

AMERICAN WATER SYSTEM

CUSTOMER INFORMATION SOFTWARE COMMITTEE

PROJECT REPORT

DECEMBER 15, 1995

Submitted By:

**D. P. BICKERTON
T. L. CARPENTER
D. P. LIPPERT**

**AMERICAN WATER SYSTEM
CUSTOMER INFORMATION SOFTWARE COMMITTEE**

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ADDENDA

Cost Analysis

J. D. Edwards

Orcom

Dun & Bradstreet Reports

J. D. Edwards

Orcom

Consultant's Report

**AMERICAN WATER SYSTEM
CUSTOMER INFORMATION SOFTWARE COMMITTEE**

PROJECT REPORT

Final Project Update

The American Water System Customer Information Software Committee has proceeded with its review of potential vendor software packages by conducting more detailed research of the two remaining candidates: Orcom Systems and J.D. Edwards. This evaluation included on-site visits to utilities where the software packages are in use, site visits to corporate headquarters, and more specific study and comparison of the products.

Package Comparison

Dedicated to the utility industry for more than 20 years, with 150 clients, Orcom has already developed an excellent, functional system that would meet or exceed American's core business needs. Their package features an understanding of state regulations and the ability to handle multiple states. However, the committee is concerned about Orcom's limited size and resources, and their timetable for implementing a client-server package.

J.D. Edwards, in contrast, has significant resources, and dedication to establishing a visionary presence in the utility market. This would allow American to customize a CIS package to fit its needs, using existing hardware. They are working to move to a client-server package, and their CIS package would interact with their accounting software to provide a seamless, integrated system. However, their lack of experience with the utility industry, limited functionality, difficulty in handling multiple states, and high dependence on American during a relatively long development process may make J.D.Edwards' package more of a challenge to implement.

Supporting Documentation

Included in the following report are several supporting documents:

- **Information System Comparative Analysis:** comparing each vendor's company background, package features (functionality, ease of use, integration with other business needs, technical capabilities), and expected requirements from American for implementation.
- **Client Listings:** for both Orcom and J.D. Edwards.
- **Cost Analysis:** comparing the application, implementation, development, maintenance, hardware, data migration, and project management costs involved with Orcom and with J.D.Edwards.
- **Dun & Bradstreet Reports:** business information reports presenting credit ratings and general financial status for both Orcom and J.D. Edwards.
- **Consultant's Report:** detailing Charles Day's recommendation, based on his assumption that American considers as priorities immediate replacement of the current system and extensive knowledge of the water utility industry. Under those assumptions, Mr. Day recommends the Orcom package for American.

Conclusion

In summary, both Orcom and J.D.Edwards offer innovative solutions to American's CIS needs, but in very different ways. The committee therefore recommends further cost and business analyses of these two products before American commits to one vendor.

THIS REPORT WAS PREPARED BY THE CORE COMMITTEE MEMBERS - DANIEL P. BICKERTON, DIRECTOR CUSTOMER RELATIONS/WV AMERICAN; THERESA L. CARPENTER, DIRECTOR CUSTOMER RELATIONS/NJ AMERICAN; AND DEBORAH P. LIPPERT, DIRECTOR CUSTOMER RELATIONS/PA AMERICAN - WITH SIGNIFICANT INSIGHT AND CONTRIBUTIONS FROM JAMES M. CURLEY, IS DIRECTOR/NJ AMERICAN. THE CORE COMMITTEE WOULD LIKE TO THANK ALL THOSE INVOLVED FOR THEIR INVALUABLE CONTRIBUTIONS TO THIS PROJECT.

J.D. EDWARDS

COMPANY OVERVIEW

J.D. Edwards has a strong, technical foundation, a visionary view of the market and a clearly identified path to the client-server world. They have taken their technical expertise in financial accounting software and applied the same theories and practices to their customer service package.

Their corporate culture is similar to the American System's. They have substantial resources and should be able to install more than one site at a time. They can provide adequate help desk support and technical resources and have a strong presence among their corporate partners, such as IBM.

J.D. Edwards is committed to establishing a presence in utility customer information systems; however, that presence is not there now. They do not have expertise in the utility industry or even a solid, basic understanding of the water utility industry. An example of their limited knowledge of the utility industry is their lack of understanding of such common elements as rate analysis and unit of measure conversions.

J.D. EDWARDS CIS PACKAGE

Their CIS package has three versions. A company can run one version entirely or parts of all three versions simultaneously.

1. Standard Customer Information System - This software package runs on PCs or terminals and has the typical "green screen" look (similar to the current EDIS screens).
2. "World Vision" Customer Information System - This package runs only on PCs. It is the Standard package with a Graphical User Interface and provides some other enhancements, such as arranging the presentation of fields on a screen to meet a specific user's needs.
3. *"One World" Customer Information System - This is a client-server version of J.D. Edwards' Standard package. It runs only on PCs and provides the full benefits of client-server technology including stored triggers and events, object-oriented code, and inherent business rules.

*Limitations: The CASE tool used by J.D. Edwards is their proprietary tool. If J.D. Edwards were no longer in the market, American would not have support for their CIS package or for the tools to maintain the package.

The "One World" product will only run on Windows NT or Windows '95.

The current Standard CIS package does not contain the functionality contained in EDIS. Only an estimated 50% of the core requirements are currently in place. The other 50% would

have to be developed. J.D. Edwards is looking to partner with strong utility companies to further develop their utility knowledge.

The missing functionality means a longer time to release the product to the market. However, the opportunity to partner would help ensure that American can get many of its requirements built into the system, because, in such an arrangement, J.D. Edwards would be willing to add to or enhance the core package, and has committed to provide all the functionality required to meet regulatory requirements within its base package. This would require a fairly substantial requirement analysis, planning, development, and testing phase. Planning and developing is estimated at 18 months before the first site could be implemented. It would also require extensive American personnel resources to help design and test procedures during this phase. Although the personnel resources would have to be determined at the implementation planning phase, it would probably require CIS and IS resources from all state corporations and the region.

RELATED CLIENT BACKGROUND AND EXPERIENCE

The current CIS package will be rolled out at New Jersey Natural Gas and Connecticut Water Company. The first live site will be New Jersey Natural Gas on June 1, 1996. This will be the Standard and "World Vision" versions of the CIS software.

New Jersey Natural Gas chose J.D. Edwards primarily because they wanted a one-vendor solution for all their applications including CIS, Financial and Accounting, Human Resources, Payroll and Purchasing. After reviewing CIS packages during 1993, New Jersey Natural Gas could not find a CIS package that contained all the functionality of their old system. They decided to use J.D. Edwards financials and partner with J.D. Edwards to develop a CIS package from scratch. The development of this CIS package took approximately two years. New Jersey Natural Gas could cost-justify this approach because, upon project completion, they could retire their mainframe computer and use less costly AS/400s, and they could reduce their information system staff from 48 people to 36 people to support a 355,000 customer base. These cost savings can not be expected at American since most locations have no mainframe computers and have considerably smaller staffs.

Since the CIS project was developed by J.D. Edwards with input from New Jersey Natural Gas, the package does not have many of the features required for water utilities such as multi-dimensional rate structures. They are currently making changes to fit the water utility requirements of Connecticut Water and expects to go live with Connecticut Water Company by January 1, 1997. J.D. Edwards does not expect to roll out the "One World" client-server version of the CIS software until the Standard version is stable, and all other product offerings are fully client-server.

WHY J.D. EDWARDS?

The lack of expertise in the utility industry may have people wondering how J.D. Edwards is even a finalist in the selection process. They are a finalist because their current product, even without all the necessary functionality, has: a relational database, a data dictionary, CASE tools, a solid plan to transition to client-server, and significant infrastructure to support American. It is also a solution that would allow every American location to utilize their existing hardware.

They are starting to build third party partnerships that will provide paths to GIS, remote computing, computerized service orders, etc. They have the company size and strength to influence vendors such as Intergraph and ESRI (GIS, AM/FM forms). Also, using the CIS package in conjunction with the J.D. Edwards accounting software would provide a truly seamless, integrated system with single points of entry for data and automatic updating of accounting systems.

Also, in the long run, J.D. Edwards' corporate culture and their experience with a variety of business clients, rather than municipalities, would yield more innovative solutions to help American anticipate and meet the unique challenges of a private utility.

ORCOM

COMPANY OVERVIEW

Orcom's business plan and mission are focused totally on meeting the needs of the utility industry. They have more than 20 years of experience working with the utility industry, and their expertise is apparent in their presentations and discussions that have highlighted some of the major features of their customer information system. They have approximately 150 investor-owned and municipal clients; however, most of their clients are smaller in size than the American system and most of their larger customers are in the gas and electric business.

Orcom's small size and their overall corporate climate make them culturally different from the American System. They do not appear to have significant resources, and we have concerns about Orcom's abilities to handle the implementation of multiple sites at the same time.

ORCOM'S CIS PACKAGE

Their CIS package contains a high level of functionality. It is a high quality system that would meet or exceed American's core business needs. They are familiar with multiple states running on one computer. One of their clients, United Cities Gas, has five AS/400 locations supporting 10 states. Some other important features included in their package are:

- Utility-defined field labels and screens
- Customer contact system
- Movement through system by group or user-defined PATHS
- Notepad by customer, premise, or meter
- Program exits for third party code

Orcom currently has two versions of their customer information system:

1. Standard Customer Information System - This package runs on PCs or terminals and has the typical "green screen" look (similar to the current EDIS screens)
2. Mirror Pond CIS - This package runs only on PCs. It is the standard package with a Graphical User Interface (GUI/400) and some other enhancements to provide some of the benefits of working in a Windows environment. This version is new, with the first site going on-line in the first quarter of 1996.

Orcom realizes that client-server computing is the direction of the future but has not made a decision as to the tools they will use to develop and support a true client-server package. They are currently evaluating C++ and PowerBuilder. Both packages are widely known languages within the computer industry. There are many competitive vendors who could program and support these languages. The president of Orcom expects to have a true client-server product in the market within three years, although at present there is no planned path or schedule.

Orcom has developed supporting modules to the CIS package. These packages are using client-server technology. Orcom's business analysis system uses the Cognos PowerPlay software to provide an executive information system for upper management. A subsidiary of Orcom, Myraid Corporation, has developed a client-server imaging and electronic filing system to complement the CIS package. They are partnered with Group One to handle the mail processing aspects of the billing system.

Orcom appears to be a very conservative firm as far as software development and implementing new technical products. They rely heavily on established user groups to promote product enhancements. The CIS package provides for integration and has significant flexibility. The package provides a very functional replacement of EDIS and all the new technical advances that EDIS does not provide. However, there is no substantial integration into other areas of the water utility industry, such as production, distribution, and work management. For example, on our site visit to Southern California Water, we saw a scheduling system being used for service orders. This system utilized Microsoft Office and not the CIS package, so the clerk had to enter information twice; a duplication of labor to be avoided. Orcom is currently working on a scheduling enhancement, due in January 1997.

RELATED CLIENT EXPERIENCE

Southern California Water Company chose Orcom due to its functionality and as a major client has benefited from the modifications that Orcom has made to the system to meet the needs of California's second largest investor-owned water company. The water company was able to install the system for eight districts serving 22 sites in a relatively short period.

The Southern California Water Company conversion was performed in a six month time frame. Orcom also modified approximately 25% of their base code to meet Southern California's requirements within a one-year time frame. Southern California Water Company, which handles 240,000 water and 20,000 electric customers, seemed pleased with the level of support and maintenance that Orcom provides.

WHY ORCOM?

With its functionality and flexibility, the Orcom package is truly the best CIS package on the market. It is a utility-based product with features to meet regulations in virtually all of the states in which American has subsidiaries. Their product offers a relational database, data dictionary, screens and labels to be defined by the client, a strong customer contact system and ease of use as well as the highest level of functionality available in a CIS package. With installation of the Orcom package, all of the existing hardware at American's subsidiaries could be effectively used. Clearly, the strongest advantage this established, workable package offers is its accessibility and the ability to have it installed at the first site in approximately six to eight months from final purchase agreements. Also, it is important to note that Southern California Water Company has effectively interfaced the Orcom package with J.D. Edwards' Accounting and Financial package. They are satisfied that the integration was possible without exhaustive resources and with little or no difficulties.

