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May 7, 2007

VIA EFILING AND HAND DELIVERY

Mr. Charles L.A. Terreni
Chief Clerk/Administrator
South Carolina Public Service Commission
101 Executive Center Dr., Suite 100
Columbia, SC 29210

RE: Docket Nos. 2004-357-W/S; 2006-107-W/S; 2006-92-W/S; and 2006-97-W/S
Order No. 2006-284

Dear Mr. Terreni:

Enclosed please find a copy of the final audit report published by Schumaker & Company. The final report of the management audit of Utilities, Inc. includes its five subsidiary water and wastewater companies operating in South Carolina which are as follows:

1. Carolina Water Service, Inc.
2. Tega Cay Water Service, Inc.
3. Utilities Services of South Carolina, Inc.
4. Southland Utilities, Inc.
5. United Utility Companies, Inc.

Pursuant to Commission Order 2006-284, ORS is filing the final audit report with the Commission and providing a copy to all parties of record in the above-referenced dockets.

Sincerely,

Nanette S. Edwards

Nanette S. Edwards

cc: Parties of record
Enclosure

Schumaker & Company

Final Report on the Management Review Audit of Utilities, Inc.

with Specific Focus on the Five Subsidiary Water and Wastewater Companies That Operate in South Carolina

- Carolina Water Service, Inc. (CWS)
- Tega Cay Water Service, Inc. (TCWS)
- Utilities Services of South Carolina, Inc. (USSC)
- Southland Utilities, Inc. (SU)
- United Utility Companies, Inc.(UUC)

April 2, 2007

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I. Executive Summary

The South Carolina Office of Regulatory Staff (ORS) identified the need to have a consultant conduct a management review audit of Water Services Corporation (WSC) with specific focus on the operations of the five subsidiary water and wastewater companies that operate in South Carolina, those being:

- Carolina Water Service, Inc. (CWS)
- Tega Cay Water Service, Inc. (TCWS)
- Utilities Services of South Carolina, Inc. (USSC)
- Southland Utilities, Inc. (SU)
- United Utility Companies, Inc.(UUC)

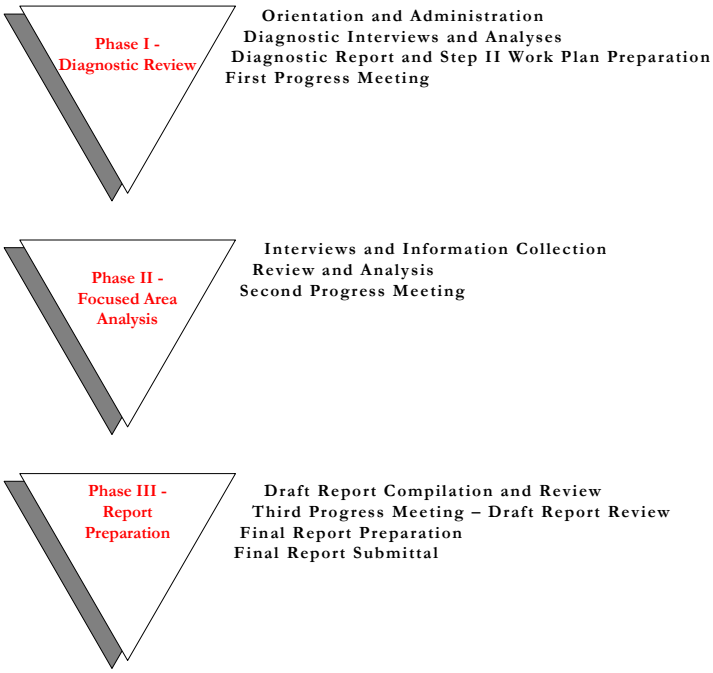
Today, new challenges are making water operations a dynamic and rapidly changing environment, requiring increased interaction between the functional areas, new technologies, expanded capabilities from staff personnel, and for some utilities, re-evaluation of utility philosophies. Utilities have had to increase staff and obtain new technical skills. New regulations, such as those pertaining to the disposal of sludge and the protection of aquatic wildlife, have also had important implications on water utility operations. In addition, many utilities have had to deal with the possibility that their current raw water sources may be inadequate over the long-term. Demand management, conservation, and other non-conventional solutions have become important elements in long-term planning. The implications on water rates have resulted in greater interaction between the engineering design, finance and rates, and customer relations departments of many utilities throughout the long-term planning process.

The bottom line of this project was to determine whether there are efficiency measures that could be passed on to South Carolina ratepayers in the form of lower rates through the implementation of greater efficiencies in organizations, operations, or both. Additionally, included in the project was the determination of whether the ratepayers of South Carolina are being properly and economically served by the range of corporate services that are provided to the WSC operations in South Carolina by the management and staff located in West Columbia (South Carolina), Charlotte (North Carolina), and Northbrook (Illinois).

A. Scope of Work

Synopsis of Study

We conducted this management review audit based on a three-phase review process, which was custom tailored to meet the objectives of ORS. These three phases, and their components, are schematically summarized at right. This process provided Schumaker & Company consultants with a structured approach that is comprehensive and logical, as well as interactive and participative with ORS and WSC. This process was originally designed to establish and sustain vital, interactive working relationships between the subject regulatory agency, the utility, and the Schumaker & Company project team during the course of management and operations audits. We have refined this three-phase process over many reviews, audits, and studies conducted with the same team members proposed for this project.



The following text presents a concise summary the results of our investigations into the work tasks that were specified in the request for proposal (RFP) from ORS.

Specific Work Tasks

The specific work tasks included in the scope of work, along with a short description, are listed as follows:

Basic Corporate Decision-Making

1. *Analytical Discipline*: Review the reports and studies relied upon by the Board of Directors and top management in reaching major policy and investment decisions, especially the extent to which indirect as well as direct costs and benefits are determined and financial risks are formally weighed.

2. *Planning Concepts and Practices*: Review the extent to which regulatory changes are evaluated and responded to. Review how these changes impact operational and budgetary decision-making.
3. *Organizational Design*: Review the extent to which the roles and authorities of and relationships among the Board of Directors and management staff of Water Services Corporation and its affiliate companies have been defined. Review any overlap or inconsistency of duties and responsibilities between corporate staff and the staff of the subsidiary companies. Review relationship between subsidiaries and other affiliate companies of Water Services Corporation. Consider benefits of consolidation or merger of affiliated companies.

Major Operational Activities

4. *Service Levels*: Review whether goals applicable to both system reliability and responsiveness to individual business and residential customers have been set and met. Review contingency plans to ensure system reliability.
5. *Revenue/Cost Allocation*: Review the cost allocation plan for corporate overhead, both direct and indirect costs, to the subsidiary companies.
6. *Pricing Strategies*: Review the use of zonal rates for systems that interconnect with other government-owned systems or systems established pursuant to Section 33-36-10 of the SC Code of Laws versus statewide rates for systems where the company operates its own water supply or wastewater treatment facilities.

Staff Functions

7. *Human Resource Policies and Practices*: Review the extent to which managerial performance is vigorously assessed and corrective action is taken where warranted. Review adequacy and implementation of compensation plans and how they relate to industry standards. Review turnover rate per profession in comparison with industry standards. Describe any anomalies that may be found.
8. *Pending Litigation*: Review any pending litigation from affiliated South Carolina companies that may impact Water Services Corporation. Contractor will agree and covenant not to disclose in its audit any confidential information related to pending litigation and will agree to use information it learns about pending litigation for no other purposes than for this.
9. *Technology Tools and Training*: Review the company's use of technology to further its business objectives. Review training policies and practices to determine whether adequate training is provided to all employees.

We have organized our findings and recommendations to be consistent with the specific work tasks identified in the RFP.

B. Overall Summary

By its very nature, a management review audit is a critical assessment of the management and operations of an organization. This management review audit was performed for ultimate benefit of the ratepayers of Utilities, Inc. (UI) subsidiaries in South Carolina. The overall objective of the UI subsidiaries is, simply, the safe, reliable long-term provision of water and wastewater services at just and reasonable costs. Continued success in achieving this objective is directly related to the management efforts and effectiveness of UI subsidiaries. Schumaker & Company's role was to determine how this objective is being met and to identify improvements that the UI subsidiaries can make to enhance the attainment of this objective. In the interest of efficiency, our review focuses on areas that could be improved and not on areas we found optimum or exceptional performance. ***The lack of various "pats on the back" for good performance should not be construed negatively in anyway.***

Because the bulk of any management review audit is devoted to opportunities for improvement, this report may give the reader the impression that Utilities, Inc. is seriously deficient. This is not the case. Utilities, Inc. has done a good job of providing water and wastewater services to its customers. Water Service Corporation employees are dedicated and take pride in their responsibilities for providing water and wastewater services in South Carolina.

C. Listing of Findings

This section presents a list of findings with the corresponding page of this report were the finding is discussed.

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Recommendation II-2 Implement a formal strategic planning process. (Refer to Finding II-4) 22

Recommendation II-3 Continue to improve corporate planning and budgeting processes. (Refer to Finding II-5, Finding II-6, and Finding II-7) 22

Recommendation II-4 Develop formal contractual agreements for all affiliate relationships, review them annually, and update them as necessary. (Refer to Finding II-10) 39

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Recommendation III-1 Conduct an evaluation of a computerized preventive maintenance system. (Refer to Finding III-2) 46

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Recommendation IV-7 Place greater emphasis on ongoing training and certification in the IT Department. (Refer to Finding IV-10) 93

II. Basic Corporate Decision-Making

A. Analytical Discipline

1. ***Analytical Discipline***: Review the reports and studies relied up by the Board of Directors and top management in reaching major policy and investment decisions, especially the extent to which indirect as well as direct costs and benefits are determined and financial risks are formally weighed.

Findings

Finding II-1 The Board of Director's involvement in the oversight of Utilities, Inc. (UI) operations has varied with UI's ownership.

Utilities, Inc. was created and owned from 1965 to 2001 as a closely-held company by members of the original 10 families that formed the company in 1965. Over that time, the number of shareholders had grown from the original 10 to approximately 400 different members of the families. For various reasons, a decision was made to sell the company to outside investors in the 2000 – 2001 timeframe, resulting in the eventual sale to n.v. Nuon (Nuon) in early 2002. Nuon is a large energy company based in the Netherlands, active in the generation, marketing, sale, and distribution of electricity, gas, and heat, as well as related products and services.[1]

In 2002, the membership of the Board of Directors was changed to a four member Board that included two inside members (the Chairman and Chief Executive Officer and the President of Utilities, Inc.) and two members from Nuon. Board meetings were held on approximately a quarterly basis with many of the meetings being done via teleconference or by consent. The primary items discussed dealt with arranging Utilities, Inc. credit facilities and the evaluation, compensation, and incentive bonuses of the Chairman/Chief Executive Officer and the President. There is little indication that Nuon was actively involved in the oversight of Utilities, Inc. management and operations. Almost from the beginning of Nuon's ownership of Utilities, Inc., Nuon began to pursue divesting Utilities, Inc. This divestment was in line with Nuon's strategy to concentrate its energy business in the Netherlands, Belgium, and Germany.[2]

As a result, on May 14, 2005, Hydro Star, LLC, a subsidiary of AIG Highstar Capital II, L.P. and certain of its affiliates (Highstar II), entered into a stock purchase agreement to acquire 100% of the stock of Utilities, Inc. from a subsidiary of Nuon. The transaction for the purchase of Utilities, Inc. closed in early 2006. Highstar II is a group of private equity funds that invest in infrastructure related assets and businesses. Highstar II is sponsored by AIG Global Investment Group (AIGGIG). AIG Global

Investment Group comprises a group of international companies that provide investment advice and market assets management products and services to clients around the world. AIGGIG member companies are subsidiaries of American International Group, Inc. (AIG). American International Group, Inc. is a leading international insurance and financial services organization, with operations in approximately 130 countries and jurisdictions. AIG's common stock is listed on the New York Stock Exchange, as well as the stock exchanges in London, Paris, Switzerland, and Tokyo.[3]

The current Board of Directors for Utilities, Inc. is composed of five individuals, as shown in *Exhibit II-1*. Only one of the Board members is an inside member, the President and Secretary, whereas the remaining members are all from Hydro Star. The current plan is for this Board to meet on a quarterly basis. This Board is expected to approve operations and maintenance capital budgets.[4]

Exhibit II-1
Board of Directors Membership

Board Member	Position	Affiliation
John Stokes	Chairman and Chief Executive Officer	Hydro Star/Utilities, Inc.
Larry Schumacher	President and Secretary	Utilities, Inc.
Aaron Gold	Board member	Hydro Star
Mike Walsh	Board member	Hydro Star
Michael Miller	Board member	Hydro Star

In addition to the Board of Directors, much of the day-to-day decision making will become the responsibility of the Operating Committee, which is composed of the following individuals shown in *Exhibit II-2*.[5]

Exhibit II-2
Operating Committee Composition

Committee Member	Position
Larry Schumacher	President and Secretary
Lisa Crossett	Chief Operating Officer
Steve Lubertozzi	Vice President and Chief Regulatory Officer
Danny Delgado	Vice President and Treasurer
Holly Roth	Vice President of Administrative Services
TBD	General Counsel

Finding II-2 **It was not possible to determine the role that the Board of Directors will play in the oversight of WSC utility companies.**

Schumaker & Company reviewed Board meeting minutes for the last couple of years – with most of those minutes created under the prior ownership group. Those minutes dealt primarily with creation of credit facilities and the determination of the Chairman and President salary and incentive awards, with little discussion of the strategic direction of Utilities, Inc. nor approval of capital or operations and maintenance budgets. There was no indication of the existence of any Board committees, such as an audit committee, compensation committee, etc. In short, since Utilities, Inc. is privately held, the existence of the Board is more for "legal" purposes (all corporations are required to have Board and hold meetings whether public or private in nature) than actual governance and oversight of Utilities, Inc.

