in respect thereto. The provisions of 6a, 6b, and 6c shall in no way restrict any disclosure by either party (1) pursuant to (A) any law of the jurisdictions governing the installation location, (B) the order of any court or governmental agency, or (C) the rules or regulations of any governmental agency, or (2) if either party in its judgment determines that such disclosure is necessary in order to comply with, or avoid violation of, any of the foregoing.

**7. PERMISSION TO COPY PRODUCT AND RELATED MATERIALS.** Licensee agrees that it will not copy or in any way duplicate Product or any materials related thereto, in whole or part, except as expressly authorized to do so by this Agreement or by written consent of Software AG.

Software AG hereby expressly authorizes Licensee to copy for its own use, for archive or emergency restart purposes, or to replace worn copy, machine readable or printed portions of Product. However, no more than three printed copies may be in existence under this license at any time without prior written consent of Software AG. The original and any copies in whole or in part of Product which are made pursuant to this provision shall be the exclusive property of Software AG.

Licensee shall keep any such copies and the original thereof at Licensee's place of business, except that Licensee may store, transport, or transmit a copy of the original to another location for backup use when the location referred to herein is unavailable.

**8. MATERIALS DEVELOPED BY Software AG.** Licensee agrees that all training and procedural materials developed by Software AG, in conjunction with the installation of Product for use by Licensee shall be the property of Software AG. Licensee further agrees that additions and supplements to Product which may be developed for Licensee through the reimbursed or unreimbursed efforts of Software AG employees or its agents, whether or not in conjunction with Licensee's employees or agents, shall be the exclusive property of Software AG. Software AG hereby agrees that Licensee shall have the right, at no additional cost, to use in its own operations such training and procedural materials and such additions or supplements to Product developed in conjunction with or for Licensee.

**9. WARRANTIES.** Software AG hereby warrants:

(1) That Software AG has the right to grant to Licensee a license to use Product and to enter into this Agreement;

(2) That Product will perform as specified in accordance with the documentation for Product.

Licensee HEREBY EXPRESSLY AGREES AND ACKNOWLEDGES THAT THE FOREGOING WARRANTIES ARE IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, AN IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR USE.

(3) Software AG's sole responsibility under this warranty shall be either to repair, replace or correct, at its option, the Product.

(4) All above warranties are contingent upon proper use of the Product. These warranties will not apply if the Product has been modified by the Licensee or otherwise tampered with.

**10. LIMITATION OF Software AG's LIABILITY.** LICENSEE EXPRESSLY AGREES THAT SOFTWARE AG'S LIABILITY FOR ANY DAMAGES, EXCEPT THOSE ARISING FROM PATENT OR COPYRIGHT INFRINGEMENT AS PROVIDED HEREINAFTER, SHALL NOT EXCEED THE AMOUNT OF PAYMENTS MADE BY LICENSEE TO SOFTWARE AG PURSUANT TO SECTION 2 OF THIS AGREEMENT. LICENSEE FURTHER AGREES THAT SOFTWARE AG SHALL NOT BE LIABLE IN ANY EVENT FOR ANY DAMAGES INCURRED BY LICENSEE OR ANY OTHER PERSON AS A RESULT OF LICENSEE'S USE OR MISUSE OF PRODUCT, EVEN IF SOFTWARE AG HAD BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. NOR SHALL SOFTWARE AG BE LIABLE FOR ANY LOST DATA, LOST PROFITS OR FOR ANY CLAIM FOR DAMAGES BY OR AGAINST LICENSEE EXCEPT FOR A CLAIM OF PATENT OR COPYRIGHT INFRINGEMENT AS PROVIDED HEREINAFTER.

**11. INDEMNITY FOR PATENT OR COPYRIGHT INFRINGEMENT.** If any claim based upon alleged infringement of a patent or infringement of a copyright is asserted against Licensee by virtue of its use of Product, Software AG will indemnify Licensee in investigation of such claims, in preparation and in defense against such claims, or in settlement thereof, provided that Software AG shall have received from Licensee notice of said claim within five (5) days of the assertion thereof, and further provided that Software AG shall have the exclusive right, if it so chooses, to control and direct the investigation, the defense or the settlement of such claim, and further provided that Software AG shall receive the complete cooperation and assistance of Licensee.

**12. ACCESS TO PRODUCT SOURCE CODE.** For those parts of Product not provided to Licensee in source code form, Software AG has deposited with a third party the Product source code and full documentation to facilitate maintenance, modification, or correction of Product. The Custodial Agreement for Product delineates the conditions under which Licensee shall have access to this Product source code. A copy of this Custodial Agreement is available on request.

Software AG reserves the right to change the third party with which the Product source code has been deposited, providing the Licensee has been given ninety (90) days advance written notice.

**13. BREACH OF AGREEMENT BY LICENSEE.** In the event Licensee fails to comply with any of the provisions of Section 1, 3, 5, 6 and 7, Software AG, by

notice to **Licensee** as provided herein, will inform **Licensee** of the breach of Agreement and provide a description thereof. If **Licensee** fails to remedy the breach of Agreement within sixty (60) days from the date of notice to **Licensee**, **Software AG** may terminate the license granted by this Agreement and **Licensee** shall immediately thereafter return to **Software AG** the **Product** and all related materials. This relief for breach of the above-stated articles shall be in addition to, and shall in no way limit **Software AG** from pursuing whatever other relief it deems appropriate for such breach.

**14. SEVERABILITY.** If any provision of this Agreement other than Section 2 shall be held illegal, unenforceable, or in conflict with any law governing this Agreement, the validity of the remaining portions shall not be affected thereby.

**15. APPLICABLE LAW.** This Agreement shall be construed and enforced according to the laws of the jurisdiction governing the installation location.

**16. NOTICE.** All notices or communications given or sent to either party, except emergency requests for services, must be made by Certified Mail in a postage prepaid letter addressed as follows:

For **Licensee:** At **Licensee's** principal office or as noted in the Product Attachment(s)

For **Software AG:** **Software AG** of North America, Inc.  
11800 Sunrise Valley Drive  
Reston, Virginia 22091

Either party shall notify the other in writing as to any change in address. Any such notice or communication so deposited will be deemed to have been given to the addressee on the date upon which the return receipt is executed by the party to be notified.

**17. CONSCIENCE OF AGREEMENT.** This Agreement, including the attachments hereto, constitutes the complete Agreement between the parties and supersedes all previous communications, representations, or agreements, either written or oral, with respect to the subject matter hereof. No modification or amendment of this Agreement will be binding on either party unless acknowledged in writing by their duly authorized representatives.

This Agreement not binding until accepted by **Software AG**.

**Licensee**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**Software AG of North America, Inc.**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_