J.D. EDWARDS AND ORCOM COMPARISON SUMMARY

	J.D. Edwards	Orcom
Current Focus	Entering utility arena	Utility specific
Utility Knowledge	Limited	Extensive
Utility Installed Base	1st client on 1/1/96	150 clients
Current Functionality	Limited	Extremely Functional
% of American Needs that are in current package	50%	90%
Package currently meets most state regulations	No	Yes
Maintain separate history of customers, premises, & meters	Yes	Yes
Handle multiple states	Not easily	Yes
Control of master tables	Easy	Easy
Setup of rate tariffs	Fairly Complex	Easy
Movement thru System	CIS & WO Workbench	PATHS
Standard CIS package	Standard CIS - "green-screen"	Standard CIS - "green-screen"
GUI-version of Standard	World Vision CIS	Mirror Pond CIS
Client-Server	One World CIS	has not decided on tools yet
Server Hardware	AS/400	AS/400
Relational Database	DB2/400	DB2/400
Data Dictionary	Yes	Yes
Standard Language	RPG/400	RPG/400
Stable Platform	Yes	Yes
Support Current Hardware throughout American System	Yes	Yes
Tight System Security	Yes	Yes
Third Party Integration	Starting to building relationships	Relationships currently exist
Ability of American to Influence the CIS product	Strong	Moderate
Resource Availability	Significant	Limited
Technical Expertise	High	Moderate
Committed to Client-Server	Yes	Yes
Clear Path to Client-Server	Yes, "One World"	No, still evaluating tools
Risk Factor	High	Low
Time Required to Market	Eighteen Months	Eight Months
American Resources Required	Significant	Low to Moderate

JDE Reference Subset
Financial/Job Cost

<u>Company</u>	<u>Name</u>	<u>Title</u>	<u>Phone</u>	<u>No. of Customers</u>
Arizona Electric	Joe Leingang	Controller	(520) 586-5385	90,000
Citizens Utilities	Jo Getchen	IS Director	(520) 753-4051	75,000
Connecticut Water Company (Installation in Process)	Bert Lenz	Treasurer	(203) 669-8630	60,000
Contra Costa Water	Leroy Prouty	IS Director	(510) 688-8000	400,000
Equitable Resources	Ray Durken	IS Director	(412) 442-3000	245,000
New Jersey Natural Gas	John Huff	IS Director	(908) 938-1001	350,000
Southern California Water	Don Bowcut	Project Manager	(909) 394-3707	260,000
Wheelabrator Technologies	Ernie Botte	IS Director	(603) 929-3411	

OrCom Systems Reference Subset
Financial/Job Cost

<u>Company</u>	<u>Name</u>	<u>Title</u>	<u>Phone</u>	<u>No. of Cust</u>
Barbados Water Authority	Oneil Brathwait	Financial Controller	(809) 427 – 3990	80,000
Clay Electric Cooperative, Inc	Derryl Cone	IS Director	(904) 473 – 4911	116,000
Columbus Waterworks	Emory Blount	Comptroller	(404) 322 – 5471	55,000
Cumberland EMC	Carl Wilson	Manager Financial Services	(615) 645 – 2481	63,000
Delta Natural Gas Company	Larry Curtis	Data Processing Manager	(606) 744 – 6171	33,000
Jackson Utility Division	Jim Watson	Customer Service Manager	(901) 422 – 7260	28,200
K N Energy Inc	Bill Gillette		(303) 763 – 3320	230,000
Niagara Mohawk Suburban Gas	George Arno		(315) 460 – 3241	5,000
Northern States Power Company	Tom Kerestes	IS Manager	(715) 839 – 2424	275,000
Nova Scotia Power Inc	Tom Ross	CIS Project Manager	(902) 428 – 6221	411,000
Penn Fuel Gas, Inc	Stephen Pye		(610) 932 – 6541	70,000
Roanoke Gas Company	Bobby Wells	DP Manager	(703) 344 – 6651	50,000
Sam Houston Electric Cooperative	Kyle Kuntz	Ass't Gen Manager	(409) 327 – 5711	60,000
San Jose Water Company	Dana Drysdale	DP Manager	(408) 279 – 7977	60,000
Southern California Water Company	David Hefler	MIS Director	(909) 394 – 3609	260,000
United Cities Gas	Bill Guy	MIS	(615) 373 – 0104	275,000

The "Summary of Costs" information for the J.D.Edwards package is unavailable, as this company wishes to cost their software as an integrated package. This would include the CIS software and Financial Accounting. In order to separate these costs, they would be quoting 2/3 of the amount of the total package. It is to our advantage to have both of these areas integrated and the costs finalized for the entire package.

JDEdwards

December 12, 1995

Ms. Deborah P. Lippert
Director Customer Relations
Pennsylvania - American Water Company
300 Gallery Road
McMurray, PA 15317-4290

Dear Debbie:

Thank you for the time and effort that you and your evaluation committee have invested in evaluating J. D. Edwards & Company. Your team has been exceptional in its attitude and efforts in challenging us to provide the best possible solution for American Water.

In seeking to provide the best possible solution we are unable to respond directly to your request for information describing a stand-alone Customer Information System. Our ability to provide American Water with a best-of-breed solution depends upon the high degree of integration between our CIS and F&A applications. For this reason we are requesting the opportunity to respond with a proposal for a fully integrated CIS/F&A solution to a joint committee of your CIS and F&A project leaders.

It is our mission as a solution provider to help American Water meet its business objectives rapidly, economically and predictably. We believe that a combined CIS/F&A solution offers unique advantages to American Water.

As a company we have built a strong record of success over the past eighteen years. We currently serve over 3,000 customers worldwide through an employee base of over 2,100 people located in 45 domestic and international JDE offices.

25 Burlington Mall Road
4th Floor
Burlington, Massachusetts 01803
+1 617 270 7800 Telephone
+1 617 238 0444 Facsimile

Our company has a strong tradition of success in the production and delivery of quality products and services. We are unique in the software industry in that we have achieved the following recognition:

- ISO 9001 Certification: Software Design, Training, Support, Documentation
- IBM Mark of Quality (1993, 1994)
- IBM International Rightsizing Award (1994)
- 11 Buyers Choice Awards (1992, 1993, 1994)
- Malcolm Baldrige Finalist (1995)

We have a published implementation methodology which we have used in over 2,000 implementations. Our domestic infrastructure of training centers and consultants maintains direct offices in 20 locations within North America. We have implemented JDE solutions in more than one quarter of the Fortune 1000. Seven of Forbes "Ten Most Admired" companies have implemented JDE software.

We believe the following factors will have significant effect on American Water's Return on Investment over time.

- Interface/Integration: JDE's enterprise solution is fully integrated. Integration allows complete, on-line, up-to-date access to company wide data. American Water will achieve significant cost avoidance by eliminating the need for the creation and maintenance of custom interfaces between multiple software products (CIS/F&A) as vendors provide disparate releases over time.
- Implementation: Proven implementation methodology supported by single vendor infrastructure of over 2,100 employees. American Water achieves cost avoidance of incurring two separate implementation projects per implementation site.
- Software Maintenance: JDE Maintenance Support provides product releases/enhancements every 12 to 18 months. JDE will spend more than 35 million dollars on Research and Development in 1996. As JDE software evolves through time, American Water's investment will appreciate. Each of American Water's operating company's will maintain a similar, flexible, enterprise solution. American Water will achieve cost avoidance of maintaining two products with different release and update schedules, at eight sites, through time.

- Client/Server Technology: JDE provides American Water the opportunity to migrate to Client/Server technology at a conservative, defined pace. Operating companies will have the choice of implementing traditional green screen, AS/400 Graphical User Interface (GUI) or distributed object oriented technologies. The solution allows each operating company to implement either AS/400 or Client/Server technology (or a combination of both) as requirements and benefits dictate. This solution produces the cost avoidance of American Water having to standardize on either an AS/400 exclusive or a Client/Server exclusive environment
- Single Vendor Support: 24 Hour Response Line provides single point of contact and problem resolution for entire American Water enterprise solution

Again, thank you for the time that you and your team have invested. Based on the work of our two teams we are confident that a joint partnership would be extremely successful. We are committed to providing the most effective solution available to the Investor Owned Water Utility marketplace.

Sincerely,



Jeff Gleason
Account Executive

CC: Glenn Smith, Account Executive
Bob Siniscalchi, Business Unit Manager
Dave Girard, Vice President & General Manager - Eastern Area
Mike Iiams, Vice President of Strategic Relationships
Doug Massingill, Executive Vice President - World Wide Operations

Proposal Description

J. D Edwards & Company requests the opportunity to propose an integrated, enterprise solution to American Water Works Company consisting of integrated Customer Information System, Core Financials, Capital Projects Management and Maintenance, Materials Management and Human Resources Management.

We seek a development partnership with American Water to enhance our Customer Information System to make it the best-of-breed offering for the Investor Owned Water Utility Marketplace

We envision two levels of CIS Development Partnership in response to American Water's request for descriptions of two scenario's. We see significant advantage to a company wide, long-term, partnership with American Water which we would reflect in an enhancement allowance to be included in response to Scenario II

Scenario I : Single Site Implementation

JDE will modify it's Customer Information System to address waste water and all state regulatory requirements necessary for American Water to operate in Pennsylvania

Scenario II. Total Company Installation

JDE will modify it's Customer Information System to address waste water and all state regulatory requirements necessary for American Water to operate in any state in which it does business. In seeking a development partnership with American Water we agree to include an enhancement allowance of \$1,400,000 to address product enhancements and additions as defined by American Water.

Implementation Planning Study. To produce a reliable and predictable budget we request a joint implementation planning session (IPS) involving American Water's Project Teams, JDE Client Services Manager (Mike Murphy), and JDE Branch Manager (Bob Siniscalchi). This planning session would utilize JDE's published implementation methodology to identify total resource requirements for a successful and predictable implementation.

In the absence of a joint Implementation Planning Session we will provide a total project implementation estimate upon request

Summary of Costs - Scenario 1 (Pennsylvania)

ORCOM SYSTEMS' SOFTWARE

Customer Information and Billing	\$ 567,473	
Contact Management System	\$ 113,495	
Service Orders	\$ 56,747	
Meter Reading Interface Software	\$ 18,916	
Code 1 Software Interface	\$ 25,000	
Equifax Credit Reporting Interface	\$ 25,000	
Rate Studies	\$ 18,916	
Utility-Defined Screen Facility	\$ 94,579	
Special Equipment	\$ 94,579	
Equipment Test Screen Facility	\$ 9,458	
Myriad Recall 2000 (20 User License)	\$ 22,995	
Myriad Electronic Filing System (20 User License)	\$ 29,495	
OrCom Business Analysis System (20 User License)	\$ 50,000	
GUI/400 Graphical User Interface (223 Licenses)	\$ 68,431	
GUI/400 Developers Kit	\$ 10,000	
Total OrCom Systems' Software		\$ 1,205,084

LASER LIBRARY HARDWARE

Laser Library System Hardware (Hardware for one Myriad Recall 2000 and Myriad Electronic Filing System)	\$39,074	
Total Estimated Laser Library Hardware		\$ 39,074

Summary of Costs

IMPLEMENTATION SERVICES

Estimated Project Management Services (2,000 hours billable at \$125 per hour, per person)	\$ 250,000
Estimated Conversion (750 hours billable at \$125 per hour, per person)	\$ 93,750
Estimated Pre-Installation (300 hours billable at \$100 per hour, per person)	\$ 30,000
System Studies (1,000 hours billable at \$100 per hour, per person)	\$ 100,000
System Set Up (500 hours billable at \$100 per hour, per person)	\$ 50,000
Estimated Modifications (1,000 hours billable at \$125 per hour, per person)	\$ 125,000
Estimated Core Group Training (1,000 hours billable at \$85 per hour, per person)	\$ 85,000
Estimated End User Training (600 hours billable at \$85 per hour, per person)	\$ 51,000
Estimated Follow Up Training (250 hours billable at \$85 per hour, per person)	\$ 21,250
Total Estimated Implementation Services	\$ 806,000

Summary of Costs

Total Proposed Cost	\$ 2,050,158 =====
OrCom Software Extended Support Fee	\$ 180,763
(15% of the total OrCom Software Cost, billed annually. Does not include modifications. Please see Extended Support for details)	
OrCom Software Premium 24-Hour Extended Support	\$ 216,915
(18% of the total OrCom Software Cost, billed annually. Does not include modifications. Please see Extended Support for details)	

Summary of Costs - Scenario 2 (Total Company)

ORCOM SYSTEMS' SOFTWARE

Customer Information and Billing	\$1,500,000	
Contact Management System	\$ 300,000	
Service Orders	\$ 150,000	
Meter Reading Interface Software	\$ 50,000	
Code 1 Software Interface	\$ 25,000	
Equifax Credit Reporting Interface	\$ 25,000	
Rate Studies	\$ 50,000	
Utility-Defined Screen Facility	\$ 250,000	
Special Equipment	\$ 250,000	
Equipment Test Screen Facility	\$ 25,000	
Myriad Recall 2000 (20 User License)	\$ 22,995	
Myriad Electronic Filing System (20 User License)	\$ 29,495	
OrCom Business Analysis System (20 User License)	\$ 50,000	
GUI/400 Graphical User Interface (1,123 Licenses)	\$ 344,761	
GUI/400 Developers Kit	\$ 10,000	
Total OrCom Systems' Software		\$ 3,082,251

LASER LIBRARY HARDWARE

Laser Library System Hardware (Hardware for one Myriad Recall 2000 and Myriad Electronic Filing System)	\$39,074	
Total Estimated Laser Library Hardware		\$ 39,074

Summary of Costs

IMPLEMENTATION SERVICES

Estimated Project Management Services (4,000 hours billable at \$125 per hour, per person)	\$ 500,000
Estimated Conversion (2,500 hours billable at \$125 per hour, per person)	\$ 312,500
Estimated Pre-Installation (500 hours billable at \$100 per hour, per person)	\$ 50,000
System Studies (1,000 hours billable at \$100 per hour, per person)	\$ 100,000
System Set Up (1000 hours billable at \$100 per hour, per person)	\$ 100,000
Estimated Modifications (4,000 hours billable at \$125 per hour, per person)	\$ 500,000
Estimated Core Group Training (3,000 hours billable at \$85 per hour, per person)	\$ 255,000
Estimated End User Training (1,100 hours billable at \$85 per hour, per person)	\$ 93,500
Estimated Follow Up Training (500 hours billable at \$85 per hour, per person)	\$ 42,500
Total Estimated Implementation Services	\$ 1,953,500

Summary of Costs

Total Proposed Cost	\$ 5,074,825
OrCom Software Extended Support Fee	\$ 462,338
(15% of the total OrCom Software Cost, billed annually. Does not include modifications. Please see Extended Support for details)	
OrCom Software 24-Hour Extended Support	\$ 554,805
(18% of the total OrCom Software Cost, billed annually Does not include modifications. Please see Extended Support for details)	

Revised Pricing - American Water Works

Proposed Applications

We have proposed the following Business Application Software:

- Customer Information and Billing
- Service Orders
- Contact Management System
- OrCom Electronic Meter Reading Software Interface
- OrCom/Code 1 Address Validation Software Interface
- OrCom Equifax Credit Reporting Software Interface
- Rate Studies
- Utility-Defined Screen Facility
- Utility-Defined Menu Facility
- Special Equipment
- Equipment Test Screen Facility
- Myriad Recall 2000
- Myriad Electronic Filing System
- OrCom Business Analysis System
- Graphical User Interface/400

Our **Customer Information/Utility Billing System** is a complete system that maintains water, sewer and related services for your customers. Our package includes a credit history tracking system, a bad debts system, deposit tracking, on-line cashiering, budget billing, collections tracking, bank drafting, and a meter inventory. The Customer Information/Utility Billing System is fully integrated with the other proposed systems.