As a privately-held utility, many of the expectations that might be expected of a utility Board do not exist – in particular compliance with Sarbanes Oxley requirements, Security and Exchange Commission requirements, inclusion of outside directors, etc. Although these requirements might apply at the parent company level, if it is publicly-traded parent, they would not necessarily be implemented at the wholly-owned subsidiary level.

WSC management has indicated that it expects the current Board, composed of capable individuals will take a more active role in the oversight of WSC Corporation. At this time, it is expected that the Board of Directors will be approving the capital and operating budgets in the February timeframe. However, since at the time of our review the Board had yet to meet, it was not possible to determine the actual role that the Board will assume.

Finding II-3 **The Operating Committee (not a Board committee but a management committee) is the primary oversight group for utility operations.**

Although it is too early to tell the actual role that the new Board of Directors will have in the oversight of Utilities, Inc. operations, the Operating Committee handles most of the decisions regarding the operations of Utilities, Inc.. Prior Boards of Directors had had little involvement in the oversight of Utilities, Inc. preferring to leave those responsibilities with the Operating Committee.

Recommendations

Recommendation II-1 **Require the Operating Committee to maintain meeting minutes and appropriate documentation to show how major policy and investment decisions are made. (Refer to Finding II-1, Finding II-2, and Finding II-3)**

As a regulated entity in not only South Carolina but many other states, Utilities, Inc. needs to be able to demonstrate that it has managed its utility operations appropriately. As a privately-held utility, many of

the safeguards that exist for publicly-traded utilities do not necessarily apply. However, the Public Service of South Carolina is charged with making a determination on rates that are based on costs and sound business practices. A clear documentation trail is a requirement to making such a determination.

B. Planning Concepts and Practices

2. ***Planning Concepts and Practices***: Review the extent to which regulatory changes are evaluated and responded to. Review how these changes impact operational and budgetary decision-making.

The creation and implementation of formalized planning processes is a critical management process that needs to exist within any organization. Various planning processes would be expected to exist within an organization, but for the purposes of our review, we concentrated on two major processes:

- Strategic planning
- Corporate planning and budgeting, including:
- Capital program planning
- Headcount planning
- Operations and maintenance planning

Strategic planning is a process that an organization undertakes to determine its overall mission and higher-level business goals and objectives. The process looks at the strengths, weaknesses, opportunities, and threats that an organization faces in setting its overall missions and specific business goals and objectives.

Corporate planning and budgeting is a process whereby lower-level business (departmental) goals and objectives are determined and agreed to throughout the organization. Not only are specific departmental goals and objectives set, but, as a minimum, annual budgets are determined within the various organizational divisions of the organization. These budgets are typically broken down into capital dollars and expense (operations and maintenance) dollars.

Findings & Conclusions

Finding II-4 The Utilities, Inc. strategic planning process is inadequate.

According to information from our interviews, Utilities, Inc. maintains a formal written strategic plan, which is a five-year plan with financial projections.[6] However, when we requested a copy of the document, we were not provided with such a document. The capital plan and financial projections are only a small part of a strategic plan.

In Schumaker & Company's experience, a formal strategic planning process results in a written strategic plan document that is shared throughout the organization. It minimally includes a mission and vision statement, goals and objectives, as well as an overall financial plan. In many cases, the organization undertakes what is called a SWOT (strengths, weaknesses, opportunities, and threats) analysis in formulating its strategic plan. The lack of such a written document can only mean that the strategic planning process, to the extent it is undertaken, is only documented in the minds of senior management. Although many small organizations exist without formal strategic planning processes in place, an organization the size of WSC should have undertaken a formal strategic planning process and developed the appropriate documentation to communicate the results throughout the organization.

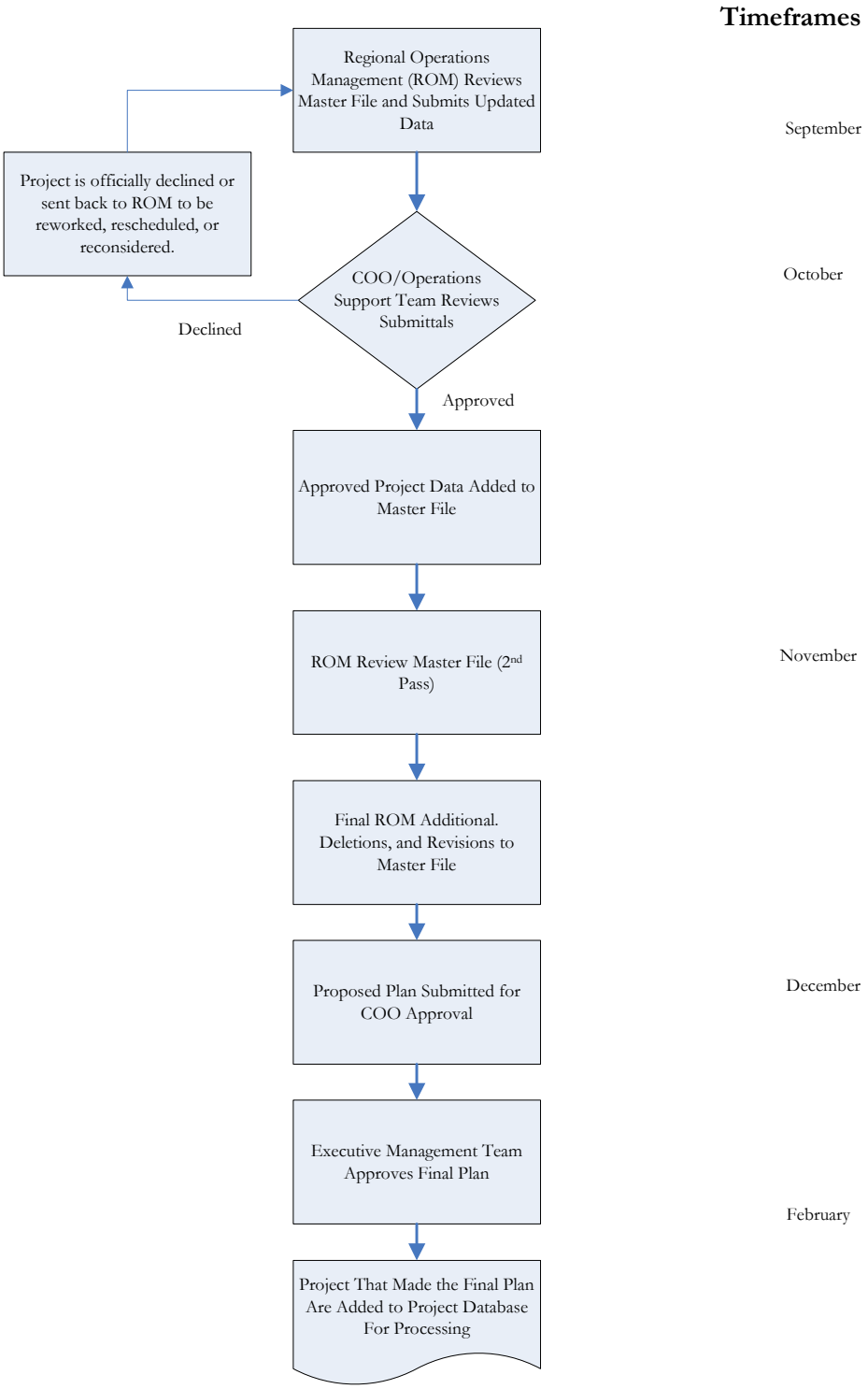
Finding II-5 Corporate planning and budgeting processes are evolving but could be improved.

Utilities, Inc. has adopted more formal business planning processes for all capital, headcount, and operations and maintenance expenditures. At the present time, these processes are primarily manual processes, albeit Excel spreadsheets and an Access database are being developed to support the effort. WSC has currently undertaken a software selection process that will replace some of its internal systems that will probably also have an impact on the planning and budgeting processes. Much of the information used in the processes has to be extracted from company systems to be manually loaded into Excel spreadsheets. The information in these spreadsheets is circulated to the appropriate personnel for input, review, and approval.[7]

Capital Program Planning

Capital program planning is essentially a "bottoms-up, top-down" process. The capital plan is a five-year plan, with a quarterly spending plan for the first two years and an annual spending plan for the last three years.[8] This process is schematically shown in *Exhibit II-3*.[9]

Exhibit II-3
Capital Program Planning Process



All projects of over $5,000 are identified as an individual line item. Capital projects in excess of $25,000 also require a project timeline.[10] Information on vehicle purchases and information technology purchases is added to the total capital program as a separate process.[11]

Individual capital projects are presented for consideration by regional and area managers within each region and state. These individual projects are maintained in either the Capital Projects Database or individual Excel spreadsheets during the review and evaluation process. The current accounting system does not have a planning module.[12] There are currently approximately 3,000 individual projects within the database at this time. These projects are then summarized and ranked according to predetermined criteria, such as:[13]

- Needed for safety
- Needed for regulatory compliance – Environmental Protection Agency, etc.
- Cost/benefit
- Regulatory environment – expected return allowed, requirements for placing in rate base, etc.
- Others