Service Orders offers a fast, convenient way to record service requirements for meter connects, disconnects, change outs and other service work. Our system will facilitate scheduling, print the service orders, and automatically update the Customer Billing System and Meter Inventory, saving time and redundant data entry.

The **Contact Management System** will allow you to define various call types and track all customer contacts. Based on the call type, letters or service orders can be generated automatically. Managers can track types of calls being received and help ensure a consistent response. The system was designed with one of our utility clients to improve communications with their consumers and provide measurement data for their quality program.

Revised Pricing - American Water Works

The **OrCom Electronic Meter Reading Interface** provides an integrated link between your hand-held devices and OrCom's Customer Information System.

The **OrCom/Equifax Credit Reporting Interface** provides an integrated link between Equifax and OrCom's Customer Information/Utility Billing System. Please note, additional hardware, software and service fees need to be purchased from Equifax.

The **OrCom/Code 1 Interface** provides an integrated link between the OrCom Customer Master Database with the Code 1 Postal Database.

Our **Rate Studies System** uses historical data from our Customer Information System to analyze the effects of potential rate changes.

The **Utility-Defined Screen Facility** allows our clients to add entire screens of information to their database. Additionally, validation tables and on-line help can be added to any field you have defined, allowing our software to be adapted to many specific information tracking requirements.

The **Utility-Defined Menu System** allows our clients to set up and maintain their own menus. Each menu can have up to 99 options, and options from existing OrCom menus or other third party software applications can be easily added to these menus. Menu option and user security is included.

The **Special Equipment System** allows you to track individual pieces of equipment such as backflow devices. Each piece of equipment is assigned an identification number. Using this unique identification, a purchase, installation and repair history of each item can be tracked.

The **Equipment Test Screen Facility** allows utilities to determine the test data they wish to capture on each type of Special Equipment. For each type of special equipment, the utility can define specific test data and maintain a perpetual historical record. This system eliminates the need for custom programming if additional testing requirements are added, or if existing test data changes.

Revised Pricing - American Water Works

Windows-based **Recall 2000** allows any computer generated report, such as the billing register, cash edits, meter reading edits and purged customer histories to be downloaded to PC based optical disks. The optical media eliminates the need for microfiche and/or storage of printed reports. Each optical cartridge will hold approximately 180 cases of computer paper. Once on optical media, information can be searched, retrieved and printed quickly.

Using the same optical hardware utilized by Recall 2000, the Windows-based **Electronic Filing System** scans and stores document images (easements etc.) to optical media. The powerful Optical Character Recognition (OCR) module enables documents to be automatically archived by the printed text on the document page. In addition to paper documents, electronic files and fax files can also be processed by the EFS system.

The **Business Analysis System** incorporates Cognos **Impromptu** and **PowerPlay** products to provide desktop reporting tools. Impromptu expedites your business decisions by using the detail stored in your databases to create compelling reports. PowerPlay gives managers high-speed, graphical navigation of the reports and allows them to view the information from different angles.

GUI/400 provides a graphical user interface to OrCom's applications and AS/400 data. GUI/400 passes the DDS from AS/400 screens and allows substantial control for tailoring the look and feel of the graphical user interface.

Revised Pricing - American Water Works

I. CIS Solution

Billing:

The Utility Billing component of OrCom's Customer Information System provides extensive capabilities. The system is designed to accommodate both utility-specific and non-utility specific charges. Features include:

- Unlimited services and meters are accommodated.
- Multiple language sets are supported.
- Summary billing.
- Billing can be cycle driven, route driven or one-time.
- Unlimited detailed billing history is stored on-line.
- Unlimited deposits, penalties and contracts are supported.
- Cancel-rebill is available for any previous billing period.
- Field level security.

Deposits:

The OrCom Customer Information System accommodates and can track unlimited deposits.

Auto letter/notice generation:

Letters and notices can be generated easily using the OrCom Customer Information System. During the credit and collections process, unlimited notices can be generated by the system. Makeup and number of notices may vary by individual company.

Letters can be generated using third party word processors or the Customer Information System. If necessary, data fields from the Customer Information System can be automatically merged into a letter to provide personalized content.

Revised Pricing - American Water Works

Service Orders:

Our Service Order System provides extensive functionality related to service work. Service Orders can be generated on-line and dispersed to various remote service centers. Scheduling of service order time and crew is provided. As part of our Mobile Computing project, service orders will be routed electronically to the appropriate crews in the field. In addition our Contact Management System has the ability to automatically generate a service order based on a customer call type.

Non-pay Collections

Complete tracking of credit and collections is provided. Each customer is automatically given a utility-defined credit rating. This rating can be defined to determine cash only customer, bankrupt customers etc. The credit rating will feed an on-line status window to alert the CSR of a customer's credit worthiness. Unlimited third party notifications are provided. The system can be interfaced with outbound calling systems for collection of delinquent funds.

Meter Management:

The OrCom Customer Information System provides extensive on-line meter tracking. Test information, history, location information and comments are tracked.

Work scheduler:

As part of our Service Order System, time and crew scheduling functionality is provided. In the future, our mobile computing project, will provide additional scheduling and dispatching features. Pricing is not yet available for the OrCom Mobile Computing System.

Revised Pricing - American Water Works

Customer Contact Management:

The OrCom Contact Management System provides an unlimited history of customer contacts with the utility. A CSR can review both closed and pending contacts. Contacts can be viewed by account or by CSR. Each contact is time, date and user stamped. Updates to customer contacts are also time and date stamped. Contacts can be transferred to other CSR's or manager. Based on contact type, various actions can occur such as generation of a service order or generation of correspondence.

Rates and Rate Studies:

The OrCom Customer Information System provides for an unlimited number of rates. A different rate per day is supported if necessary. Rates can be defined for various states and municipalities and are utility-defined based on specific requirements.

In the event AWC want to perform "what if" analysis with rates, both our Rate Studies system and our Business Analysis system provide this type of functionality.

Equipment maintenance tracking:

The OrCom Special Equipment System allows you to track individual pieces of equipment such as backflow devices. Each piece of equipment is assigned an identification number. Using this unique identification, a purchase, installation and repair history of each item can be tracked.

The OrCom Equipment Test Screen Facility allows utilities to determine the test data they wish to capture on each type of Special Equipment. For each type of special equipment, the utility can define specific test data and maintain a perpetual historical record. This system eliminates the need for custom programming if additional testing requirements are added, or if existing test data changes.

Revised Pricing - American Water Works

Graphical User Interface (GUI Format)

The OrCom Customer Information System utilizes GUI/400, a graphical user interface which provides a "Windows"-like look and feel for end users. Full mouse "point and click" support is provided, and standard CUA compliant functions keys can also be used.

When using the GUI/400 Developers kit, each field in the base system can be moved or deleted from the GUI panel to allow tailoring of GUI screens. In addition, each field literal or description within the Customer Information System is user-defined and can be changed to fit AWC terminology and business practices.

User Defined Screens:

The OrCom Utility-defined Screen Facility provides users the ability to define entire screens of information that may not be captured in the base OrCom system. These screens can be interspersed seamlessly into the base system. User defined help can be added to describe the new screens. In addition each field littoral or description within the Mirror Pond Customer Information System is user defined. This provides AWC the ability to define labels based on AWC terminology and business practices.

Revised Pricing - American Water Works

Third Party Interfaces:

OrCom has extensive experience integrating our Customer Information System to other third-party applications. Our technical personnel and programmers have worked effectively with personnel from other companies to plan and build necessary bridges, be it interactive or batch.

External systems that our Customer Information System interface with include:

- Various Third-Party Financial Accounting Systems
- OrCom Financial Accounting Systems
- Group 1 Code 1 Address Validation Software
- Equifax Credit Reporting System
- Phone Notification Systems
- Interactive Voice Response Unit
- Myriad Recall 2000 Optical Archiving System
- Myriad EFS Optical Imaging System
- Itron and various other Meter Reading Applications
- UTC Cashiering Workstations
- Ithica Receipt Printers
- Various UNIX workstations
- Milsoft Engineering System
- Cognos Impromptu Graphical Query Tool
- Cognos PowerPlay Executive Information System
- NCR and Unisys Remittance Processors
- ESRI ArcView AM/FM System

For the future we have plans to integrate:

- OrCom Mobile Computing System
- Backflow Device Test Tracking System

1. Hand held meter reading devices.

OrCom is a distributor of Itron Meter Reading Equipment. We have provided interfaces to various Itron, Radix and Schlumberger meter reading technologies. As part of our price proposal, we have included prices associated with interfacing to existing AWC meter reading technologies.

Revised Pricing - American Water Works

2. Mailing address/postage/carrier route software.

OrCom is a distributor of Group 1 Code 1 Address Validation Software and we have integrated our applications with the Code 1 software. As part of our proposal we have included pricing associated with interfacing to existing AWC Code 1 Address Validation Software.

3. Mobile Computing.

A future OrCom project, scheduled for completion in the third quarter of 1996 is mobile computing. We plan to provide the ability to have interactive devices in service vehicles. Our Service Order System will be enhanced to provide additional scheduling and dispatching functionality. The system will have the ability to interact with a geographic-based mapping system for instant identification of AWC's service vehicles. The OrCom Mobile Computing System will provide clients the flexibility to use various DOS or Windows based devices utilizing various communication methods. Pricing is not yet available for the OrCom Mobile Computing System.

4. GIS (ESRI AM/FM Integration).

OrCom utilizes ESRI's ArcView system to provide AM/FM integration to third party GIS systems. We would need a better understanding of AWC requirements in order to quote necessary integration.

5. Digitized Mapping.

OrCom does not provide map digitizing services. OrCom utilizes ESRI's ArcView system to provide AM/FM integration to third party GIS systems.

6. Computer, telephony.

The OrCom Customer Information System can be interfaced with a variety of telephony applications to provide phone number and account number identification. IBM Call Path/400 is one product that could be used. OrCom will be happy to interface to the product (s) chosen by AWC for inbound and outbound call functions. We would need a better understanding of AWC requirements in order to quote necessary integration.

Revised Pricing - American Water Works

7. Financials/Accounting software (GL, AP, PO, HR Payroll, FA, CPR).

Interfaces to the financial accounting software system chosen by AWC will be necessary. OrCom can design, write and maintain the necessary interfaces. Typical interfaces include a General Ledger cash and revenue interface and an interface to accounts payable for refund check processing. Once OrCom has a better understanding of the selected financial accounting system, we can provide integration estimates.

8 & 9. Imaging Technology/Optical disk retrieval system.

In 1990 OrCom Systems developed several Client/Server optical archiving products. These products were first released in a DOS environment and operated on stand-alone personal computers connected to the AS/400 and interfaced with OrCom's utility applications. These products used personal computers and optical disk drives to manipulate large reports and other documents in pursuit of a paper-less environment.

OrCom's mission is to serve the needs of the utility industry exclusively. As OrCom identified markets for these products outside the utility industry, we organized a separate corporation, Myriad, Inc. Myriad has updated the Laser Library Products as Windows applications functioning on networks and with multi-platter optical disk storage devices (jukeboxes). These products are platform independent.

Myriad's Recall 2000 is an Optical Archiving System which operates in the Windows environment using an Optical Disk storage device. Recall 2000 will allow a variety of computers to download reports to a personal computer based optical drive. The system allows for the equivalent of approximately 300 cases of paper to be stored on each optical cartridge. Large reports, purged customer history, billing registers and financial reports are accessible to client PC's for retrieval and printing.

Myriad's Electronic Filing System (EFS) is a Windows-based product which uses the same optical hardware used by Recall 2000. EFS stores document images (easements, letters etc.) to optical media. The powerful Optical Character Recognition (OCR) module enables documents to be automatically archived by the printed text on the document page. In addition to paper documents, electronic fax files can also be processed by the EFS system.

Revised Pricing - American Water Works

10. Cash receipt/scanning system.

Multiple methods of revenue can be accepted such as cash, check, split payments, money orders etc. Payment is recognized by the system as soon as the CSR enters the information. Payments can be allocated to various services based on utility-defined criteria. Payments can be accepted manually, electronically or through the use of bar code devices remittance processors and lock boxes. If necessary receipts can be printed.

II. Implementation Hours & Costs

Please refer to the attached cost summary's for a breakdown of implementation hour and cost estimates. We have provided implementation estimates for both scenarios. Our plan assumes installing one site initially which will uncover a majority of the issues for all sites. If business process flows and user works functions are similar from company to company, progressively less implementation services will be required for the remaining seven installations.

During the initial implementation stages of the project OrCom and AWC will discuss and identify roles and responsibilities. We are assuming a constant overall AWC core group will be available to assist in the implementation of all eight sites. Using this approach, consistent knowledge transfer can occur, thereby eliminating the need to "recreate the wheel" eight times. If this approach is not practical, we may be required to adjust our implementation and training estimates.

Scenario 1: We have estimated implementation services associated with a single installation in Pennsylvania. Please refer to Summary of Costs - Scenario 1 for detail.

Scenario 2: Estimates are provided for an eight company implementation. Please refer to Summary of Costs - Scenario 2 for detail.

Revised Pricing - American Water Works

III. Customization costs/hour

As part of our implementation estimate, we have included customization estimates. Hourly rate is \$ 125.

Scenario 1: We have proposed 1000 hours of programming as an initial estimate. Upon completion of a requirements definition, we can provide detailed modification estimates. Please refer to Summary of Costs - Scenario 1 for detail.

Scenario 2: We have proposed 4000 hours of programming as an initial estimate. Upon completion of a requirements definition, we can provide detailed modification estimates. Total company modification hours will be significantly reduced if a majority of modifications done for the first installation become consistent across all eight AWC companies. Please refer to Summary of Costs - Scenario 2 for detail.

IV. Training Hours and Costs.

After further discussion of your requirements, OrCom will provide a specific training plan tailored to your needs, including recommended training hours and number of trips required. The plan will be customized to meet the requirements of the various companies that make up AWC.

Scenario 1: We have enclosed training estimates for a core group, operations, technical and end-user personnel. Please refer to Summary of Costs - Scenario 1 for detail.

Scenario 2: Additional hours have been proposed to support training for all eight operating companies. Our assumption is a consistent AWC core group will be available to assist OrCom in an overall training plan. Our plan assumes economies of scale using previously trained AWC personnel to assist in training. Please refer to Summary of Costs - Scenario 2 for detail.

Revised Pricing - American Water Works

V. Annual Maintenance Costs.

Annual maintenance is included as part of OrCom's Extended Support Program. Extended Support includes:

- All software updates developed to enhance the OrCom software you have purchased.
- Response Line services for your software questions.
- A full warranty for all software purchased.

The cost of our Extended Support Program is 15% of software license fees for standard support and 18% for Premium 24 hour support. Please refer to Summary of Costs for detail.

VI. Annual Support Fees.

OrCom does not differentiate annual support and annual maintenance fees. Both annual support and maintenance are included as part of OrCom's Extended Support Program.

VII. Other Costs or Fees.

Please refer to attached OrCom's Rate Schedule. Travel, meal, lodging and associated costs are billed as incurred.

Revised Pricing - American Water Works

VIII. Comments.

OrCom is extremely excited to begin a partnership with American Water Works. We have priced our systems to give the entire company a 25% discount if all eight operating companies choose the OrCom System.

Our systems are extremely stable and market proven. A number of our clients have chosen OrCom instead of a custom development project for their Customer Information System. Reasons mentioned on why they choose not to pursue a development project include:

- Risk is unlimited with a development effort, risk can be managed with a packaged software solution.
- OrCom product is stable, it is not a development effort.
- Implementation schedule is much easier to maintain with packaged software.
- Development efforts run the risk of becoming highly customized.
- Future upgrades become increasingly more difficult to maintain during a development effort.
- A significant number of development efforts have been canceled because they exceeded original design scope and budget.

IX. Summary

OrCom has provided quality Customer Information System solutions since 1978. As utilities are our only business, we are acutely familiar with the intricacies of Customer Information Systems.

Over 125 utilities use our Customer Information System, including Southern California Water Company and San Jose Water Company. We have extensive experience in serving water utilities throughout the country.

The utility industry is in a period of rapid change, and OrCom has positioned itself to respond aggressively. Our future direction is continued integration with emerging technologies, other third-party applications, and development of new applications as dictated by our clients in the marketplace.

Revised Pricing - American Water Works

To improve customer service, we developed the OrCom Customer Contact System. By providing software to automate call centers, we have given our clients a powerful tool to improve their customer responsiveness.

As technology has evolved, OrCom has responded with utility-specific systems. OrCom was one of the first vendors to provide a complete optical archiving system, and we recently developed a Graphical User Interface and decision support software.

Current projects include developing a mobile based computing system for service personnel. Specific to water, we have partnered with San Jose Water Company to develop a Backflow Device Test Tracking System.

Our long-term strategy continues to be combining emerging technologies, the input of our clients, and OrCom's utility experience in partnership. This strategy has successfully enabled OrCom to identify market trends and position OrCom as an industry leader in the utility information systems industry.

EXHIBIT D --

OrCom Systems' Rate Structure

TRAINING

Training on Hardware, IBM Software and OrCom Software operation is billed at \$85 per hour, per person

PROJECT MANAGEMENT AND CUSTOM PROGRAMMING

Project Management, standard systems design, consulting and customized programming as requested are billed at \$125 per hour, per person. Programs to convert customer data to the OrCom Software are also billed at this rate.

ADVANCED TECHNICAL SERVICES AND BUSINESS ANALYSIS SERVICES

Clients are notified in advance of any projects requiring Advanced Technical Services. Such services include linking communications networks, PC networks or other complex projects requiring sophisticated technical skills. Systems integration issues and complex systems design problems require the services of an OrCom Business Analyst. Both Advanced Technical Services and Business Analysis Services are billed at \$145 per hour, per person.

TRAVEL EXPENSES

OrCom Systems bills to the Client our actual travel, meal and lodging expenses as incurred in conjunction with any support services.

PREMIUM EXTENDED SUPPORT

Annual Premium Extended Support cost is 18% of the total OrCom Software license fees purchased, plus 18% of the cost of software modifications. Under Premium Extended Support, Response Line is available 24 hours a day, seven days a week.

ADDITIONAL CHARGES

Equipment and products shipped by OrCom Systems are FOB Bend, Oregon. The charges are normally prepaid and added to your invoice.

Business Information Report™

For: Tom Bailey West Virginia American Water C	November 6, 1995 2:09 pm
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BUSINESS SUMMARY

J.D. EDWARDS & COMPANY (INC)	DUNS: 08-634-9982	RATING	4A2
8055 E TUFTS AVE STE 1331 AND BRANCH(ES) OR DIVISION(S) DENVER CO 80237 TEL: 303 488-4000	FINANCIAL AND BUSINESS APPLICATION COMPUTER SOFTWARE SIC NO. 7372	STARTED	1977
		SALES F	\$240,587,000
		WORTH F	\$33,964,000
		EMPLOYS	1731(685 HERE)
		HISTORY	CLEAR
CHIEF EXECUTIVE: C EDWARD MC VANEY, CHB-PRES			

CUSTOMER SERVICE

If you need any additional information, would like a credit recommendation, or have any questions, please call our Customer Service Center at (800) 234-3867 from anywhere within the U.S. From outside the U.S., please call your local D&B office.

SUMMARY ANALYSIS

The Summary Analysis section reflects information in D&B's file as of November 6, 1995.

RATING SUMMARY

The "4A" portion of the Rating (the Rating Classification) indicates that the company has a worth from \$10 million to \$50 million. The "2" on the right (Composite Credit Appraisal) indicates an overall "good" credit appraisal. This credit appraisal was assigned because of D&B's assessment of the company's financial ratios and its business experience.

Below is an overview of the company's D&B Rating(s) since 01/01/91:

RATING	DATE APPLIED
4A2	10/12/94
4A3	06/20/91
4A2	04/13/91
3A2	01/01/91

For: Tom Bailey
West Virginia American Water C

November 6, 1995
2:09 pm

PAYMENT SUMMARY

The Payment Summary section reflects payment information in D&B's file as of the date of this report.

The PAYDEX for this company is 63.

This PAYDEX score indicates that payments to suppliers average 20 days beyond terms, weighted by dollar amounts. When dollar amounts are not considered, approximately 75% of the company's payments are within terms.

Below is an overview of the company's dollar-weighted payments, segmented by its suppliers' primary industries:

	TOTAL RCV'D #	TOTAL DOLLAR AMOUNTS \$	LARGEST HIGH CREDIT \$	% W/IN TERMS %	DAYS SLOW				
					<31 %	31-60 %	61-90 %	91+ %	
Total in D&B's file	99	705,700	100,000						
Top 10 Industries:									
1 Air courier service	15	123,200	50,000	95	5	-	-	-	
2 Help supply service	6	14,300	10,000	100	-	-	-	-	
3 Mfg photograph equip	5	283,500	100,000	65	35	-	-	-	
4 Mfg computers	5	120,100	80,000	4	15	38	-	43	
5 Whol computers/softwr	5	32,500	30,000	7	-	93	-	-	
6 Whol office supplies	5	10,300	5,000	76	-	24	-	-	
7 Management consulting	4	8,400	7,500	55	45	-	-	-	
8 Nonclassified	2	27,500	25,000	100	-	-	-	-	
9 Arrange cargo transpt	2	7,750	7,500	100	-	-	-	-	
10 Newspaper-print/publ	1	20,000	20,000	-	100	-	-	-	
11 OTHER INDUSTRIES	46	57,550	7,500	80	19	1	-	-	

Other Payment Categories:

Cash experiences	0	0	0					
Payment record unknown	3	600	500					
Unfavorable comments	0	0	0					
Placed for collection								
with D&B	0	0						
other	0	N/A						

The highest "Now Owes" on file is \$100,000

The highest "Past Due" on file is \$7,500

Dun & Bradstreet has 99 payment experiences in its file for this company. For your convenience, we have displayed 80 representative experiences in the PAYMENTS section.

For: Tom Bailey
West Virginia American Water C

November 6, 1995
2:09 pm

PAYMENTS

REPORTED	PAYING RECORD	HIGH CREDIT	NOW OWES	PAST DUE	SELLING TERMS	LAST SALE WITHIN
	Antic - Anticipated	(Payments received prior to date of invoice)				
	Disc - Discounted	(Payments received within trade discount period)				
	Ppt - Prompt	(Payments received within terms granted)				
10/95	Ppt	7500	-0-	-0-	N30	1 Mo
	Ppt	5000	-0-	-0-	N30	6-12 Mos
	Ppt	1000	1000	-0-	N30	1 Mo
	Ppt	1000	1000	-0-	N30	1 Mo
	Ppt	500	-0-	-0-	N30	6-12 Mos
	Ppt	100	100	-0-	N30	1 Mo
	Slow 30	2500	-0-	-0-		6-12 Mos
09/95	Ppt	100000	50000			2-3 Mos
	Ppt	50000	50000	-0-		1 Mo
	Ppt	35000	35000	-0-		1 Mo
	Ppt	25000	2500	-0-		1 Mo
	Ppt	15000	15000	-0-		1 Mo
	Ppt	7500	-0-	-0-	N30	6-12 Mos
	Ppt	5000	2500	1000		1 Mo
	Ppt	5000	1000	-0-	N30	
	Ppt	5000	2500	-0-		1 Mo
	Ppt	2500	-0-	-0-		2-3 Mos
	Ppt	2500	2500	-0-	N30	
	Ppt	2500	-0-	-0-		6-12 Mos
	Ppt	1000	-0-	-0-	N30	4-5 Mos
	Ppt	1000	-0-	-0-	N30	2-3 Mos
	Ppt	1000	-0-	-0-	N30	6-12 Mos
	Ppt	1000	500	-0-	N30	1 Mo
	Ppt	1000	1000	-0-		1 Mo
	Ppt	750	500	-0-		
	Ppt	250	50	-0-	N30	
	Ppt	250	250	-0-		
	Ppt	250	250	-0-		1 Mo
	Ppt	250	50	-0-		1 Mo
	Ppt	250	-0-	-0-	N30	6-12 Mos
	Ppt	100	-0-	-0-	N30	1 Mo
	Ppt	100	-0-	-0-	N30	4-5 Mos
	Ppt	100	50	-0-	N30	1 Mo
	Ppt	100	50	-0-		
	Ppt	100	50	-0-	N30	1 Mo
	Ppt	100	-0-	-0-	N30	4-5 Mos
	Ppt	50	-0-	-0-		6-12 Mos
	Ppt	50	-0-	-0-		6-12 Mos
	Ppt	50	50	-0-	N30	
	Ppt	50	-0-	-0-		4-5 Mos
	Ppt-Slow 15	2500	1000	-0-		1 Mo
	Ppt-Slow 30	5000	5000	-0-		1 Mo
	Ppt-Slow 30	1000	-0-	-0-		4-5 Mos
	Ppt-Slow 30	1000	-0-	-0-		1 Mo

For: Tom Bailey West Virginia American Water C	November 6, 1995 2:09 pm
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PAYMENTS (continued)

	Ppt-Slow 30	1000	250			4-5 Mos
	Ppt-Slow 30	100	-0-	-0-		6-12 Mos
	Ppt-Slow 30	100	50	50		1 Mo
	Ppt-Slow 30	50	50	50	N30	1 Mo
	Ppt-Slow 60	250	-0-	-0-	N30	2-3 Mos
	Ppt-Slow 60	250	100	50		1 Mo
	Ppt-Slow 90	250	-0-	-0-	N30	1 Mo
	Ppt-Slow 120	2500	1000			2-3 Mos
	Slow 30	100000	100000			2-3 Mos
	Slow 30	2500	-0-	-0-	N30	4-5 Mos
	Slow 30	2500	-0-	-0-	N30	2-3 Mos
	Slow 30	50	-0-	-0-	N30	2-3 Mos
	Slow 60	30000	250	250	N30	4-5 Mos
	Slow 60	5000	5000	5000		
	Slow 60	2500	2500	250	N30	
	Slow 30-120	25000	7500	-0-	N30	1 Mo
	Slow 120	50	-0-	-0-		6-12 Mos
08/95	Ppt	2500	2500	-0-	N15	1 Mo
	Ppt	2500	1000	-0-	N15	1 Mo
	Ppt	2500	-0-	-0-	N30	6-12 Mos
	Ppt	1000	-0-	-0-	N30	6-12 Mos
	Ppt	500	-0-	-0-		6-12 Mos
	Ppt-Slow 30	7500	5000	2500	N15	1 Mo
	Ppt-Slow 90	250	-0-	-0-		4-5 Mos
	Slow 30	500	500	500	N30	1 Mo
07/95	Ppt	250	-0-	-0-	N30	2-3 Mos
	Ppt	100	-0-	-0-	N30	6-12 Mos
	Ppt	50	-0-	-0-	N30	6-12 Mos
	Ppt-Slow 30	10000	-0-	-0-	N30	1 Mo
	Slow 60	100	-0-	-0-	N30	4-5 Mos
06/95	Ppt	10000				4-5 Mos
	Ppt	750	100			2-3 Mos
	Ppt	250	-0-			2-3 Mos
	Slow 60	100				
03/95	Ppt	50	50	-0-		1 Mo
02/95	Ppt	50	-0-	-0-		6-12 Mos

* Payment experiences reflect how bills are met in relation to the terms granted. In some instances payment beyond terms can be the result of disputes over merchandise, skipped invoices etc.