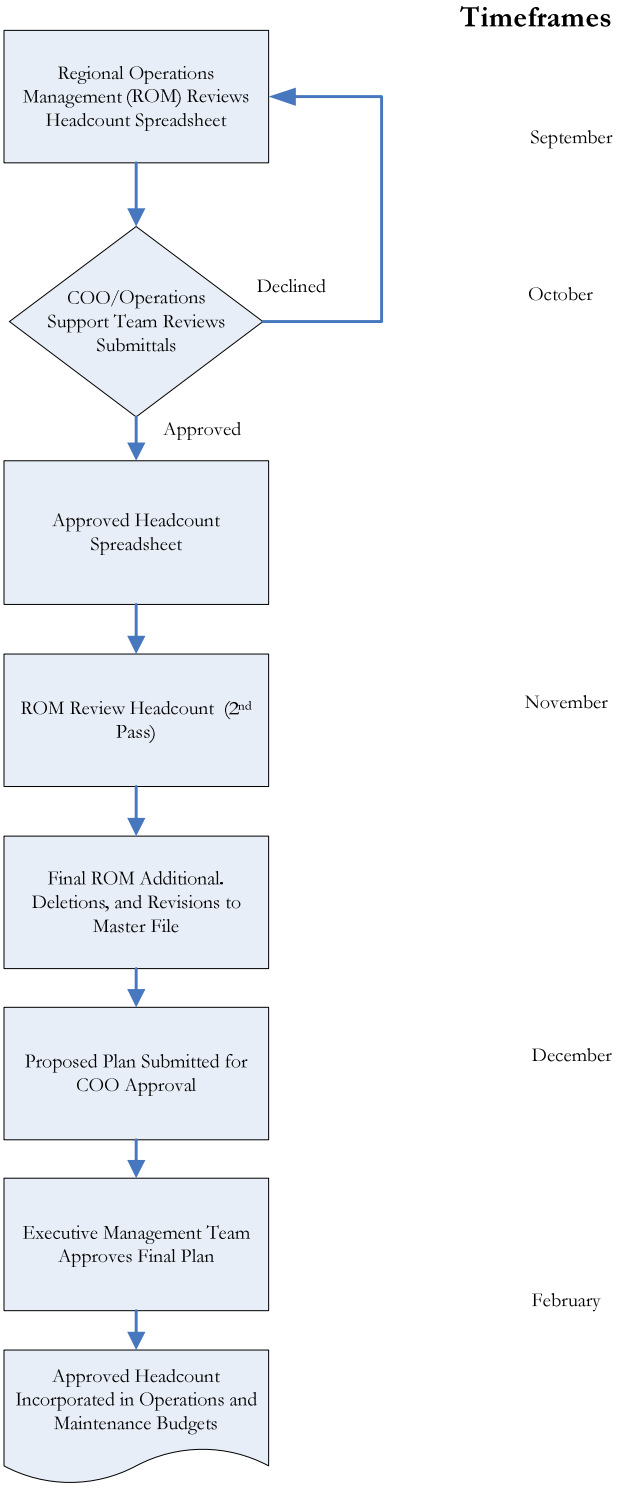
Each of these criteria is given a weighting and projects are chosen for implementation based on the highest rankings until the capital funding is spent. The overall capital budget dollars amount is determined with the financial area in conjunction with the Board to meet certain financial commitments. Once the individual projects have been identified for the capital program, the capital program is presented and approved by the Board of Directors in the February timeframe.[14]

Once a project has been approved as a part of the capital program, it still goes through a series of approvals prior to the commencement of work.[15] This approval process is facilitated with the Capital Project Database. During the year budget-to-actual performance on individual projects is measured by extracting information from the various work orders in the accounting system and uploading (electronic and manual) the information into the Capital Project Database. The current accounting system does not maintain budget information.[16]

Headcount Planning

A very similar process is used for headcount planning. The headcount plan is a five-year plan with a quarterly spending plan for the first two years and an annual spending plan for the last three years. Payroll information from the prior year is downloaded from the Water Services Corporation payroll vendor, Automatic Data Processing (ADP), and templates are created for circulation to the responsible regional manager and business managers in the regions. The headcount planning process is schematically shown in *Exhibit II-4*.[17]

Exhibit II-4
Headcount Planning Process



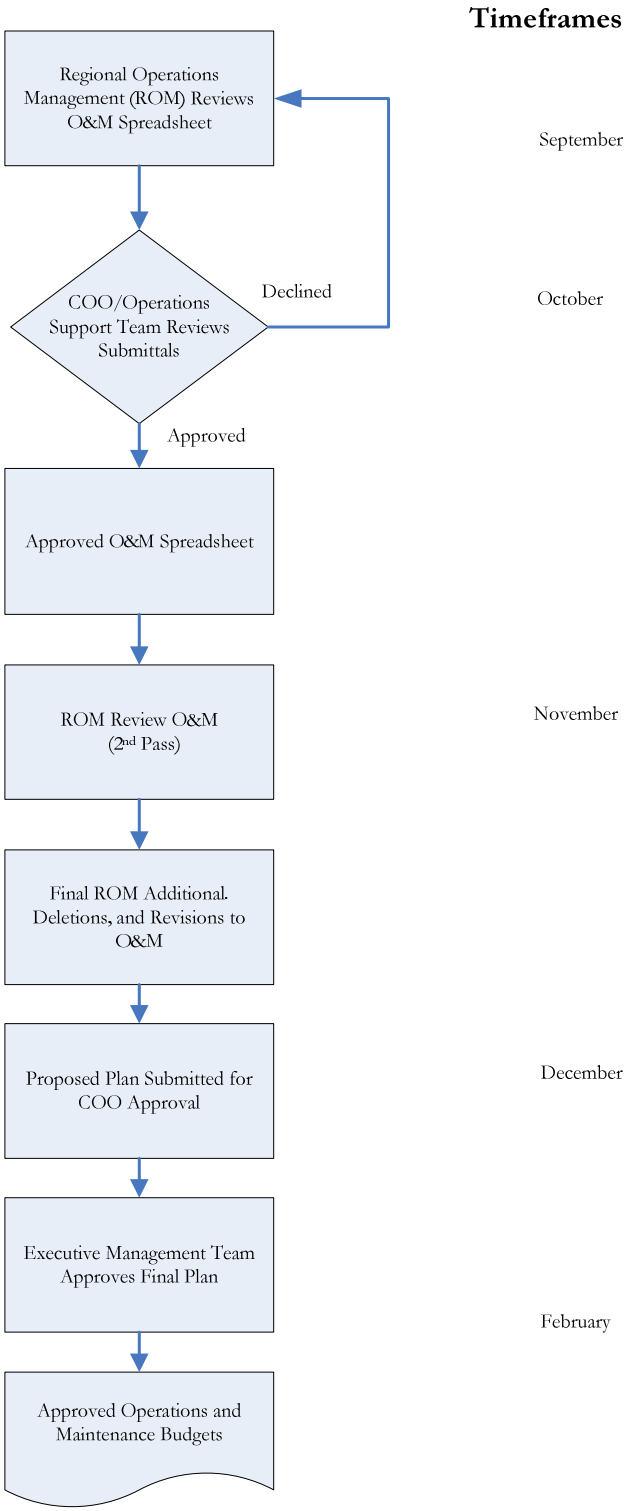
Individual Excel spreadsheet templates are created for circulation among the various responsible managers within Water Services Corporation, Inc.

Operations and Maintenance Planning Process

Headcount planning to a large extent drives the operations and maintenance budgets. A very similar process is used for operations and maintenance planning. The headcount plan drives the salaries portion of the operations and maintenance budget. In addition to staffing costs, supplies and materials are added to the operations and maintenance budget to create the complete operations and maintenance plan.[18] These costs are estimated based on prior year actual expenditures modified for expected future changes – i.e. such as the price of fuel and other cost changes.

The operations and maintenance plan is a five-year plan with a quarterly spending plan for the first two years and an annual spending plan for the last three years. The operations and maintenance planning process is schematically shown in *Exhibit II-5*.[19]

Exhibit II-5
Operations and Maintenance Planning Process



Tracking and Reporting

Various reports are produced on a monthly basis for monitoring conformance to operations and maintenance and capital plans, specifically:[20]

- Monthly Headcount Report
- Monthly Capital Expenditures Report
- Monthly Construction Work In Process
- Monthly Vehicle Report
- Monthly Information Technology Report
- Monthly Capital Spending Less Than $5,000
- Monthly Capitalized Time Report
- Monthly Projects Placed In Service
- Monthly Fines and Penalties
- Monthly Operations and Maintenance Expenditures – Current Month, Year to Date, Comparison to Last Year
- Monthly Gasoline Expenditures

Finding II-6 WSC corporate planning processes are not being adequately supported by its current information (computer) systems.

WSC has developed formal corporate planning processes. The corporate planning processes identified at WSC, although more manual and labor intensive than they should be, are reasonable. The processes involve input from the various regions as to the projects required, desired headcount levels, and operations and maintenance expenditures requirements. Each process involves several iterations between the regional and headquarters personnel in developing the final approved plans. The processes could be improved with better information (computer) systems.

Finding II-7 The tracking of the adherence to corporate plans could be improved with the implementation of better information (computer) systems.

Just as the development of the corporate plans is hindered by a lack of good computer systems, the tracking of the adherence to the corporate plans is a manual process. The current accounting system does not support the budgeting process – more specifically it does not permit budget amounts to be entered into the system, from which to create budget-to-actual reports of any nature.

Recommendations

Recommendation II-2 Implement a formal strategic planning process. (Refer to Finding II-4)

A formal strategic planning process results in a written document that is shared throughout the organization. It should include a mission and vision statement, goals and objectives, as well as an overall financial plan. A SWOT analysis should be undertaken as a part of the development of the initial strategic plan. The strategic plan should be reviewed and approved by the Board of Directors each year. Furthermore a process should be implemented for periodically updating the strategic plan.

Recommendation II-3 Continue to improve corporate planning and budgeting processes. (Refer to Finding II-5, Finding II-6, and Finding II-7)

WSC corporate planning and budgeting would be improved with more formal documentation and computer support. Schumaker & Company consultants recognize that WSC adoption of newer computer systems (which WSC was currently in the process of evaluating during our review) will have an impact on not only the processes involved in capital, headcount, and operations and maintenance planning process but also the tracking of adherence to corporate plans. Once these computer systems are selected, newer, modified business processes should be created that need to be documented for corporate-wide use.

C. Organizational Design

3. ***Organizational Design***: Review the extent to which the roles and authorities of and relationships among the Board of Directors and management staff of Water Services Corporation and its affiliate companies have been defined. Review any overlap or inconsistency of duties and responsibilities between corporate staff and the staff of the subsidiary companies. Review the relations between subsidiaries and other affiliate companies of Water Services Corporation. Consider benefits of consolidation or merger of affiliated companies.

Organization Structure

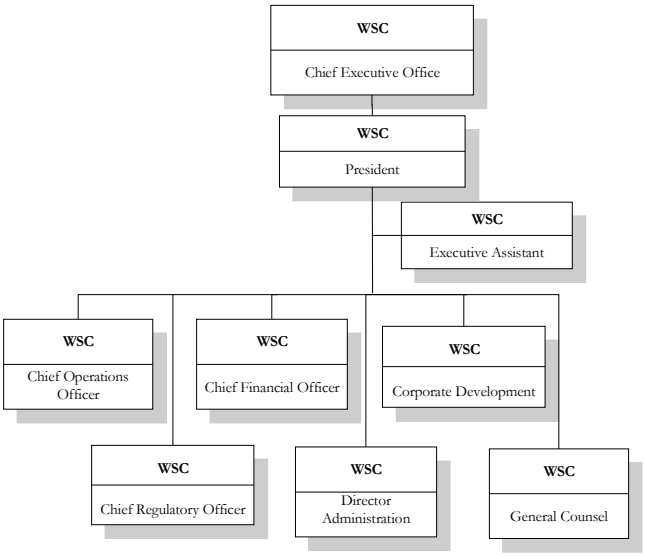
Findings & Conclusions

Finding II-8 **The regional organization adopted by Utilities, Inc. is similar to other water companies.**

Utilities, Inc. is organized in a regional structure with many of the common functions being centralized in Water Services Corporation in Northbrook. In actuality, all Utilities, Inc. personnel are employees of Water Services Corporation. The costs associated with each employee are allocated to the appropriate operating utility for regulatory purposes only.

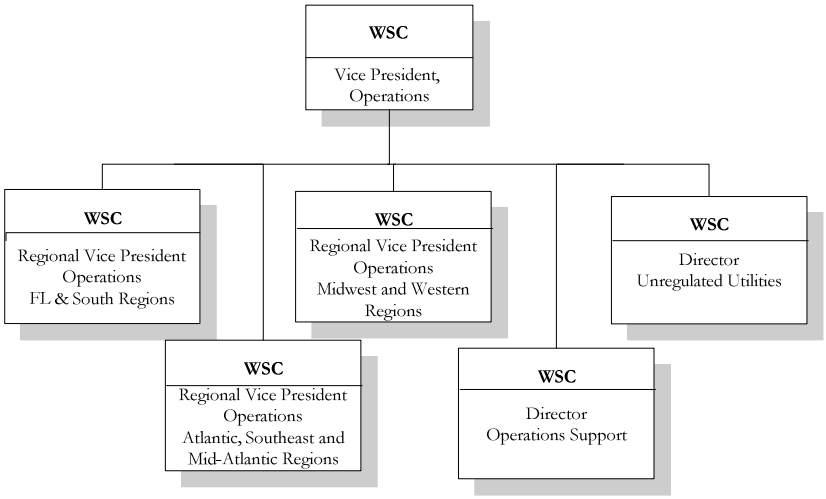
The organization of Water Services Corporation is shown in *Exhibit II-6*.