* Each experience shown represents a separate account reported by a supplier. Updated trade experiences replace those previously reported.

For: Tom Bailey
West Virginia American Water C

November 6, 1995
2:09 pm

FINANCE

03/28/95	Fiscal Dec 31 1992	Fiscal Oct 31 1993	Fiscal Oct 31 1994
Curr Assets	60,524,169	67,070,774	103,097,000
Curr Liabs	56,418,997	59,361,671	86,021,000
Current Ratio	1.07	1.12	1.19
Working Capital	4,105,172	7,709,103	17,076,000
Other Assets	21,728,023	28,230,108	32,612,000
L T Liabs	13,252,584	15,926,774	15,724,000
Worth	12,580,611	20,012,437	33,964,000
Sales	170,480,072	197,901,059	240,587,000
Net Profit (Loss)		9,123,794	12,368,000
Fiscal statement dated OCT 31 1994:			
Cash	\$ 28,615,000	Accts Pay	\$ 18,306,000
Accts Rec	62,993,000	Unearned Revenue	29,827,000
Deferred Income		Accruals	32,479,000
Tax	4,609,000	Taxes	5,409,000
Prepaid	6,107,000		
Other Curr Assets	773,000		

Curr Assets	103,097,000	Curr Liabs	86,021,000
Fixt & Equip	17,148,000	Unearned Revenue	13,208,000
Software		Def. Credits/Income	2,516,000
Development Costs	13,288,000	COMMON STOCK	13,000
Deposits	2,176,000	ADDIT. PD.-IN CAP	8,431,000
		ADJUSTMENTS	(1,102,000)
		RETAINED EARNINGS	27,155,000
		TREASURY STOCK	(533,000)

Total Assets	135,709,000	Total	135,709,000
From NOV 01 1993 to OCT 31 1994 sales \$240,587,000; cost of goods sold \$222,412,000. Gross profit \$18,175,000. Other expenses \$104,000; net income before taxes \$18,071,000; Federal income tax \$5,703,000. Net income \$12,368,000.			
Statement received by mail MAR 03 1995. Extent of audit, if any, not indicated.			
--0--			
Fixed assets shown net less \$11,815,000 depreciation.			
On MAR 28 1995 Brad Hoffman, credit manager, referred to the above figures.			

PUBLIC FILINGS

The following data is for information purposes only and is not the official record. Certified copies can only be obtained from the official source.

*** UCC FILING(S) ***

FILING NO: 912030525

DATE FILED:

04/25/1991

For: Tom Bailey
West Virginia American Water C

November 6, 1995
2:09 pm

PUBLIC FILINGS (continued)

TYPE: Continuation
SEC. PARTY: FIRST INTERSTATE BANK NA, DENVER
CO
DEBTOR: J D EDWARDS & CO

LATEST INFO RECEIVED: 05/17/1991
ORIG. UCC FILED: 08/15/1986
ORIG. FILING NO: 872918492
FILED WITH: SECRETARY OF
STATE/UCC DIVISION,
CO

COLLATERAL: Inventory - Accounts receivable - Products - Proceeds - and OTHERS
FILING NO: 952023255
TYPE: Amendment
SEC. PARTY: FIRST INTERSTATE BANK OF, DENVER
CO
ASSIGNEE: FIRST INTERSTATE BANK OF DENVER,
DENVER, CO
DEBTOR: J D EDWARDS & COMPANY

DATE FILED: 03/28/1995
LATEST INFO RECEIVED: 05/09/1995
ORIG. UCC FILED: 08/15/1986
ORIG. FILING NO: 872918492
FILED WITH: SECRETARY OF
STATE/UCC DIVISION,
CO

COLLATERAL: Inventory - Accounts receivable - Products - Proceeds - and OTHERS
FILING NO: 952023255
TYPE: Assignment
SEC. PARTY: FIRST INTERSTATE BANK OF, DENVER
CO
ASSIGNEE: FIRST INTERSTATE BANK OF DENVER,
DENVER, CO
DEBTOR: J D EDWARDS & COMPANY

DATE FILED: 03/28/1995
LATEST INFO RECEIVED: 05/09/1995
ORIG. UCC FILED: 08/15/1986
ORIG. FILING NO: 872918492
FILED WITH: SECRETARY OF
STATE/UCC DIVISION,
CO

COLLATERAL: Specified Proceeds - Specified Computer equipment
FILING NO: 91122710
TYPE: Original
SEC. PARTY: IBM CREDIT CORP, STAMFORD, CT
DEBTOR: JD EDWARDS & CO, HOUSTON, TX

DATE FILED: 06/24/1991
LATEST INFO RECEIVED: 07/10/1991
FILED WITH: SECRETARY OF
STATE/UCC DIVISION,
TX

COLLATERAL: Specified Proceeds - Specified Business machinery/equipment
FILING NO: 754977
TYPE: Original
SEC. PARTY: XEROX CORP, DALLAS, TX
DEBTOR: EDWARDS, JD & CO, ATLANTA, GA

DATE FILED: 03/13/1991
LATEST INFO RECEIVED: 04/17/1991
FILED WITH: FULTON COUNTY
SUPERIOR COURT, GA

COLLATERAL: Leased Proceeds - Leased Computer equipment
FILING NO: 910230011
TYPE: Original
SEC. PARTY: XL/DATACOMP INC, HINSDALE, IL
DEBTOR: EDWARDS, J D & CO, HERNDON, VA

DATE FILED: 02/20/1991
LATEST INFO RECEIVED: 04/02/1991
FILED WITH: SECRETARY OF THE
COMMONWEALTH/UCC
DIVISION, VA

FILING NO: 910520387
TYPE: Assignment
SEC. PARTY: XL/DATACOMP INC, HINSDALE, IL
ASSIGNEE: CITICORP LEASING INC, HARRISON,
NY
DEBTOR: J D EDWARDS & CO, HERNDON, VA

DATE FILED: 05/13/1991
LATEST INFO RECEIVED: 06/24/1991
ORIG. UCC FILED: 02/20/1991
ORIG. FILING NO: 910230011
FILED WITH: SECRETARY OF THE
COMMONWEALTH/UCC
DIVISION, VA

For: Tom Bailey
West Virginia American Water C

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PUBLIC FILINGS (continued)

COLLATERAL: Leased Proceeds - Leased Computer equipment	DATE FILED: 02/14/1991
FILING NO: 9101307	LATEST INFO RECEIVED: 03/04/1991
TYPE: Original	FILED WITH: COBB COUNTY SUPERIOR COURT, GA
SEC. PARTY: XL/DATACOMP INC, HINSDALE, IL	
DEBTOR: EDWARDS, J D & CO, ATLANTA, GA	
COLLATERAL: Leased Proceeds - Leased Computer equipment	DATE FILED: 12/10/1990
FILING NO: 1375010	LATEST INFO RECEIVED: 12/27/1990
TYPE: Original	FILED WITH: SECRETARY OF STATE/UCC DIVISION, NJ
SEC. PARTY: XL/DATACOMP INC, HINSDALE, IL	
DEBTOR: EDWARDS, J D & CO, EAST RUTHERFORD, NJ	
COLLATERAL: Specified Computer equipment including proceeds and products	DATE FILED: 06/13/1994
FILING NO: 1435545	LATEST INFO RECEIVED: 08/12/1994
TYPE: Original	FILED WITH: SECRETARY OF STATE/UCC DIVISION, WI
SEC. PARTY: CITICORP LEASING INC, HARRISON, NY	
DEBTOR: JD EDWARDS & CO, MILWAUKEE, WI and OTHERS	
FILING NO: 1444586	DATE FILED: 07/25/1994
TYPE: Assignment	LATEST INFO RECEIVED: 08/12/1994
ASSIGNEE: CITICORP LEASING INC, HARRISON, NY	ORIG. UCC FILED: 06/13/1994
DEBTOR: JD EDWARDS & CO, MILWAUKEE, WI and OTHERS	ORIG. FILING NO: 1435545
	FILED WITH: SECRETARY OF STATE/UCC DIVISION, WI
COLLATERAL: Specified Computer equipment including proceeds and products - Specified Machinery including proceeds and products - Specified Equipment including proceeds and products	DATE FILED: 09/07/1993
FILING NO: 932066046	LATEST INFO RECEIVED: 09/14/1993
TYPE: Original	FILED WITH: SECRETARY OF STATE/UCC DIVISION, CO
ASSIGNEE: IBM CREDIT CORPORATION, STAMFORD CT	
DEBTOR: J D EDWARDS & COMPANY	
COLLATERAL: Specified Computer equipment including proceeds and products - Specified Equipment including proceeds and products	DATE FILED: 03/11/1992
FILING NO: 1264119	LATEST INFO RECEIVED: 04/09/1992
TYPE: Original	FILED WITH: SECRETARY OF STATE/UCC DIVISION, WI
SEC. PARTY: XL/DATACOMP INC, HINSDALE, IL	
DEBTOR: J D EDWARDS AND CO, MILWAUKEE, WI	
COLLATERAL: Leased Computer equipment including proceeds and products	DATE FILED: 12/26/1990
FILING NO: 1171342	LATEST INFO RECEIVED: 05/08/1991
TYPE: Original	FILED WITH: SECRETARY OF STATE/UCC DIVISION,
SEC. PARTY: XL/DATACOMP INC, HINSDALE, IL	
DEBTOR: J D EDWARDS & CO, MILWAUKEE, WI	

For: Tom Bailey
West Virginia American Water C

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PUBLIC FILINGS (continued)

WI

FILING NO:	1184276	DATE FILED:	03/04/1991
TYPE:	Assignment	LATEST INFO RECEIVED:	04/30/1991
SEC. PARTY:	XL/DATACOMP INC, HINSDALE, IL	ORIG. UCC FILED:	12/26/1990
ASSIGNEE:	CIRCLE BUSINESS CREDIT INC, INDIANAPOLIS, IN	ORIG. FILING NO:	1171342
DEBTOR:	J D EDWARDS & CO, MILWAUKEE, WI	FILED WITH:	SECRETARY OF STATE/UCC DIVISION, WI

There are additional UCC's in D&B's file on this company available by contacting 1-800-DNB-DIAL.

The public record items contained in this report may have been paid, terminated, vacated or released prior to the date this report was printed.

BANKING

09/95 Account(s) averages low 4 figures. Account open under 1 year.

HISTORY

03/28/95

C EDWARD MC VANEY, CHB-PRES
ROBERT C NEWMAN, V PRES

JACK L THOMPSON, V PRES
RICHARD E ALLEN, V PRES-FIN-
TREAS-ASST-SEC

RICK SNOW, SEC-GEN COUNSEL
DIRECTOR(S): THE OFFICER(S)

Business started Mar 1977. 96% of capital stock is owned by officers and employees. 4% of capital stock is owned by outside investors.

No other employee other than the listed officers owns 10% or more of the capital stock.

C EDWARD MC VANEY born 1940. 1958-62 University of Nebraska, Lincoln, NE, student. 1962-64 Rutgers University, New Brunswick, NJ, Masters. 1964-70 Peat Marwick & Mitchell & Co, Denver, CO. 1970-77 Alexander Grant & Co, Denver, CO, CPA. 1977 to present active here daily and continues.

JACK L THOMPSON born 1949. 1967-70 Montana State University, Missoula, MT, student. 1970-71 Billings Business College, Billings, MT, student. 1971-72 Humble Oil Co, Cutbank, Montana, computer operator-programmer. 1972-75 Trans Western Life Insurance Co, Billings, MT, manager. 1975-76 National Farmers Union, Denver, CO, programmer analyst. 1976-77 Alexander Grant & Co, Denver, CO, consultant. 1977 to present active here daily and continues.

ROBERT C NEWMAN born 1941. 1958-62 University of California, Berkeley, CA, student. 1962-64 UCLA, Los Angeles, CA, Masters.

For: Tom Bailey
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HISTORY (continued)

1964-73 North American Co, Phoenix, AZ, industrial engineer. 1973-77 Haskins & Sells, Denver, CO, management. 1977-78 Newman Markum Associates, Denver, CO. 1978 to present active here daily and continues.

RICHARD E ALLEN born 1957. Graduated in 1979 from Colorado State University, Fort Collins, CO. 1979-81 employed by Coopers & Lybrand, Denver, CO. 1981-85 employed by Luff Exploration Corp, Denver, CO. 1985 to present active here.

JAN ZAPAPAS born 1955. 1990 to present active here. 1986-90 employed by Fischer Imaging Corporation, Denver, CO. 1985-86 employed by Skyswitch Communications Co, Denver, CO. 1977-85 employed by Arthur Andersen, Denver, CO. Graduated from Purdue University, Lafayette, IN in 1977 with a BS in Industrial Engineering.

RICK SNOW born 1945. Active here since 1988. 1984-88 employed by Global Software, Raleigh, NC as corporate counsel. 1977-84 employed by Storage Technology, Louisville, CO as corporate counsel. 1973-77 employed by Time Share, Inc, Cupertino, CA as assistant corporate counsel. 1970-73 employed by Memorex Corporation, Santa Clara, CA as assistant corporate counsel. 1966-70 attended California Western University, San Diego, CA graduating with a JD degree. Graduated in 1966 from the University of California, Berkeley, CA with a BS degree.