Exhibit II-6
Water Services Corporation Organization



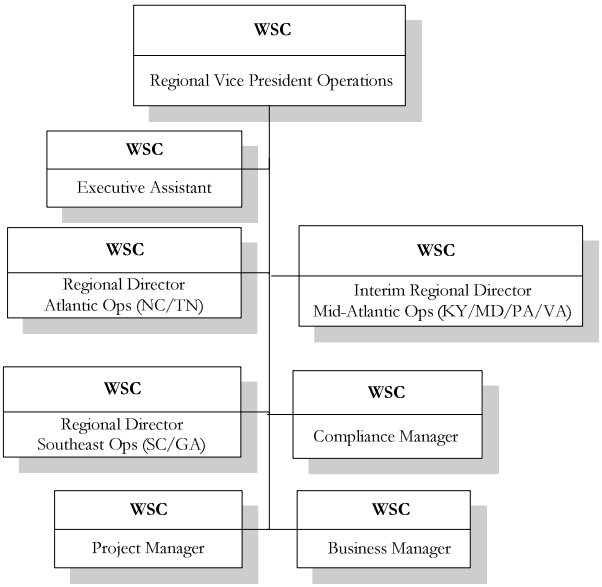
The regional organization reports to the Vice President of Operations. There are six regions as shown later in *Exhibit II-12*. The regions report to a Regional Vice President with each Vice President generally being responsible for multiple regions, as shown in *Exhibit II-7*.

Exhibit II-7
Regional Operations Organization



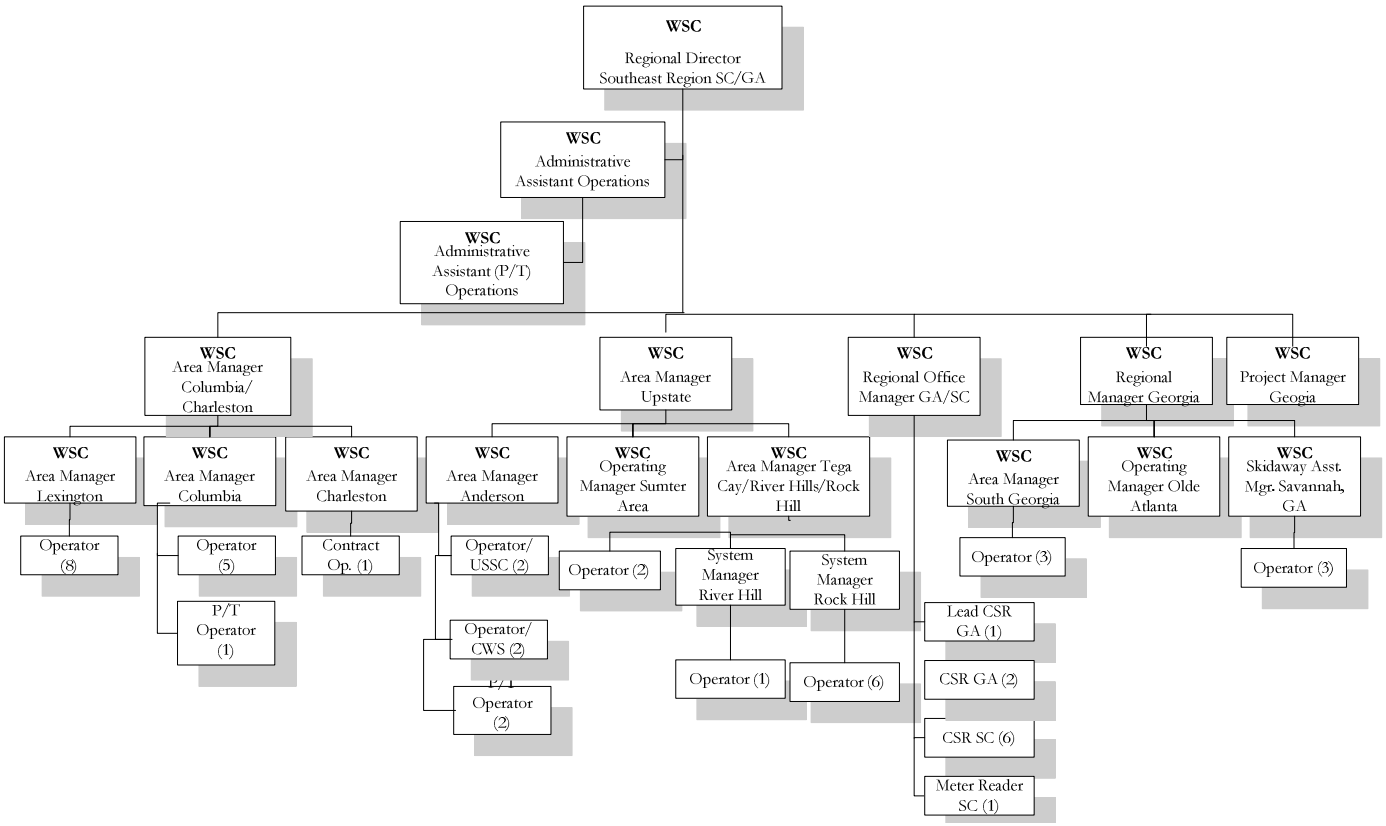
Each region is headed by a Regional Director that reports to the Regional Vice President, as shown in *Exhibit II-8*.

Exhibit II-8
Regional Organization



In addition to the Regional directors, each Regional Vice President's office is staffed with a Business Manager, a Compliance Manager, and a Project Manager – although not all of these positions are filled at this time. The Southeast Region, in which the South Carolina utilities are located, is shown in *Exhibit II-9*.

Exhibit II-9
Southeast Region



The WSC departments that serve South Carolina, and their functional objectives, are as follows:[21]

- Accounting – to accurately depict the financial records for all Utilities, Inc. entities, including South Carolina entities
- Administrative – to accurately field phone calls and actively assist other departments
- Billing and technology – to maintain an accurate billing system to send precise and timely billing information to customers; also includes regular system upkeep, upgrades, and maintenance
- Customer services – to maintain and assist in satisfying customer needs
- Executive – to meet the company needs as a whole

- Human resources – to develop, implement, and administer company programs, policies, and employee benefits; also responsible for ensuring company compliance with government regulations as those regulations pertain to HR matters
- Operations – to continuously provide safe and reliable water/wastewater services to customers
- Regulatory – to assess regulatory matters and file rate proceedings to ensure that Utilities, Inc. companies are earning their appropriate return on equity; it also assists in acquisitions and divestitures that require commission approval

Recommendations

None

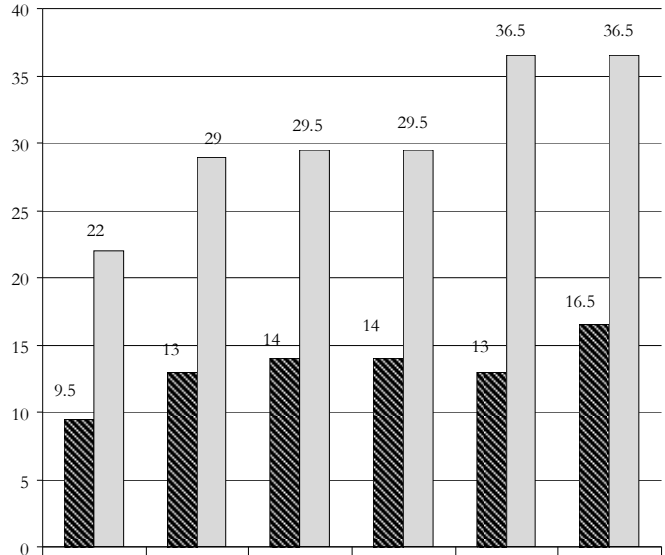
Staffing Levels

Findings & Conclusions

Finding II-9 **Staffing levels in South Carolina have increased over the last five years in response to regulatory requirements.**

Exhibit II-10 displays staffing levels for office and field operative employees in South Carolina by year.

Exhibit II-10
Regional South Carolina Staffing
(2002-2006)

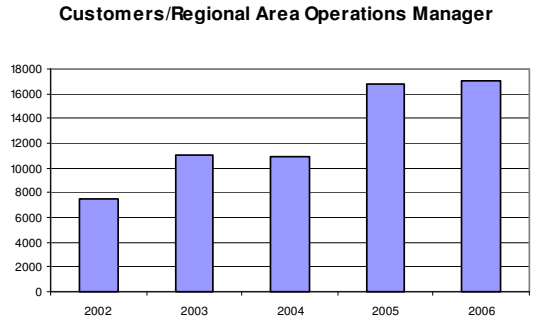


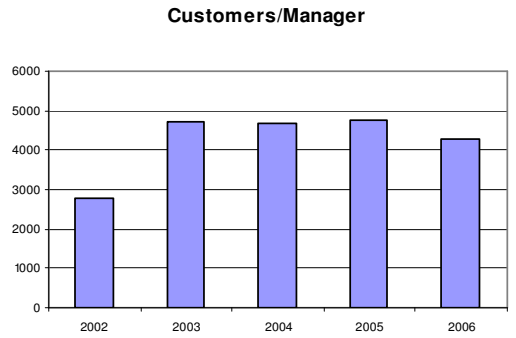
	Jul 02	Oct 02	Jul-03	Jul-04	Jul-05	Jul-06
Total Number of Office Employees	9.5	13	14	14	13	16.5
Number of Field Operatives	22	29	29.5	29.5	36.5	36.5

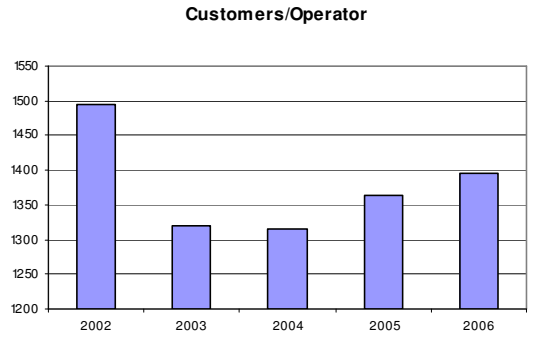
Staffing levels in South Carolina increased in October 2002 with the acquisition of additional water systems in South Carolina. Since that timeframe, the number of office employees has increased slightly from 14 to 16.5. However, in 2005, field forces level increased significantly. This increase, according to WSC management, was due to regulatory requirements for the South Carolina Department of Health and Environmental Contorl (DHEC) requiring facility checks be done on a 7 day per week, 365 day per year basis.

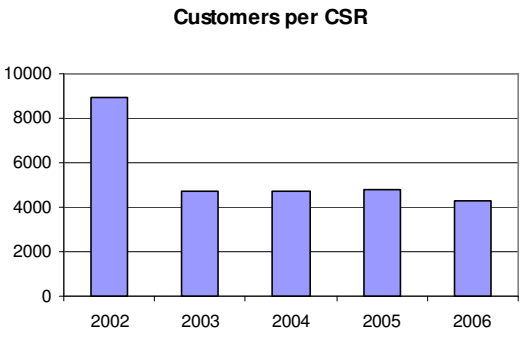
Exhibit II-11 illustrates various ratio statistics.