OPERATION

03/28/95 Designs, develops, markets and supports financial and business application software for mid-range computers (100%). Service terms are net 30 days and original installations require a down-payment with a portion on delivery and the balance in accordance with the terms of the contract. Has 2,500 account(s). Sells to commercial concerns, distributors and end users. Territory: International; 28% of annual sales on international basis. International terms are the same as domestic terms. The business experiences a sales peak in December and June; steady the rest of the year. Some or all of the operations at this location have been registered to the international quality system standard--ISO 9001.

EMPLOYEES: 1731 which includes officer(s). 685 employed here.

FACILITIES: Leases 100,000 sq. ft. in fourteen story steel and glass building. Premises neat. The business occupies the 6th, 7th, 8th, 9th, 11th, 12th, 13th and 14th floors of the building.

LOCATION: Suburban business section on main street.

BRANCHES: The company maintains branch operations in the following countries and cities. Operations and name are the same as headquarters.

----INTERNATIONAL OFFICES----

Belgium, Brussels;. London, England; Paris, France; Frankfurt, Germany; Milan, Italy; Tokyo, Japan, Singapore, Hong Kong and Sao Paulo.

----BRANCH LOCATIONS----

Atlanta, Boston, Charlotte, Chicago, Cincinnati, Cleveland, Coral

For: Tom Bailey
West Virginia American Water C

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OPERATION (continued)

Gables, Costa Mesa, Dallas, Detroit, Denver, fort Lauderdale, Houston, Miami Milwaukee Minneapolis, Montreal, New York, Norwalk, Philadelphia, Phoenix, Pittsburgh, Portland, Richmond, Sacramento, St Louis, San Francisco, Seattle, Tampa, Toronto, Washington D C and Vancouver.

GLOBAL ACTIVITY.

The following section is a global summary and is intended to assist D&B's non-U.S. customers when evaluating D&B reports on U.S. companies.

FAMILY TREE SUMMARY.

D&B's global linkage file shows branches for this company are located in England (1), France (1), Germany (1), Italy (1), Japan (1), Hong Kong (1), Canada (1).

IMPORT/EXPORT ACTIVITY.

Not Reported.

Based on information in our file, D&B has assigned this company an extended 8 digit SIC. D&B's use of 8 digit SICs enables us to be more specific to a company's operations than if we use the standard 4 digit code.

73729901 Business Application Software.

GLOBAL NEWSWORTHY EVENTS.

None reported.

11-06(491 /491) 00000 067067067 H
BANK: First Interstate Bank, 633 17th St, Denver, CO 80202

-- END OF REPORT --

For: Tom Bailey
West Virginia American Water C

November 6, 1995
2:09 pm

A GUIDE TO UNDERSTANDING D&B RATINGS AND PAYDEX™

D&B RATING KEY - ONE OF THREE RATINGS WILL BE DISPLAYED

1. CAPITAL AND CREDIT- An overall appraisal of a company's size and credit worthiness as assigned by a D&B Analyst.

Rating Classification

(based on financial statement)

5A	\$50,000,000 and over
4A	\$10,000,000 to \$49,999,999
3A	\$1,000,000 to \$9,999,999
2A	\$750,000 to \$999,999
1A	\$500,000 to \$749,999
BA	\$300,000 to \$499,999
BB	\$200,000 to \$299,999
CB	\$125,000 to \$199,999
CC	\$75,000 to \$124,999
DC	\$50,000 to \$74,999
DD	\$35,000 to \$49,999
EE	\$20,000 to \$34,999
FF	\$10,000 to \$19,999
GG	\$5,000 to \$9,999
HH	up to \$4,999

(based on employees)

1R	10 or more employees
2R	less than 10 employees

Composite Credit Appraisal

1 = High	2 = Good
3 = Fair	4 = Limited

Note: Capital and Credit Ratings consist of two parts. The first two characters (i.e. '3A' or '1R') are an indication of company size based on a current financial statement (Fiscal or Interim) or the number of employees (if current financial information is not in file). The third character is the Composite Credit Appraisal: an assessment of creditworthiness based on key credit information including payment activity, years in business and public filings.

2. EMPLOYEE RANGE DESIGNATION- A designation, based on number of employees, which is assigned to firms in particular lines of business for which D&B does not provide a Capital and Credit Rating (e.g. banks, insurance companies).

<u>Rating</u>	<u># of Employees</u>	<u>Rating</u>	<u># of Employees</u>
ER1	1,000 or more	ER5	20 to 49
ER2	500 to 999	ER6	10 to 19
ER3	100 to 499	ER7	5 to 9
ER4	50 to 99	ER8	1 to 4
		ERN	Not Available

3. -- (THE BLANK SYMBOL) Should not be interpreted as indicating that credit should be denied. It simply means that the information available to D&B does not permit us to classify the company with our rating key and that further inquiry should be made before reaching a credit decision.

KEY TO D&B PAYDEX™

The Dun & Bradstreet Paydex is a dollar-weighted numerical score that gives you an overview of a company's payment habits as reported to D&B. The larger the debt, the more it influences the composite Paydex score.

<u>Paydex</u>	<u>Payment Pattern</u>	<u>Paydex</u>	<u>Payment Pattern</u>
100	Anticipates	50	Slow to 30 days
90	Discount	40	Slow to 60 days
80	Prompt	30	Slow to 90 days
70	Slow to 15 days	20	Slow to 120 days
		UN	Unavailable Information

Business Information Report™

Page 2 of 9

For: Tom Bailey
West Virginia American Water C

November 6, 1995
1:46 pm

BUSINESS SUMMARY

ORCOM SYSTEMS INC	DUNS: 09-229-0204	RATING	3A2
1001 SW DISK DRIVE	PROVIDES BUSINESS	STARTED	1974
BEND OR 97702	ORIENTED COMPUTER	SALES F	\$12,062,492
TEL: 541 389-0120	SOFTWARE & WHOL	WORTH	\$1,350,415
	COMPUTERS AND	EMPLOYS	127
	COMPUTER	HISTORY	CLEAR
	PERIPHERALS	FINANCING	SECURED
		FINANCIAL	
	SIC NOS.	CONDITION	GOOD
	7372 5045		

CHIEF EXECUTIVE: STEVEN GERLICHER, PRÉS

CUSTOMER SERVICE

If you need any additional information, would like a credit recommendation, or have any questions, please call our Customer Service Center at (800) 234-3867 from anywhere within the U.S. From outside the U.S., please call your local D&B office.

SUMMARY ANALYSIS

The Summary Analysis section reflects information in D&B's file as of November 6, 1995.

RATING SUMMARY

The Rating was changed on June 15, 1995 because D&B's analysis of the financial statement supports a higher Rating. The "3A" portion of the Rating (the Rating Classification) indicates that the company has a worth from \$1 million to \$10 million. The "2" on the right (Composite Credit Appraisal) indicates an overall "good" credit appraisal. This credit appraisal was assigned because the payment information in D&B's file indicates that this company's obligations are retired satisfactorily and because of D&B's "good" assessment of the company's December 31, 1994, fiscal financial statement.

Below is an overview of the company's D&B Rating(s) since 01/01/91:

RATING	DATE APPLIED
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For: Tom Bailey West Virginia American Water C	November 6, 1995 1:46 pm
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SUMMARY ANALYSIS (continued)

3A2	06/15/95
2A3	06/10/94
2A2	06/11/92
2A3	05/14/92
2A1	01/01/91

PAYMENT SUMMARY

The Payment Summary section reflects payment information in D&B's file as of the date of this report.

The PAYDEX for this company is 79.

This PAYDEX score indicates that payments to suppliers average 2 days beyond terms, weighted by dollar amounts. When dollar amounts are not considered, approximately 95% of the company's payments are within terms.

Below is an overview of the company's dollar-weighted payments, segmented by its suppliers' primary industries:

	TOTAL RCV' D #	TOTAL DOLLAR AMOUNTS \$	LARGEST HIGH CREDIT \$	% W/IN TERMS %	DAYS SLOW				
					<31 %	31-60 %	61-90 %	91+ %	
Total in D&B's file	15	63,700	15,000						
Top 10 Industries:									
1 Whol computers/softwr	3	17,500	7,500	86	14	-	-	-	
2 Short-trm busn credit	2	30,000	15,000	100	-	-	-	-	
3 Air courier service	2	5,050	5,000	100	-	-	-	-	
4 Ret building material	1	1,000	1,000	100	-	-	-	-	
5 Misc publishing	1	1,000	1,000	100	-	-	-	-	
6 Arrange cargo transpt	1	1,000	1,000	100	-	-	-	-	
7 Mfg computers	1	250	250	100	-	-	-	-	
8 Trucking non-local	1	250	250	100	-	-	-	-	
9 Whol electrical equip	1	100	100	100	-	-	-	-	
10 Ret mail-order house	1	50	50	100	-	-	-	-	
Other Payment Categories:									
Cash experiences	0	0	0						
Payment record unknown	1	7,500	7,500						
Unfavorable comments	0	0	0						
Placed for collection with D&B	0	0							

For: Tom Bailey
West Virginia American Water C

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PAYMENT SUMMARY (continued)

other	0	N/A
The highest "Now Owes" on file is \$10,000		
The highest "Past Due" on file is \$ 0		
D&B receives over 220 million payment experiences each year. We enter these new and updated experiences into D&B Reports as this information is received.		

PAYMENTS

Antic	- Anticipated	(Payments received prior to date of invoice)				
Disc	- Discounted	(Payments received within trade discount period)				
Ppt	- Prompt	(Payments received within terms granted)				
REPORTED	PAYING RECORD	HIGH CREDIT	NOW OWES	PAST DUE	SELLING TERMS	LAST SALE WITHIN
10/95	Ppt	250	-0-	-0-		6-12 Mos
09/95	Ppt	15000	10000	-0-		1 Mo
	Ppt	15000	-0-	-0-		6-12 Mos
	Ppt	7500	7500	-0-		1 Mo
	Ppt	7500	100	-0-	N30	1 Mo
	Ppt	1000	750	-0-	N30	1 Mo
	Ppt	1000	1000	-0-	1 10 Prox	1 Mo
	Ppt	1000	250	-0-	N30	1 Mo
	Ppt	100	50	-0-	N30	1 Mo
	Slow 30	2500	50	-0-		1 Mo
	(011)	7500	7500	-0-		1 Mo
	First sale.					
08/95	Ppt	5000	2500	-0-	N15	1 Mo
07/95	Ppt	250	-0-	-0-	N7	6-12 Mos
	Ppt	50	-0-	-0-	N30	2-3 Mos
06/95	Ppt	50	-0-	-0-		6-12 Mos
* Payment experiences reflect how bills are met in relation to the terms granted. In some instances payment beyond terms can be the result of disputes over merchandise, skipped invoices etc.						
* Each experience shown represents a separate account reported by a supplier. Updated trade experiences replace those previously reported.						

For: Tom Bailey West Virginia American Water C	November 6, 1995 1:46 pm
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FINANCE

05/15/95	Fiscal Dec 31 1992	Fiscal Dec 31 1993	Fiscal Dec 31 1994
Curr Assets	1,675,624	2,514,999	2,306,785
Curr Liabs	1,130,914	2,159,799	1,819,471
Current Ratio	1.48	1.16	1.26
Working Capital	544,710	355,200	487,314
Other Assets	314,529	500,806	933,561
L T Liabilities	0	0	70,460
Worth	859,239	856,006	1,350,415
Sales	8,129,303	9,515,950	12,062,492
Net Income	656,670	367,723	1,167,022
Fiscal statement dated DEC 31 1994:			
Cash	\$ 577,098	Accts Pay	\$ 595,006
Accts Rec	1,623,155	Notes Pay	547,199
Inventory	34,197	Accruals	628,844
Advances To Employees	64,543	L.T. Liab-(1yr)	48,422
Prepaid	7,792		

Curr Assets	2,306,785	Curr Liabs	1,819,471
Fixt & Equip	487,865	L.T. Liab-Other	70,460
Research & Development Costs	445,696	COMMON STOCK	20,000
		RETAINED EARNINGS	1,330,415

Total Assets	3,240,346	Total	3,240,346
From JAN 01 1994 to DEC 31 1994 sales \$12,062,492; cost of goods sold \$9,068,066. Gross profit \$2,994,426; operating expenses \$1,846,016. Operating income \$1,148,410; other income \$34,167; other expenses \$15,555. Net income \$1,167,022.			
Submitted by Suzanne Cramer, controller. Prepared from statement(s) by Accountant: Trimble & Everton, CPA's, Bend, OR.			
ACCOUNTANTS OPINION: A review of the accountant's opinion indicates the financial statements meet generally accepted accounting principles and that the audit contains no qualifications.			
--0--			
. BALANCE SHEET EXPLANATIONS			
L T Liabilities: due to bank secured by equipment.			
. INCOME STATEMENT EXPLANATIONS			
Other Income: interest income.			
Other Expenses: interest expense.			
On MAY 11 1995 Suzanne Cramer, controller, deferred all information.			
. ANALYST COMMENTS			
Liquid assets to current liabilities are 1.21 to 1 as of Dec 31 1994. The median for this industry is 1.5 to 1 as of May 11 1995. Liquid assets to current liabilities were .82 to 1 as of Dec 31 1993. Total liabilities to worth are 139% as of Dec 31 1994. The median for this industry is 109% as of May 11 1995. Total liabilities to worth are 252% as of Dec 31 1993.			

For: Tom Bailey
West Virginia American Water C

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PUBLIC FILINGS

The following data is for information purposes only and is not the official record. Certified copies can only be obtained from the official source.