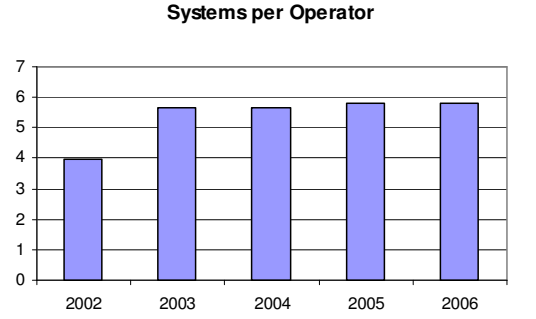
Exhibit II-11
Ratio Statistics

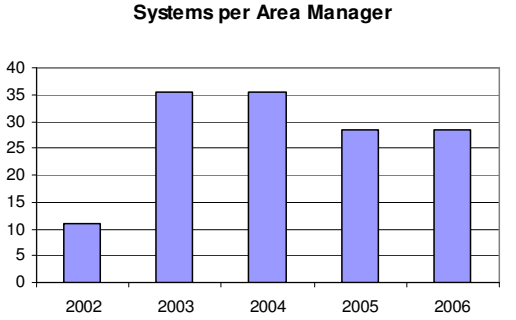


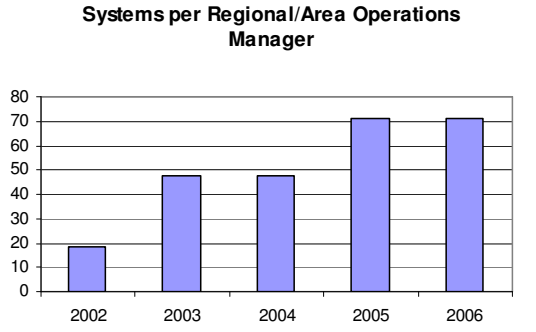


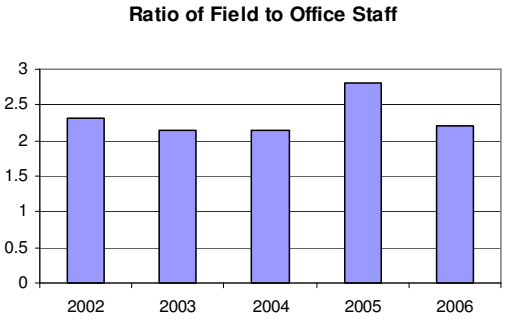












Recommendations

None

Affiliate Relationships

With regard to affiliated relationships, Schumaker & Company conducted an in-depth review of the affiliated interests of WSC that impact its regulated utility operations in South Carolina. In this case, an affiliated interest is defined as a business entity that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with the regulated utility. Control is defined as the power to dictate or influence the policy of an entity, whether through the ownership of voting securities, by contract, or otherwise. The focus of this area was to determine the extent to which, if at all, WSC ratepayers are compromised by WSC's plans or activities in relation to affiliated interests. (Specifics of cost allocation related to affiliate relationships will be addressed in *Work Plan Area 5 – Revenue/Cost Allocation*.)

Organization Overview

The five regulated utilities in South Carolina include:

- Carolina Water Service, Inc. (CWS)
- Tega Cay Water Service, Inc. (TCWS)
- Utilities Services of South Carolina, Inc. (USSC)
- Southland Utilities, Inc. (SU)
- United Utility Companies, Inc.(UUC)

Carolina Water Service, Inc.

Carolina Water Service, Inc. is a public utility providing water supply/distribution service and wastewater collection/treatment services. CWS is one of four Class A water/wastewater utilities in South Carolina. Its service area includes portions of Aiken, Beaufort, Charleston, Dorchester, Georgetown, Lexington, Orangeburg, Richland, Sumter, Williamsburg, and York counties. According to customer records for the test year ending June 30, 2004, water services, including distribution, were provided to 5,653 residential and 170 commercial customers. Of these customers, 2,774 were provided water distribution service. Likewise, wastewater collection and/or treatment services were provided to 9,729 residential and 181 commercial customers, including one wholesale customer, Midlands Utility, Inc. Wastewater collection services were provided to 2,213 of these customers.[22]

In 2004, CWS applied to the Public Service Commission of South Carolina (PSC) for a rate increase for its water and wastewater customers. The rate case was heard by the PSC in Docket 2004-357-WS in May, 2005. Although the Office of Regulatory Staff's (ORS) financial audits of CWS conducted prior to the rate hearing did not indicate any particular issue with the company's books and records, the number

of rate increases over the years and the level of the company's prices raised enough concern to justify performing this study.[23]

Tega Cay Water Service, Inc.

Tega Cay Water Service, Inc. is a public utility providing water supply service and wastewater collection/treatment service. TCWS is a Class B water and wastewater utility in South Carolina. Its service area includes portions of York County. According to TCWS' annual report for the year ended December 31, 2004, water services, including distribution, were provided to 1,713 residential and no commercial customers. Likewise, wastewater collection and treatment services were provided to 1,689 residential and no commercial customers.[24]

Utilities Services of South Carolina, Inc.

Utilities Services of South Carolina, Inc. is a public utility providing water supply and wastewater collection service. USSC is a Class A water utility in South Carolina and is a Class C wastewater utility. Its service area includes portions of Lexington, Anderson, Richland, Sumter, Abbeville, and York Counties. USSC did not become part of the Water Services Corporation until 2003. According to USSC's annual report for the year ended December 31, 2004, water services, including distribution, were provided to 6,859 residential and no commercial customers. Likewise, wastewater collection and/or treatment services were provided to 467 residential and no commercial customers.[25]

Southland Utilities, Inc.

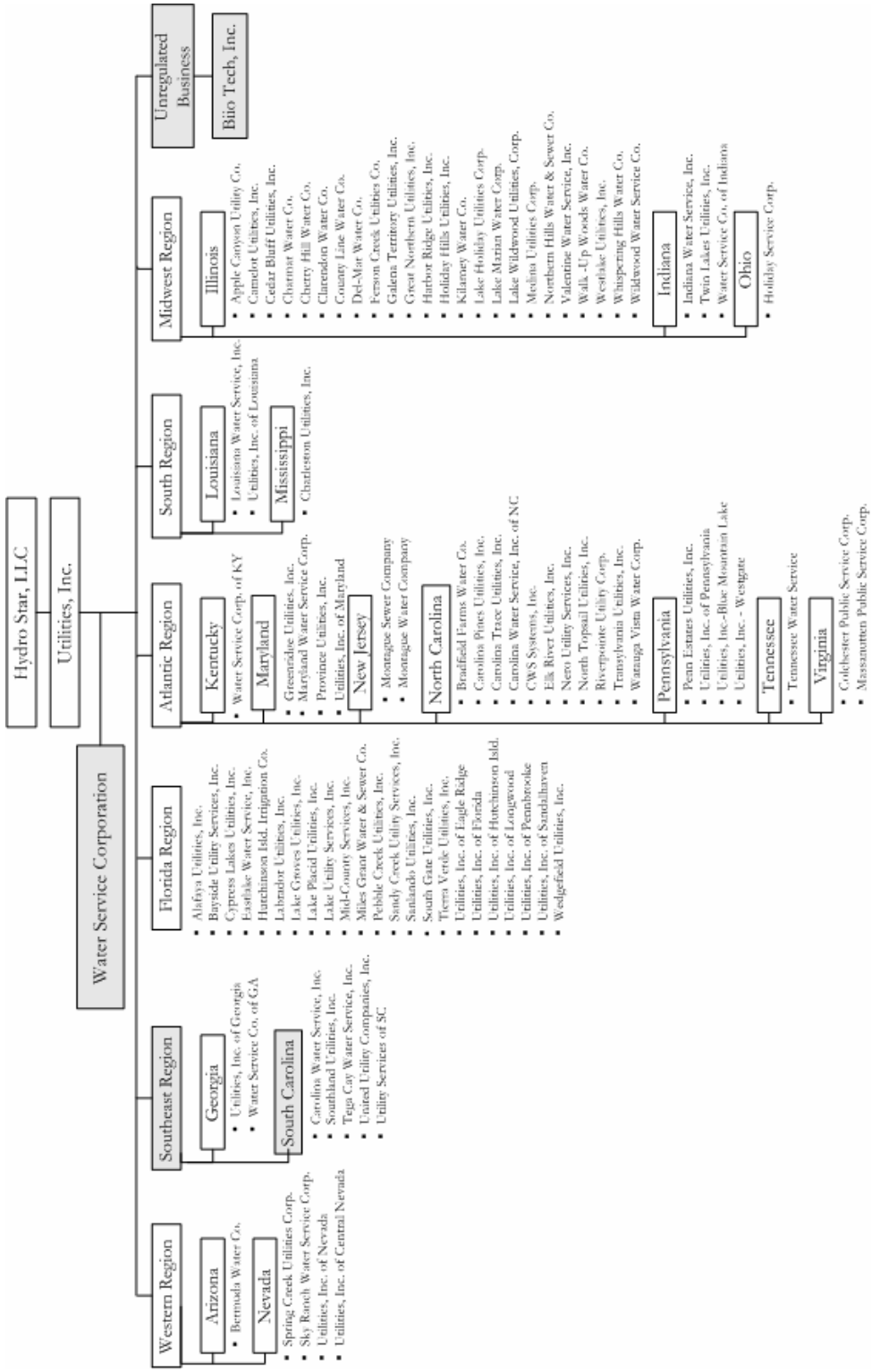
Southland Utilities, Inc. is a public utility providing water supply service. SU is a Class C water utility in South Carolina. Its service area includes portions of Lexington County. According to SU's annual report for the year ended December 31, 2004, water services, including distribution, were provided to 175 residential and no commercial customers.[26]

United Utility Companies, Inc.

United Utility Companies, Inc. is a public utility providing water supply service and wastewater collection service. UUC is a Class C water utility and a Class B wastewater utility in South Carolina. Its service area includes portions of Cheraw, Anderson, and Greenville Counties. According to UUC's annual report for the year ended December 31, 2004, water services, including distribution, were provided to 95 residential and no commercial customers. Likewise, wastewater collection and/or treatment services were provided to 1,779 residential and no commercial customers. In 2004, South Carolina Utilities, Inc. merged with United Utility Companies, Inc.[27]

Exhibit II-12 illustrates the Hydro Star organization showing the five South Carolina water utilities and their affiliates.[28] Those boxes in *Exhibit II-12* that are highlighted provide services on behalf of South Carolina customers.

Exhibit II-12
Hydro Star Organization



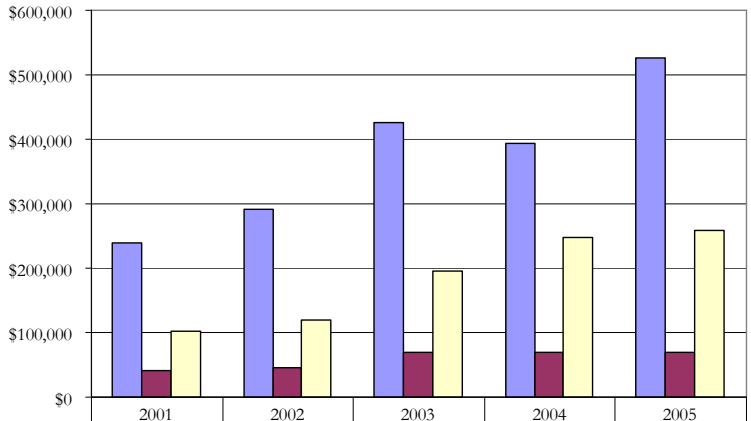
Services from Affiliates to South Carolina Utilities

Those affiliates providing services to the South Carolina utilities primarily include the Water Services Corporation (in Northbrook, IL and the Southeast Region in Charlotte, NC) and BioTech organizations, in which the following services have typically been provided:[29]

1. Executive and management services
2. Operations and engineering functions
3. Administrative services, including human resources
4. Billing
5. Information technology services
6. General customer services
7. Accounting functions, including payroll services
8. Regulatory functions
9. Sludge hauling services
10. General repairs and maintenance

Water Services Corporation employees provide the first eight services, while BioTech provides the last two services.[30] *Exhibit II-13* displays the dollar amount of services provided by Water Services Corporation to the five South Carolina utilities in total for 2001 to 2005,[31] which have generally been increasing over the past five years.

Exhibit II-13
$ Charges for Services Provided by WSC to South Carolina Utilities
(Total)

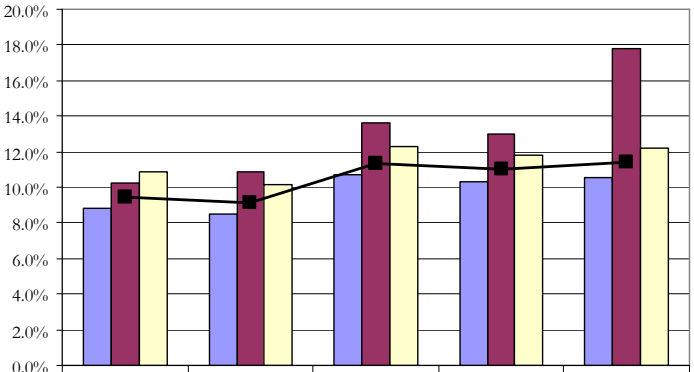


	2001	2002	2003	2004	2005
General Expenses	$238,543	$290,506	$426,988	$394,453	$526,560
Computer Costs	$40,246	$45,216	$68,637	$69,493	$68,762
Insurance Expenses	$103,180	$118,496	$195,864	$247,735	$257,842

Exhibit II-14 displays the percentage of total WSC allocated charges that the five South Carolina utilities have received each year for the past five years (2001-2005). The percentages have generally been

increasing, although 2004 took a slight dip.

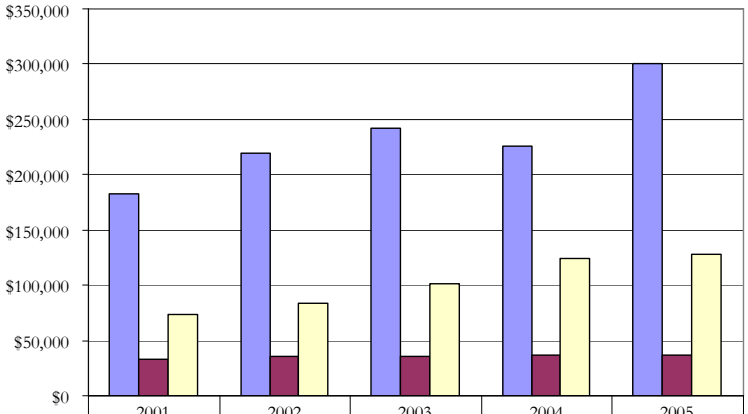
Exhibit II-14
% of Charges for Services Provided by WSC to South Carolina Utilities
(Total)



	2001	2002	2003	2004	2005
General Expenses	8.8%	8.5%	10.7%	10.3%	10.6%
Computer Costs	10.2%	10.8%	13.6%	13.0%	17.8%
Insurance Expenses	10.9%	10.1%	12.3%	11.8%	12.2%
Total Expenses	9.4%	9.1%	11.3%	11.0%	11.4%

Exhibit II-15 displays WSC charges by year (2001-2005) by major category for services provided to Carolina Water Services.[32]

Exhibit II-15
Charges for Services Provided by WSC to Carolina Water Services

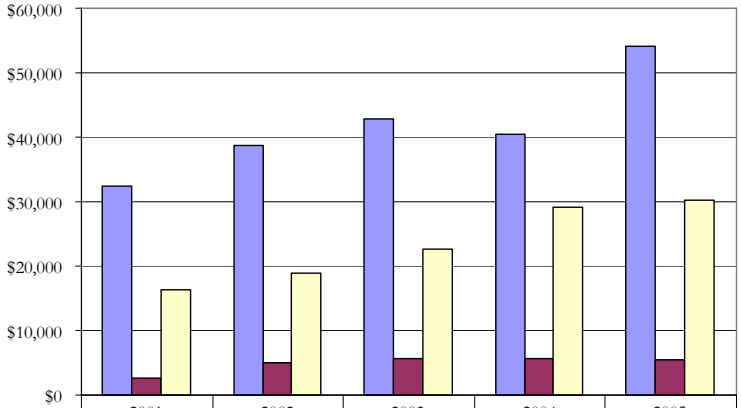


	2001	2002	2003	2004	2005
General Expenses	$182,390	$219,617	$242,312	$225,670	$300,269
Computer Costs	$33,171	$34,972	$36,085	$36,890	$36,610
Insurance Expenses	$73,603	$83,867	$101,273	$124,782	$127,767

Exhibit II-16 displays WSC charges by year (2001-2005) by major category for services provided to Tega

Cay Water Services.[33]

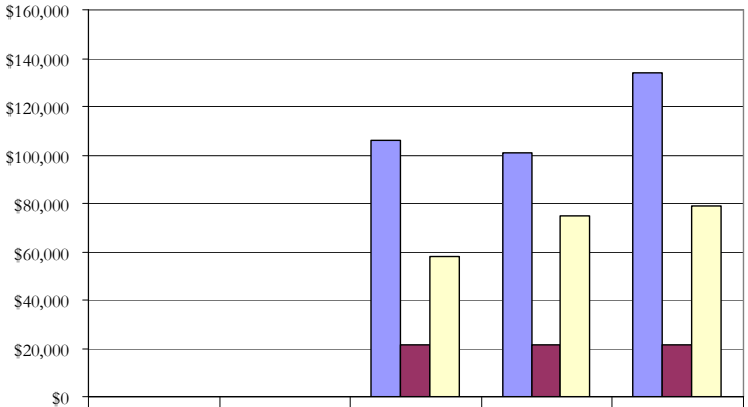
Exhibit II-16
Charges for Services Provided by WSC to Tega Cay Water Service



	2001	2002	2003	2004	2005
General Expenses	$32,361	$38,676	$42,919	$40,344	$54,217
Computer Costs	$2,631	$4,977	$5,703	$5,722	$5,510
Insurance Expenses	$16,388	$19,002	$22,509	$29,229	$30,274

Exhibit II-17 displays WSC charges by year (2001-2005) by major category for services provided to Utilities Services of South Carolina.[34] Only 2003 to 2005 data was available, as USSC did not become part of the Water Services Corporation organization until 2003.

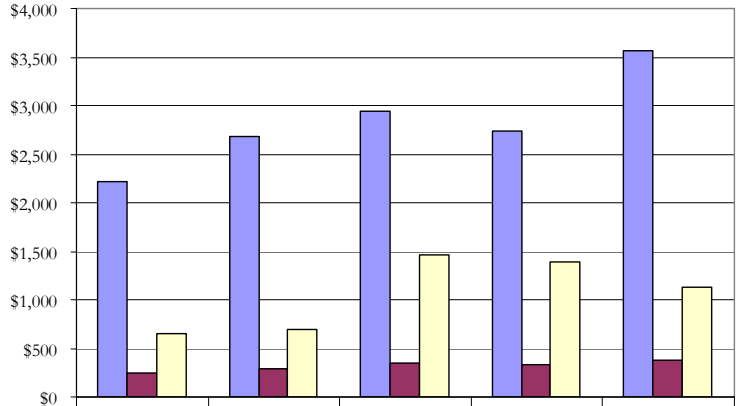
Exhibit II-17
Charges for Services Provided by WSC to Utilities Services of South Carolina



	2001	2002	2003	2004	2005
General Expenses	$0	$0	$106,328	$100,974	$133,814
Computer Costs	$0	$0	$21,523	$21,699	$21,651
Insurance Expenses	$0	$0	$58,046	$74,861	$78,821

Exhibit II-18 displays WSC charges by year (2001-2005) by major category for services provided to Southland Utilities.[35]

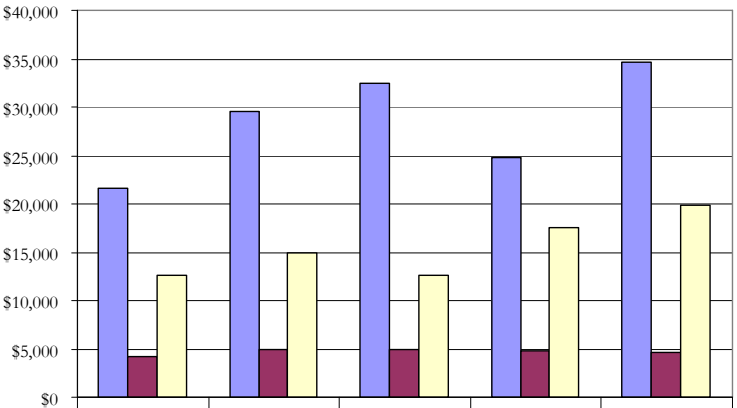
Exhibit II-18
Charges for Services Provided by WSC to Southland Utilities



	2001	2002	2003	2004	2005
General Expenses	$2,224	$2,678	$2,944	$2,743	$3,560
Computer Costs	$250	$293	$352	$335	$382
Insurance Expenses	$646	$689	$1,471	$1,388	$1,128

Exhibit II-19 displays WSC charges by year (2001-2005) by major category for services provided to United Utility Companies,[36] which includes South Carolina Utilities, Inc., as the latter merged with UUC in 2004.

Exhibit II-19
Charges for Services Provided by WSC to United Utility Companies



	2001	2002	2003	2004	2005
General Expenses	$21,568	$29,535	$32,485	$24,722	$34,700
Computer Costs	$4,194	$4,974	$4,974	$4,847	$4,609
Insurance Expenses	$12,543	$14,938	$12,565	$17,475	$19,852

The Water Services Corporation organization headquartered in Northbrook (Illinois) is the group where most shared services are provided to South Carolina utilities, although the Charlotte (North Carolina) regional office also provides shared services to South Carolina utilities.[37] All of these, including facilities, systems, and programs, are handled via the allocation methodology described in *Chapter III – Major Operational Activities*.

There is an agreement in place for services provided by Water Services Corporation to regulated utilities,[38] but none exists for services provided by Bio Tech to the regulated utilities.[39] The charges from Bio Tech to South Carolina utilities are not based on cost allocations; instead all charges from Bio Tech to individual South Carolina utilities sent are via invoices, from which payment is made via Water Services Corporation's accounts payable system.[40]

No other affiliate transactions involving transfer of employees, property, and/or technology exist according to WSC management.[41]

Services from South Carolina Utilities to Affiliates

No services were provided by the South Carolina utilities to its unregulated affiliates,[42] although South Carolina employees sometimes provide services for multiple utility organizations in South Carolina. These allocations, as well as those from Water Services Corporation, are described in *Work Plan Area 5 – Revenue/Cost Allocation*.

Findings & Conclusions

Finding II-10 The relationships of UI affiliates are not appropriately documented.

Proper documentation does not currently exist for affiliate relationships within the UI organization. Regarding South Carolina utilities, minimally Schumaker & Company expected to see at least two up-to-date contractual agreements regarding affiliate relationships, specifically one for Bio Tech services provided to South Carolina utilities and one for Water Services Corporation services provided to South Carolina utilities.

In the first case, Bio Tech, a formal agreement does not exist.[43] Instead, Bio Tech invoices the South Carolina utilities whenever it provides services. Although requested during field work on this project, it was stated by WSC management that we must receive a price sheet directly from Bio Tech, as WSC management would not be able to provide one. Subsequently, during review of the draft audit report, WSC management provided such a price sheet.[44]

In the second, case, the existing agreements for affiliate transactions between Water Services Corporation and South Carolina utilities within the UI organization are out-of-date and not regularly updated.[45]

- One agreement involving CWS, SU, UUC, South Carolina Utilities (which was later merged into UUC), and other non-Carolina utilities was over 20 years old (dated January 1, 1987) and had not been updated since that time.
- Another agreement involving TCWS was over 11 years old (dated December 31, 1995) and had not been updated since that time.
- Another agreement involving USSC was not originally provided during field work on this project, but was subsequently provided by WSC management during review of the draft audit report. This agreement was the newest of the three agreements involving South Carolina utilities (dated September 30, 2002) in which the Chief Regulatory Officer's signature was shown for both Water Services Corporation and USSC.

Schumaker & Company consultants noted additional concerns, such as:[46]

- All services are not included in the description of services provided by WSC to regulated utilities; human resources and information technology are two examples of services not specifically mentioned.
- The agreements indicate that costs are distributed (allocated) to regulated utilities "on an annual basis, unless the parent should elect to make a supplementary analysis for a special purpose," yet WSC in 2005 began routinely allocating costs on a quarterly basis. Schumaker & Company does not consider routine allocation of costs a "special purpose;" therefore, wording needs to be modified to reflect the current situation. Until recently, when allocations were being performed on a yearly basis, the customer numbers used were June customers, thereby creating a type of "average number of customers." Now that allocations are done quarterly, the customer count for a specific quarter is the count used to determine allocated costs. This wording also needs to be modified.
- The agreements indicate that "costs will be prorated in proportion to the average number of customers of each operating company during the calendar year" in which each customer of a water company and each customer of a sewer company will be counted as one. These agreements also state that "each customer of a company that provides water and sewer shall be counted as one and one-half," while "each customer of a water company which is a distribution company only, that is having no source of supply facilities, shall be counted as one-half." The customer equivalents for availability customers, however, are worded differently in the three agreements. The agreement involving the CWS, SU, and UUC utilities indicates that "each customer whose charge is for the availability of water service shall be counted as one-half," which does not agree with company documentation provided in *Exhibit III-8*. The agreement also does not specifically discuss availability of sewer service, as the TCWS and USSC agreements do. The TCWS and USSC agreements indicate that "each customer whose charge

is for the availability of water or sewer service shall be counted a one-quarter" and "each customer whose charge is for the availability of water and sewer service shall be counted as one-half," in which underlining has been provided by Schumaker & Company for emphasis between the two statements. The wording in not comprehensive and in at least one case wrong.