* * * UCC FILING(S) * * *

COLLATERAL: All Inventory including proceeds and products - All Account(s) including proceeds and products - All General intangibles(s) including proceeds and products - All Contract rights including proceeds and products

FILING NO:	R71988	DATE FILED:	09/10/1993
TYPE:	Original	LATEST INFO RECEIVED:	10/04/1993
SEC. PARTY:	WESTERN BANK, BEND, OR	FILED WITH:	SECRETARY OF
DEBTOR:	ORCOM SYSTEMS INC		STATE/UCC DIVISION, OR

COLLATERAL: Specified Account(s) including proceeds and products - Specified General intangibles(s) including proceeds and products - Specified Contract rights including proceeds and products

FILING NO:	R29563	DATE FILED:	10/22/1992
TYPE:	Original	LATEST INFO RECEIVED:	11/12/1992
SEC. PARTY:	WESTERN BANK, BEND, OR	FILED WITH:	SECRETARY OF
DEBTOR:	ORCOM SYSTEMS INC		STATE/UCC DIVISION, OR

COLLATERAL: All Equipment including proceeds and products - Specified Computer equipment including proceeds and products

FILING NO:	R92440	DATE FILED:	02/14/1994
TYPE:	Original	LATEST INFO RECEIVED:	05/03/1994
SEC. PARTY:	WESTERN BANK, BEND, OR	FILED WITH:	SECRETARY OF
DEBTOR:	ORCOM SYSTEMS INC		STATE/UCC DIVISION, OR

COLLATERAL: Specified Equipment including proceeds and products

FILING NO:	S14596	DATE FILED:	07/25/1994
TYPE:	Original	LATEST INFO RECEIVED:	09/09/1994
SEC. PARTY:	IBM FEDERAL, BETHESDA, MD	FILED WITH:	SECRETARY OF
DEBTOR:	ORCOM SYSTEMS INC		STATE/UCC DIVISION, OR

COLLATERAL: Specified Equipment

FILING NO:	R88953	DATE FILED:	01/19/1994
TYPE:	Original	LATEST INFO RECEIVED:	05/03/1994
SEC. PARTY:	TOSHIBA AMERICA INFORMATION SYSTEMS, WESTLAKE VILLAGE, CA	FILED WITH:	SECRETARY OF
ASSIGNEE:	BELL ATLANTIC CAPITAL CORP, THOUSAND OAKS, CA		STATE/UCC DIVISION, OR
DEBTOR:	ORCOM SYSTEMS		

COLLATERAL: Specified Equipment

For: Tom Bailey
West Virginia American Water C

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PUBLIC FILINGS (continued)

FILING NO:	R20177	DATE FILED:	08/12/1992
TYPE:	Original	LATEST INFO RECEIVED:	08/24/1992
SEC. PARTY:	TOSHIBA AMERICA INFORMATION SYSTEMS INC, IRVINE, CA	FILED WITH:	SECRETARY OF STATE/UCC DIVISION, OR
ASSIGNEE:	BELL ATLANTIC/TRI-CON, PARAMUS, NJ		
DEBTOR:	ORCOM SYSTEMS		

FILING NO:	N07075-B	DATE FILED:	08/25/1993
TYPE:	Continuation	LATEST INFO RECEIVED:	10/04/1993
SEC. PARTY:	IBM CREDIT CORPORATION, SAN RAMON, CA	ORIG. UCC FILED:	01/09/1989
DEBTOR:	ORCON SYSTEMS INC	ORIG. FILING NO:	N07075
		FILED WITH:	SECRETARY OF STATE/UCC DIVISION, OR

The public record items contained in this report may have been paid, terminated, vacated or released prior to the date this report was printed.

HISTORY

08/11/95

STEVEN GERLICHER, CHB+	MARILYN BEEM, PRES
ANDREW CHILD, EXEC V PRES-	CHRISTIAN WEBER, EXEC V PRES
OPERATIONS	
PAUL COLBURN, V PRES-PRODUCT	
DEVELOPMENT	

DIRECTOR(S): The officers identified by (+) and Robert Chalfin.

CORPORATE AND BUSINESS REGISTRATIONS REPORTED BY THE SECRETARY
OF STATE OR OTHER OFFICIAL SOURCE AS OF 10/24/1995:

BUSINESS TYPE: Corporation -	DATE INCORPORATED: 08/24/1983
Profit	STATE OF INCORP: Oregon

Business started 1974 by the officers. 100% of capital stock is owned by Steven Gerlicher.

STEVEN GERLICHER born 1947. 1968-74 self-employed under own name as a computer and computer software distributor, Seattle, WA; discontinued with record clear and all debts paid. 1974 to present active here.

MARILYN BEEM born 1945. 1968-78 accounting, Burton Division of Cavitron, Van Nuys, CA. 1978 to present here.

ANDREW CHILD born 1958. 1980 graduated from University of Richmond with BS and BA. 1987 graduated from Portland State University with a MBA. 1980-87 regional manager, W & O Supply Inc, Portland, OR. 1987 to present here.

For: Tom Bailey
West Virginia American Water C

November 6, 1995
1:46 pm

HISTORY (continued)

CHRISTIAN WEBER born 1948. 1970 graduated from Oregon Institute of Technology. 1970-73 assistant manager, F W Woolworth, Fairbanks, AK. 1973-77 owner, Holly Main Licquors, El Segundo, CA; sold, all debts paid. 1977-83 owner, Plants Galore, Bend, OR; sold, all debt paid. 1980-83 assistant manager, Copeland Lumber, Bend, OR. 1983 to present here.

PAUL COLBURN born 1959. 1982 graduated from Eastern Washington University with a BA in business administration. 1980-87 chief accountant, PUD of Pend Oreille County, Newport, WA. 1987-90 finance officer, Truckee Donner PUD, Truckee, CA. 1990-91 office manager, NAC Corporation, Bend, OR. 1990 to present here.

ROBERT CHALFIN, not active here. Active with The Chalfin Group Inc, New Jersey.

OPERATION

08/11/95 This business provides business oriented computer software services (70%), and wholesales computers and computer peripherals (30%).

Terms are net upon receipt of invoice. Has 150 account(s). Sells to utility companies. Territory: Worldwide. Nonseasonal.

EMPLOYEES: 127 which includes officer(s).

FACILITIES: Leases 15,000 sq. ft. in a two story frame building in good condition. Premises neat.

LOCATION: Industrial section on side street.

11-06(192 /892) 00000 057057057

-- END OF REPORT --

For: Tom Bailey West Virginia American Water C	November 6, 1995 1:46 pm
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A GUIDE TO UNDERSTANDING D&B RATINGS AND PAYDEX™

D&B RATING KEY - ONE OF THREE RATINGS WILL BE DISPLAYED

1. CAPITAL AND CREDIT- An overall appraisal of a company's size and credit worthiness as assigned by a D&B Analyst.

Rating Classification

(based on financial statement)

5A	\$50,000,000 and over
4A	\$10,000,000 to \$49,999,999
3A	\$1,000,000 to \$9,999,999
2A	\$750,000 to \$999,999
1A	\$500,000 to \$749,999
BA	\$300,000 to \$499,999
BB	\$200,000 to \$299,999
CB	\$125,000 to \$199,999
CC	\$75,000 to \$124,999
DC	\$50,000 to \$74,999
DD	\$35,000 to \$49,999
EE	\$20,000 to \$34,999
FF	\$10,000 to \$19,999
GG	\$5,000 to \$9,999
HH	up to \$4,999

(based on employees)

1R	10 or more employees
2R	less than 10 employees

Composite Credit Appraisal

1 = High	2 = Good
3 = Fair	4 = Limited

Note: Capital and Credit Ratings consist of two parts. The first two characters (i.e. '3A' or '1R') are an indication of company size based on a current financial statement (Fiscal or Interim) or the number of employees (if current financial information is not in file). The third character is the Composite Credit Appraisal: an assessment of creditworthiness based on key credit information including payment activity, years in business and public filings.

2. EMPLOYEE RANGE DESIGNATION- A designation, based on number of employees, which is assigned to firms in particular lines of business for which D&B does not provide a Capital and Credit Rating (e.g. banks, insurance companies).

<u>Rating</u>	<u># of Employees</u>	<u>Rating</u>	<u># of Employees</u>
ER1	1,000 or more	ER5	20 to 49
ER2	500 to 999	ER6	10 to 19
ER3	100 to 499	ER7	5 to 9
ER4	50 to 99	ER8	1 to 4
		ERN	Not Available

3. -- (THE BLANK SYMBOL) Should not be interpreted as indicating that credit should be denied. It simply means that the information available to D&B does not permit us to classify the company with our rating key and that further inquiry should be made before reaching a credit decision.

KEY TO D&B PAYDEX™

The Dun & Bradstreet Paydex is a dollar-weighted numerical score that gives you an overview of a company's payment habits as reported to D&B. The larger the debt, the more it influences the composite Paydex score.

<u>Paydex</u>	<u>Payment Pattern</u>	<u>Paydex</u>	<u>Payment Pattern</u>
100	Anticipates	50	Slow to 30 days
90	Discount	40	Slow to 60 days
80	Prompt	30	Slow to 90 days
70	Slow to 15 days	20	Slow to 120 days
		UN	Unavailable Information

CHARLES E. DAY AND ASSOCIATES

211 North Union Street, Suite 100, Alexandria, Virginia 22314, (703) 739-0446

Ms. Deborah P. Lippert
Director Customer Relations
PENNSYLVANIA - AMERICAN WATER COMPANY
P.O. Box 1290
300 Galley Road
McMurray, PA 15317

December 11, 1995

Re: **AMERICAN WATER WORKS COMPANY, INC. (AWC)** Automated Customer Information Application System Recommendations

Dear Debbie:

This report is a summary of results from the evaluation of responses received from the **AMERICAN WATER WORKS COMPANY, INC. (AWC)** Request for Proposal for an automated customer information application system. Information received during vendor meetings, product demonstrations, site visits, financial report reviews and proposers' strategic plans has been taken into account in developing a selection and related recommendations.

Recommendations are therefore based on a structured review of available services, product features, AWC's relationship and synergy with competing companies, compatibility with internal operating requirements, and overall reaction by AWC evaluation groups.

EXECUTIVE OVERVIEW

The Customer Information Application System evaluation and planning effort was guided by the following objectives:

Determine the company and product(s) which will provide AWC with the most appropriate automated customer information application including operating features to completely replace the existing Electronic Data Information System, maximize the investment in existing computer hardware, acquire more productive automation features, position for integration and inclusion of new system capabilities and provide a basis for all AWC operating companies to sustain, improve, and extend business opportunities well into the 21st century.

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An additional specific objective was to allow for future interface with a new financial and accounting system also under review. It was also important to position AWC with a well-established supplier of automated systems which will work cooperatively with the different technical and administrative areas within AWC and one which fully understands the utility business and water utilities, in particular.

Based on these objectives, structured review of submittals by responding companies plus demonstrations, site visits and customer interviews, it is recommended that AWC proceed with internal approval and acquisition of the OrCom Systems customer information application and related automated features for use and extension of currently installed IBM AS/400 computer equipment. The recommendation to proceed to the next step with OrCom Systems is based on two important assumptions regarding AWC priorities compared to findings: 1) OrCom successfully demonstrated more upgraded features for immediate replacement of AWC's EDIS system, and (2) OrCom provides dedicated service to the utilities industry with more CIS packages installed at water utilities and is the only supplier with actual installation of an upgraded version of the new AS/400 Graphical User Interface software system.

These two assumptions are critically important to the selection recommendation since, if immediate replacement of the CIS portion of specified requirements is not the top priority for AWC, then the recommended solution(s) and company would also be different. Each proposer has unique strengths and advantages over competitors from company financials, impressiveness of officers and organization culture, vigilance in strategic planning, accessibility, relationship to additional suppliers and overall responsiveness to other call center and field automation capabilities.

In particular, J.D. Edwards runs second in this evaluation only because of the lack of water utility experience and not having a CIS package already installed and fully converted to meet AWC's standards. The strategic thinking, migration plans, accessibility, company maturity and sophistication of J.D. Edwards, by example, far exceeds OrCom.

HTE, Inc., by comparison, was most responsive to total requirements documented by AWC and with costs developed more thoroughly. Their customer information system, however, did not demonstrate the latest IBM AS/400 software capabilities and most AWC employees attending the presentations left with an uncomfortable feeling of too much work left to be done with a company that appeared to be more grounded with municipalities as clients and was possibly too bureaucratic, lethargic and difficult to work with.

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The newly developed functionality provided by OrCom Systems includes a unique multi-dimensional rate table capability which is felt to be essential to various AWC operating areas. An existing installation at Southern California Water Company provided AWC with unique contact with a client organization which seemed satisfied with OrCom, the CIS application and technical support. An all day visit with a tour of the new customer inquiry center provided the evaluation team with a unique view of the OrCom system and a practical water utility application. We must remain aware however, that AWC differs in networking and Information System organization operating requirements due to the company's structure, number of locations and varies municipalities and PUC tariff areas served.

Caution is also being advised with this recommended selection decision due to OrCom's staff size, apparent financial limitations, under-developed future plans, moderately seasoned executive staff and the remoteness and laid back style of company headquarters in Bend, Oregon.

Functionality sought through OrCom Systems includes the following major application and sub-systems:

- | | |
|-----------------------|----------------------------------|
| • Billing System | • Accounting System Interface |
| • Customer Inquiry | • Cash Receipt Management |
| • Accounting Features | • User Defined Screens |
| • Case Management | • Calculations/Conversions |
| • Credit History | • Rates and Rate Studies |
| • Credit Collection | • Computer Aided Dispatching |
| • Imaging Technology | • Computer Telephone Integration |
| • Managm't Reporting | • Integrated Mapping System |
| • Meter Reading Sys | • Service/Work Order Management |

Other sections of this report and attachments provide added information about the requirements and features requested by AWC in its request for proposal (RFP) document issued to interested and qualified firms. The responding companies in this solicitation include:

- Augustine & Company Computer Associates - Exton, PA
- HTE, Inc. - Orlando, FL
- J.D. Edwards - Denver, CO
- OrCom Systems - Bend, OR
- Severn Trent Systems, Houston, TX

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Following this executive overview is a list of related recommendations. Also included are an outline of the approach used in reaching a selection recommendation, a summary of finalist offerings, demonstration script, evaluation team comments and various category ratings.