- Until recently the customer service office for Illinois, Indiana, and Ohio companies was housed in the Northbrook headquarters, therefore, the allocation was weighted heavier to these companies. As this situation changes, corrections to agreements are needed.

These contractual agreements are not regularly reviewed and updated when changes occur.

Recommendations

Recommendation II-4 **Develop formal contractual agreements for all affiliate relationships, review them annually, and update them as necessary. (Refer to Finding II-10)**

Contractual agreements should exist for all affiliate relationships with all five South Carolina utilities. They should exist not only for services provided by WSC but also for all other non-regulated entities within the UI organization. These agreements should be comprehensive and up-to-date. They should be reviewed annually and updated whenever any changes are required. These agreements should be regularly provided to the South Carolina Office of Regulatory Staff for information purposes.

III. Major Operational Activities

A. Service Levels

4. ***Service Levels***: Review whether goals applicable to both system reliability and responsiveness to individual business and residential customers have been set and met. Review contingency plans to ensure system reliability.

Water and Wastewater Operations

Schumaker & Company consultants spent several days visiting various Utilities, Inc. facilities to observe the operations and maintenance of these facilities. The facilities included both wastewater treatment facilities and water supply (wells) facilities in the West Columbia and Tega Cay areas and other facilities in and around the Rock Hill and Cherokee County areas of South Carolina. These visits permitted our consultants to observe the facilities and hold information gathering discussions with the operators stationed at some of these facilities.

Findings & Conclusions

Finding III-1 **The water and wastewater facilities appear well maintained and the operators interviewed appear knowledgeable about the operations of the specific facilities.**

Schumaker & Company consultants chose a random selection of facilities to visit in various geographical areas of South Carolina. Photographs of some of the facilities visited are shown in *Exhibit III-1*, *Exhibit III-2*, *Exhibit III-3*, and *Exhibit III-4*.

Exhibit III-1
Visited Treatment Facilities

Exhibit III-2
Visited Well Head Facilities

Exhibit III-3
Tega Cay Site Visit

Exhibit III-4
Briarcreek Wastewater Treatment Visit

The facilities visited appeared to be maintained in reasonable condition. One of the well heads visited was currently undergoing a renovation, including rebuilding of the well head structure and servicing of the pressure tank.

Finding III-2 Preventive maintenance is handled without the benefit of a computerized system or an equipment history database.

Schumaker & Company did not identify any type of preventive maintenance system in use throughout WSC. Preventive maintenance is handled by individual operators based on the knowledge and experience of those individuals. To this point in time, not having a system has been perhaps an acceptable practice; however, when one looks at the overall size of WSC and the commercial off-the-shelf packages that are available for scheduling preventive maintenance, WSC should be considering the implementation of such a business tool.

Recommendations

Recommendation III-1 Conduct an evaluation of a computerized preventive maintenance system. (Refer to Finding III-2)

One of the benefits of WSC's taking over small water systems should be the implementation of better technology for operating the various facilities. In our experience, such a system could not only be used to plan and schedule the performance of preventive maintenance, but also periodic inspections and testing could also be scheduled. In addition, such systems provide a history record for such activities.

Customer Service Functions

Water Services Corporation operates 15 call centers that are geographically located across the country. South Carolina calls go to a facility in South Carolina. Each call center uses a common *Customer Service Manual* for conducting its operations, although the *Customer Service Manual* contains slight variations for items that are specific to a given regulatory jurisdiction – such as deposits, payment terms, etc. All customer service representatives (CSRs) are trained to the *Customer Service Manual*.[47]

Customer service offices operate from 8:00 am to 5:00 pm local time. CSRs are responsible for billing inquiries, service requests, service issues, final bills, and new customers. In addition, each office is sent up to handle walk-in customers for bill payments and inquiries. Final bills are handled in Northbrook (Illinois). WSC does not use an automatic call directors (ACDs) in the customer service offices and, consequently, average speed of answer (ASA) is not measured, i.e., all phones ring at the same time.[48]

CSRs are also responsible for coordinating meter reading activities. In-house or contract meter readers are used to read meters. The system automatically kicks out high meter readings to be reread by a meter reader. If still high, the CSR is responsible for calling the customer to inform the customer of a high bill. Low readings may or may not be checked.[49]

Customer service representatives are also responsible for the processing of all payments. All payments are sent to the local office for processing. CSRs can make payment arrangements. Guidelines exist in the manual, but it varies by state.[50] Customer telephone numbers are verified on all calls.

The customer service system is essentially the billing system. It does permit searching on last name, account number, and address. It maintains a history of the last 12 invoices (monthly), and a history of calls but only in the notes fields in the system.[51]

Service orders are opened to handle complaints. There are approximately 50 types of service orders. Complaint service orders are called out to an area or operations manager for contact with the customer within 24 hours.[52]

Findings & Conclusions

Finding III-3 Customer service functions need to be improved.

Customer service functions are reasonable given current technologies in use at WSC; however, with the adoption of a newer computer system, customer service activities should be redesigned. Customer service activities are dispersed throughout the WSC organization as follows:

- Bill creation and mailing – Northbrook
- Payment processing – Regional
- Customer Contact Center – billing inquiries, payment arrangements etc. – Regions

The *Customer Service Manual*, which was developed at WSC, identifies many of the policies and procedures in place. The bill generation process is centralized in Northbrook; however, billing inquiries and payment processing are handled at the various field locations. In addition, call center functions are handled at the individual field locations. WSC has not taken advantage of technologies such ACDs and it cannot measure such indicators as average speed of answer, average handling time, etc. – all items that a modern call center would use to monitor its performance.

Schumaker & Company recognizes that WSC is in the process of replacing its customer information systems. At the same time these systems are replaced, the customer service function should be re-engineered to consider some centralization (physical or virtual) of the call center function supported by newer telephone technologies. At the same time, the *Customer Service Manual* will need to be rewritten to conform with these new requirements. We further suggest that the manual be rewritten using Word document production features, so that it could be more easily maintained and made available on an internal website (intranet).

Recommendations

Recommendation III-2 **Redesign customer service functions to include a consolidation of activities into fewer locations, adoption of newer call center technologies, and improvement of other business processes. (Refer to Finding III-3)**

Over the last ten years with the advent of newer technologies, utilities have been reducing the number of call centers, implementing automatic call director technologies, and implementing various bill payment methods (electronic, credit card, etc.) and bill processing technologies. Utilities develop specific measurements to measure performance in call centers and bill processing centers. Some of these measures would include:

- Average speed of answer
- Average handling time
- % bills processed day received
- % bills handled manually

Many of these measurements are actually only possible with the installation of certain technologies – none of which WSC currently has employed. Without such indicators, it is not possible to objectively measure performance in the customer service area. Business processes will need to be modified with the adoption of these newer technologies.

B. Revenue/Cost Allocation

5. ***Revenue/Cost Allocation***: Review the cost allocation plan for corporate overhead, both direct and indirect costs, to the subsidiary companies.

The following pages of this section describe the specific steps to be undertaken in conducting investigations in this work plan task area. We have designed our approach for the revenue/cost allocation area around two specific sub-topics, those being:

- *Cost accumulation and assignment* – As part of this section, we will address how WSC and its affiliates accumulate and assign costs that are ultimately borne by the ratepayers of South Carolina through intercompany billings.
- *Direct billing and cost allocation methodologies among affiliates* – Within this section, we will assess the fairness and the appropriateness of the methodology for cost allocations by WSC and its affiliates, as well as any contracts governing this methodology.

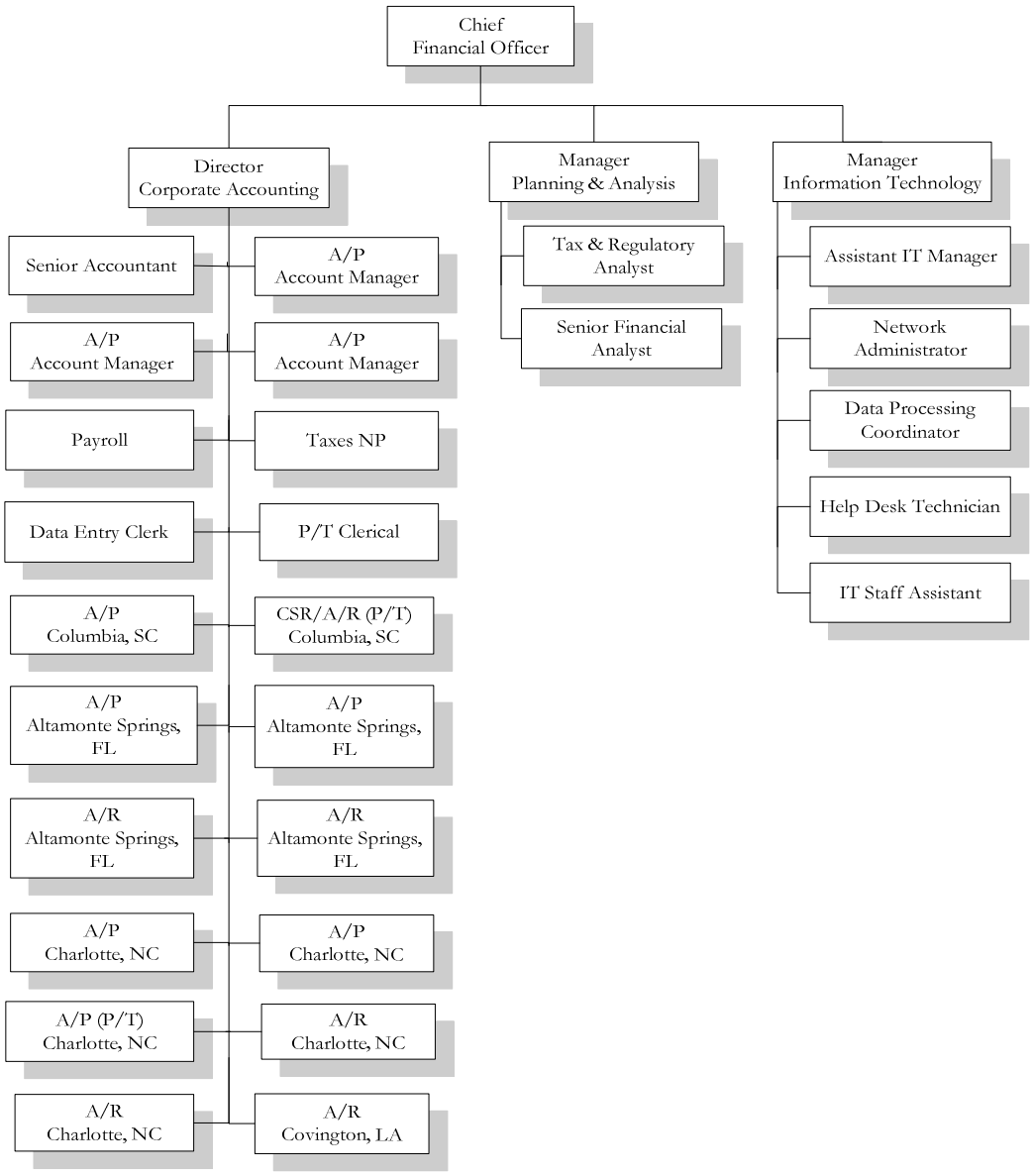
Background Information

This section includes the background information for the Revenue/Cost allocation area.

Organization Overview

Accounting activities involving affiliate transactions are handled in the Chief Financial Officer (CFO) organization, primarily in the Corporate Accounting group, as shown in *Exhibit III-5*.[53]

Exhibit III-5
CFO Organization



Allocation of Costs Methodology Background

In 2001 through 2004, the allocation of costs was done annually. In 2005 Utilities, Inc. (UI) decided to begin doing allocations on a semi-annual basis, and then changed in mid-year to do allocation quarterly. Therefore, in 2005 allocations were done for the period January through June 2005, July through September 2005, and October through December 2005.[54] In 2006, allocations were being done quarterly.[55]

All WSC costs are charged to UI subsidiaries, both regulated and non-regulated entities. Where applicable, WSC attempts to make payments to vendors, suppliers, or other similar organizations directly charged to a UI subsidiary. If they cannot be directly charged, then an allocation is made (described later). No WSC personnel costs are directly charged to UI subsidiaries; they are only allocated.[56] Also, WSC allocates costs to UI's operated, but not owned systems, in the same manner as it allocates costs to UI's owned entities. At this time, UI has very few of these systems, which are very small and only operated on an emergency basis by WSC operators. Because customers in these systems benefit from being part of the UI family (even though they are not owned), they receive a small portion of the allocation.[57]

To Schumaker & Company's knowledge, no "operated, but not owned" systems are located in South Carolina.