Attachments also include a presentation on a "CASE Tool" presented by J.D. Edwards which automated the applications development process in a client server environment for greater productivity and economies of scale in work performed by information system departments; and a presentation by my firm on "Using Proven Technology To Automate Your Customer Service" in telephone call center environments. Both presentations are representative of automation goals, priorities and system aspirations for AWC.

RELATED RECOMMENDATIONS

In addition to the recommendation for OrCom's Customer Information System software on upgraded IBM AS/400 processor equipment and eventually an all personal computer and client server networking environment, there are several related recommendations which should be considered with respect to finalizing the purchase decision and implementation planning. The recommendations listed below are felt to be important to the success of the automation effort and will have positive influence on efficiency gains and AWC's operation's profitability.

- Finalizing Costs Proposal - The number of locations, optional configuration arrangements, application features, hardware expansion needs at each AWC site, and number of employees to be licensed for product usage will determine the final price of the OrCom system. A partnering agreement may help lower total costs, but negotiations and a final cost proposal submittal are an essential next step.
- Organizational Implications - The new application development tools and networking capabilities of evaluated systems may give rise to additional options for information systems, operations and customer service call center organizations; it would be better to fashion equipment placement and networks around new and more effective organizations rather than compromising the logic of technical configurations and associated costs due to inappropriate organization structures.

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- Reference Interviews - Due to the limited time available to develop a selection recommendation, reference checks for OrCom and other finalist firms were not completed. Five to ten interviews by telephone are recommended prior to contract consummation; an updated Dun and Bradstreet financial check is also recommended to identify if any outstanding legal judgements exist.

- Advanced Operating Features - Since much effort was spent by the evaluation team insuring that billing, customer inquiry, service/work order management and other currently provided functions, via EDIS, are included with any new system, a number of new applications remain uncommitted to for future development; new features, such as call center and computer telephone integration, imaging technology, and geographic information (mapping) system need commitment by both AWC and supplier to obtain fuller benefit of available technology.

- Telephone Systems Review - From a survey of telephone systems inventory across AWC operating offices, there is a large variance in the type of telephone equipment and capabilities currently employed; a good portion of customer service operations and customer satisfaction will involve call center telephone systems; telephone PBX/ACD related equipment should be included in subsequent analyses for further complementary gains and compatibility with any new computer operations.

- Financial Systems Selection - J.D. Edwards is understood to be a finalist firm in both the financial accounting system evaluation effort and the automated customer information application system review; care was taken not to base this project's selection recommendation on the benefits of fully integrating these important packages from a common vendor; however, a positive impression was left with this project's evaluation team regarding the financial systems capabilities of J.D. Edwards.

- AWC As System Integrator - AWC's ability to participate and potentially partner with the selected vendor was an important consideration in the selection recommendation; as a method of further influencing system design and lowering costs, AWC should decide prior to negotiations on the desired role and level of participation; added time for final roll out of systems due to any partnering relationship should also be considered.

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- Implementation Roll Out Strategy - a strategy for implementing the automated customer information application needs to consider 1) the most effective starting location to fully test and accept all critical application functions, 2) AWC's technical and administrative support capabilities to better guarantee success, and 3) rotation of critical staffers and avoid loss of contact with day-to-day operations and adjustments which will undoubtedly occur during an implementation effort scheduled over several years. The implementation team should include representatives from the evaluation effort to insure clear communications on requirements specified and deliverables expected.

With the recommendations above it is believed that an effective contract negotiation and orderly system implementation will result. Surefooted project management and a broader view of total requirements will help insure enhanced service to customers, improved operating efficiency, and overall profitability to AWC.

PROJECT APPROACH

The recommendations herein are the results of a fairly structured project approach which identified AWC's customer information application operating requirements, documented those requirements and evaluated the top suppliers in the utilities industry who specialize in automated customer services systems. The following major tasks and steps were followed and accomplished in reaching the recommended selection decision.

Core Committee Requirements Review and Kick-Off Meeting	August 23
VA Call Center Visit and Ops Requir'mts	September 5
Regional AWC Reps & Eval Committee Mtg	September 6
Vendor Documentation Review and Proposer List Development	September 22
Expanded CIS Call Center Evaluation Criteria	September 28
Draft Requirements Overview Documentation	October 3
Regional Survey Within AWC Completed	October 4
Draft Request for Proposal to Core Committee	October 11

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Preliminary Vendor Information on Interest and Capabilities	October 26
Final Request for Proposal Document Completed	October 27
Core Committee Review Meeting and RFP Release to Vendors	October 30
AWC Executive Summary and Status Report	November 2
Vendors Demonstration and Interviews	November 1-3
Finalists and Short-List Review Completed	November 13
Site Visits and Executive Briefings by Committee	November 28 - December 11
Recommendations Report Completed	December 11

Nine firms received the initial request for proposal document. In addition to the responding companies listed in the Executive Summary, no-responses were received from 1) Capital Data Systems - Cary, NC, 2) Electronic Data Systems - Atlanta, GA, 3) Information Management Associates - Shelton, CT, and 4) S P L World Group - Morristown, NJ. Site visits were taken with the two finalist firms, OrCom Systems and J.D. Edwards. AWC also received additional executive briefings at the corporate offices of these two firms.

Requirements and responses are listed in Attachments 1 - 4 with specific business functions, AWC comments, and vendor capabilities summary matrices.

SUMMARY OF VENDOR PROPOSALS

- Augustine & Company Computer Associates, Exton, PA - The formal RFP response and presentation prepared by this firm was inferior in quality, substance and lacked understanding of AWC's project scope. While the company has had experience in meter system interface sub-systems with AWC, the required experience, resources and CIS product knowledge were insufficiently demonstrated in comparison to other proposers.

The submittal by this firm was not considered further following the initial vendor presentation in early November. It is recommended, however, that

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this company be considered for other meter sub-system and field systems software development which may require outside assistance and fall within the range of Augustine's deliverables.

- HTE, Inc., Orlando, FL - Perhaps the most robust and complete response received to the written request for proposal was submitted by HTE, Inc. This company also had the largest number of attendees for the product demonstration and company interview meeting. Difficulty was encountered by this firm two areas: 1) the customer information system presented did not show a clear improvement over or full functional capability in replacing AWC's EDIS software system, and 2) answers to interview questions reflected a fairly rigidly developed and coded system and an unwillingness to partner with AWC to jointly fashion final design.

The introduction of fully developed call center technology using IBM's CallPath software, mobile meter data entry devices and geographic information system software stood out over other proposers; but, all of these features are also available to AWC to pursue separately with any other AS/400 vendor solution. HTE, Inc provided complete costing information to include project management, training, data migration, and customization development for a total cost of \$21.4 million. While expensive, this estimate is probably not far from the final cost of any other recommended system solution.

Finally, a Dun and Bradstreet financial report was requested on the top three finalists. HTE, Inc. is not rated, however, due to insufficient information in its application submitted several years ago. However, the company did come to its presentation session with it's capital investment firm representative. The \$200 million annual revenue was highest among finalist firms, but, represents a client base principally of large municipalities with many operating requirements unrelated to a water utility.

- J.D. Edwards, Denver, CO - This company has a well established organization and strategic plan to develop utility oriented automation systems as a key business product starting first with a customer information application. A workbench methodology for incorporating newer state of the art "windows

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look and feel" software is being used. A gradual migration technique is being incorporated to allow cooperative use of lower cost computer terminal equipment, which AWC now uses, with newer PC equipment for more advanced windows and graphical user interface. A copy of the presentation from J.D. Edwards, under a non-disclosure agreement, in Attachment 5 exemplifies their technique in networking older system technology in the IBM AS/400 environment with a new CASE development tool kit.

J.D. Edwards would be the recommended company and system solution if actual development and installation of customer information applications were more extensive. The company's financial applications are impressive and their top managers and officers appear to have the most seasoned approach in long-term business development and working relationships. There was concern expressed with the proprietary nature of software development tools which are typically standard product offerings in newer operating environments.

The desire for partnering in development activities by this firm is an attractive feature and benefit to the proposed automation project process. The install of the CIS module at New Jersey Gas will help build user confidence in code existence and utility industry peculiarities, but, not as timely as the recommended system solution which will premiere its newer CIS system in January 1996. The direction, management and quality of financial accounting experience and packages were rated highest among the two finalist firms in the evaluation. If the final selection decision should be delayed a few months by AWC, it is recommended that the status of this firms' CIS development be re-visited in comparison to OrCom Systems.

- OrCom Systems, Bend, OR - This recommended system solution and firm separates itself from competitors by having 1) a total company focus on the utility industry, 2) an installed CIS application using newer "windows look and feel" software, and 3) plans for production development of more advanced graphical user software functionality by January 1996. The company also has an understanding of rate base calculation and multi-dimensional rate tables. The understanding of nuisances associated with water utilities billing and customer inquiry seems exceptional in comparison to other proposing firms.

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The company is quite small, however, with less than 150 people and is located inconveniently in Bend, OR. The corporate office's laid back style is different compared to other companies considered. Senior manager and the executive staff seem to concentrate on tactically planning existing products and are reluctant to share long-range product or company plans - if they exist.

Field device input experience and an automated report generator package and statistical graphical display capabilities are complementary product features. Imaging technology is also a major spun off product line which may also be helpful in archiving original source documents for indefinite periods.

The next step to this evaluation will be to check references in greater detail, verify financial status again and negotiate more specific deliverables, roll out date within bounds of OrCom's limited resources.

- Severn Trent Systems, Houston, TX - The automation subsidiary of a major utility company based in the United Kingdom is newer in its CIS application development planning than most proposers and without an actual application to demonstrate. The positive distinction, however, is that development of the CIS system will start in a client server and graphical user interface environment to which others are planning on transitioning. The Severn Trent Operational Resources Management System (STORMS) is also notable as a fully functional solution which provides operational control of work orders and related information.

In addition to the undeveloped nature of the CIS system, conversion to the planned system would be more impacting to current operations, costly in hardware and possibly more difficult to support. The pros and cons of the system and financial security of the provider are all outweighed by the fact that the AWC evaluation team seems more targeted for immediate gains in replacing EDIS system functions in a surefooted manner using existing IBM AS/400 as the hardware platform from which to migrate all new development. This being the case, Severn Trent's proposal is a few years ahead of its time and not now appropriate for AWC.

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Many thanks to you, Dan Bickerton and Terry Carpenter and the entire evaluation team for your support in reaching this selection recommendation. It is with sincere hopes that information contained herein will aid AWC in proceeding to the next steps recommended and project implementation with great success. If I or my firm, Charles E. Day and Associates, can be of further assistance in contract negotiation and system implementation coordination on this project or related technology or administrative issues, please give me a call. I will also plan on keeping in touch with you. Thanks again for the opportunity to work with you and others at AMERICAN WATER COMPANY on this very important project engagement.

Sincerely,



Charles E. Day CMC
Management Consultant

CED/cd

Attachments

cc: Dan Bickerton
Terry Carpenter

EVALUATION TEAM

Core Committee

Deborah Lippert, PA, Chairperson *
Dan Bickerton, W. VA *
Terry Carpenter, NJ *

Regional Representatives

Tom Bailey, W. VA *
Rachel Bartley, TN
Colleen Bromley, IL
Coleman Bush, KY
Jim Curley, NJ *
Carl Frey, CA
Mario Gratta, NE
Dave Jerpe, PA
Melody McNeeley, IN *
John Moesta, PA
Rick Pennay, PA
Joe Pignio, NJ
Gilbert Smith, IN *
Carl Sullivan, W. VA

Management Consultant

Charles Day, VA, CED&A *

* Attended OrCom Systems and J.D. Edwards site visits and executive meetings

ATTACHMENTS

1. **Vendor Responses To The Capabilities Summary Matrix**
2. **Software Product Evaluation Summary and Demonstration Script**
3. **Evaluation Committee Comments From Vendor Demonstrations and Interviews**
4. **AWC Data Questionnaire Summary Sheet**
5. **Case Tool Model For Client/Server Application - J.D. Edwards**
6. **"Using Proven Technology to Automate Your Customer Service" - Charles E. Day and Associates**

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EVALUATION RATING RESULTS

The following listing of the five proposing firms represents ratings with assumptions listed in the Executive Summary. For this reason the technical scores for applications and product functionality which were principally prototypes may show a higher rating in the attachments. The addition of corporate direction, financial strengths and other key performance indicators in doing business with proposing firms are reflected more heavily in final rating results listed below.

Costs below are as proposers submitted them and are not complete in most cases. The CIS application seems to have been the one application where costs were provided consistently by each bidding company. HTE, Inc. costs appear more out of line compared to others simply because all immediate and future requirements and installation charges were included in their initial cost estimates. Other bidders' best and final costs for all sub-systems will likely be much higher than estimates given.

<i>RANK</i>	<i>COMPANY</i>	<i>PROPOSAL COSTS</i>
1	OrCom Systems	\$ 5,076,864
2	J.D. Edwards	2,500,000
3	HTE, Inc.	21,400,000
4	Severn Trent Systems	5,500,000
5	Augustine & Company	176,000

Attachments to this report will show systems features requested from proposers and their responses to the request for proposal. Comments from the vendor demonstrations and interview meetings from the evaluation team are also included.