No WSC costs are allocated to UI as all costs associated with UI are directly charged to its books.[58] Likewise, no costs of the South Carolina utilities are charged back to WSC or UI, as they currently provide no services to either organization.[59]

Allocation Description by Journal Entry

All UI companies currently use the same chart of accounts in the homegrown accounting system (referred to as Accuterm), which WSC intends to replace soon.[60] However, allocation of common WSC expenses is based on five separate Excel spreadsheets, in which information is entered manually from the accounting system. These spreadsheets (which are nearly 10 years old, although they have been modified during that time period) are used quarterly to create journal entries, which are then uploaded to the accounting system to transfer costs to UI subsidiaries, including the South Carolina utilities.[61] These journal entries include:

- Standard Entry (SE) 50: Direct operator and regional office salaries and benefits
- SE 51: Direct computer expenses
- SE 52: Direct insurance expenses
- SE 60: Indirect common expenses
- SE 90: Expenses between companies

Use of the wording "direct" by WSC management with regard to these journal entries does not mean directly charged; instead its use generally refers to direct allocations, although in some cases an indirect allocation using a three-factor allocation is actually performed.

Operator and Regional Office Salaries and Benefits

This standard journal entry (SE 50) is applicable essentially to all non-Northbrook employees except regional offices and headquarters in Northbrook; those employees in Northbrook are included in SE 60 and those employees at regional offices are included in SE 90.[62]

Because staff within a region, such as the Southeast Region, works for multiple companies and operations staff within South Carolina also often works for on a number of systems in more than one of the five South Carolina utilities, salaries and associated benefit expenses are allocated to each utility.[63] Generally regional and utility employees do not use time reporting for charging time to one of the South Carolina utilities.[64] Allocations are made based on the number of customer equivalents (as discussed in *Chapter II*) for each particular operator (employee) within one of the utilities or by regional office, as based on a quarterly analysis of how much each employee's salary should be allocated to each company.[65]

Regarding health costs and other benefit costs, the total costs are calculated for all WSC employees throughout the period and then these costs are divided by the number of full-time employees to give the base amount for each employee. The base amount given to each employee is then allocated to each subsidiary based on the same methodology as salaries, which is based on customer equivalents.[66]

Pension and 401k contributions are tracked to each employee and also allocated out based on customer equivalents.[67]

Direct Computer Expenses

Each of the accounts that are related to programming, maintaining, and servicing the computer system are assigned to each of the UI subsidiaries based on each company's utilization. An analysis is performed each quarter to determine the number of accounts payable (A/P) invoices received and processed, as well as the number of customer bills sent for each of the respective companies. The total number of A/P invoices and customer bills are added together for each company and the corresponding proportion of the total is calculated. Accordingly, each company is directly assigned a proportion of costs that correlates to the company's use of the system. Deprecation of computer assets is allocated using *Code 5*, as described later in this section.[68]

Direct Insurance Expenses

According to WSC management, insurance, specifically the following types of insurance, is directly allocated to each company based on the determination of the premium for each company:[69]

- Excess liability
- Worker's compensation
- Automobile
- General property
- Other (key person life, etc.)

Actually insurance is sometimes directly allocated and sometimes indirectly allocated, as shown on the following pages. The difference being that direct allocation typically refers to using a sole cost causative allocation factor and indirect allocation refers to using a general allocator comprised of multiple factors, as one factor cannot solely define cost causation. Excess liability insurance is an example where an indirect allocation factor is used.

The details on which individual premiums are based are verified annually by the outside insurance company; however, the specific amounts may not directly correspond to salaries listed in the quarterly allocation journal entry (or other WSC accounting schedules) due to timing differences. The basis by insurance type includes the following:[70]

- *Excess liability* – It is an umbrella policy for general liability, automobile, and worker's compensation insurance. The premium allocation is based on three factors: miles of sewer mains (# sewer customers times average of 40 feet of main per customer divided by 5,280 feet), gallons of water sold (# of water customers times average of 200 gallons per day divided by 365 days per year), and operations payroll. WCS management believes that the use of this three-factor allocation is rational, because the number of customers drives many things, including the company's investment in plant and in vehicles, which in turn directly relates to the amount of insurance premiums that the company is charged. The company also uses operations payroll as its third factor, because the standard worker's compensation policy is allocated based on operations payroll.
- *Worker's compensation* – The premium allocation is based on each system's percentage of operations payroll to total operations payroll. WSC management believes that use of operations payroll is appropriate given that operators (employees in field) are covered under the worker's compensation policy.
- *Automobile* – The premium allocation is based on the specific number of vehicles insured according to the policy. WSC management believes that the use of number of vehicles is appropriate as the amount paid is directly related to the number of vehicles.
- *General property* – The premium allocation is based on the estimated property value of evaluated storage tanks, standpipes (if any), and an allocation of other plant items, including the regional office's property values and the Northbrook office property value. WSC management believes that it is appropriate, as these three factors drive the cost of general property insurance premium costs.
- *Other* (key person life, etc.) – The premium allocation for this variety of smaller policies is based on operations payroll.

Each type of insurance is weighted depending on the premium corresponding to that type of insurance.

Indirect Common Expenses

Salaries, benefits, and other expenses not assigned via SE 50, SE 51, and SE 52 are allocated via SE 60. Each of these accounts (as adjusted for reclassification of accounts) is allocated based on codes assigned to each account.[71]

Expenses between Companies

The UI subsidiaries also receive an allocation of costs that have been incurred at their regional cost centers and offices. (All cost centers are offices, but not all offices are cost centers. Cost centers receive costs that are not specific to one company.) South Carolina is one of six states that have regional cost centers and offices. The allocation of costs is made based on the number of customer equivalents for each operating company that receives service from each cost center or office.[72]

Allocation Description of Codes Used by Account

In performing the allocation for each of these journal entries, 11 different codes specify the allocation factors used. *Exhibit III-6* and *Exhibit III-7* illustrate the allocation factors used by individual account.[73]

Exhibit III-6
Summary Description of Codes Used by Account

Individual WSC Account	SE #	Code #
Operator's Salaries	50	
Regional Office Salaries	50	
Salary – Computer	52	4
Salary – IL Admin/Accounting	60	1
Salary – IL Customer Service	60	2
Agency Expense	60	1
Legal Fees	60	1
Audit Fees	60	1
Temp Employment	60	1
Outside Computer Consulting	51	
Employment Finders Fees	60	1
Computer Maintenance	51	
Director Fees	60	1
Computer Programming	51	
Engineering Fees	60	1
Accounting Studies	60	1
Tax Return Review	60	1
Computer Salaries	51	
Other Outside Salaries	60	1
Health Insurance Reimbursement	50; Northbrook Office 60	Northbrook 5
Employee Insurance Deductions	60	5
Health Costs & Other	60	5
Dental Insurance Reimbursements	60	5
Pension Contributions	Operators 50; Balance 60	6
Tuition	60	5
Deferred Compensation	60	1
Health Insurance Premiums	60	5
Dental Insurance Premiums	60	5
Term Life Insurance	Operators 50; Balance 60	5
401K Contributions	Operators 50; Balance 60	6
Disability Insurance	Operators 50; Balance 60	5
Other Employee Pension & Benefits	Operators 50; Balance 60	5
Other Insurance	52	
Publications, Subscriptions & Tapes	60	1
Answering Service	60	2
Computer Supplies	NA	
Printing & Blueprints	60	5

Exhibit III-7
Summary Description of Codes Used by Account

Individual WSC Account	SE #	Code #
Postage & Postage Meters – Office	NA	
UPS & Air Freight	NA	
XEROX	60	5
Office Supply Stores	60	5
Reimbursement/Office Employee Expense	60	5
Cleaning Supplies	60	5
Memberships	60	5
Microfilming	51	
Other Office Expense	60	5
Office Telephone	60	5
Office Telephone – Long Distance	60	5
Office Computer Phone List	51	
Office Computer Phone Line/Long Distance	51	
Office Electric	60	5
Office Gas	60	5
Other Office Utilities	60	5
Office Cleaning Service	60	5
Landscaping, Mowing Snow	60	5
Office Garbage Removal	60	5
Decorating & Repainting Structures	60	5
Repair Office Machines & Heating	60	5
Other Office Maintenance	60	5
Employee Educational Expenses	60	5
Office Education/Training Expense	60	5
Meals and Related Expenses	60	1
Bank Service Charges	60	1
Other Miscellaneous General	60	1
Depreciation Structure	60	5
Depreciation Office Furniture	60	5
Depreciation – Telephones	60	5
Depreciation – Computer	51	
Real Estate Tax	60	5
FICA Expense	Regional Offices 50; Northbrook 60	NB 5
SUTA	50	
SUTA – IL	60	5
FUTA	Regional Offices 50; Northbrook 60	NB 5
Interest Intercompany	Varies	
Interest During Construction	60	5
Miscellaneous Income	60	5
S/T Interest Expense	60	5

Each of the 11 codes (code corresponds to a particular method of allocation) used are described on the following pages as follows:[74]

Code 1

The customer equivalent basis for allocating common expenses has been used for a number of years. Water Services Corporation provides service to about 250 small systems. The make-up of the customer base is fairly uniform throughout these systems, namely residential and small commercial customers, with the work force and work schedules geared to serving these small operations. The administrative staff, in turn, is also tailored to serving these small systems plus emerging new developments, thereby establishing a relationship between administrative and general expenses and customers used as the basis of allocations. Using customers as the basis of allocation also has the advantage of being readily available and being consistent from year to year.

Code 1 is based on customer equivalents. Customer equivalents are not number of customers, nor are they the number of billed customers. Customer equivalents are determined by the following table, as shown in *Exhibit III-8*.[75]

Exhibit III-8
Customer Equivalents by Customer Type

	# of Customers	Factor	Customer Equivalents
Water Customer Only	1	1.00	1.00
Sewer Customer Only	1	1.00	1.00
Water & Sewer Customer (a)	1	1.50	1.50
Water Distribution Only	1	0.50	0.50
Sewer Collection Only	1	0.50	0.50
Availability (b)	1	0.25	0.25

(a) Many of the expenses incurred in servicing customer accounts are shared between water and sewer when a customer is supplied both services; therefore, use of a 1.5 customer equivalent recognizes that some expenses do not have to be fully duplicated. Customers that are both water and sewer together are not considered the customer equivalent of two customers, because these customers only require one premise, one address, one bill, etc. Also, it is not considered the same as having a a water or sewer customer on their own, because WSC serves both water and sewer service issues. Therefore, WSC determined 1.5 to be a logical customer equivalent for a combined water and sewer customer.

(b) No availability customers are located in South Carolina.

The number of customers is the number of meters installed at 6/30 to provide the average number of customers during the year. An availability customer is one who has a main in front of his lot, but does not partake in any of the services.

Code 1 determines the percentage of customer equivalents in a given system compared to the total number of customer equivalents in Utilities, Inc.

Code 2 (not applicable to South Carolina utilities)

The company's general office and division office of the Illinois, Indiana, and Ohio operations is located at 2335 Sanders Road in Northbrook, Illinois. To gain operating efficiency, the clerical employees do

work involving all subsidiaries, as well as the Illinois-Indiana-Ohio division. The employees that are allocated based on *Code 2* work exclusively on the Illinois-Indiana-Ohio companies.

Similar to *Code 1*, *Code 2* is also based on customer equivalents. Code 2 determines the percentage of customer equivalents compared to the total number of customer equivalents in Illinois, Indiana, and Ohio.

This Code allocates costs to only Illinois, Indiana, and Ohio companies.

Code 3 (not applicable to South Carolina utilities)

Some particular expenses apply only to Illinois companies. *Code 3* is also based on customer equivalents. *Code 3* determines the percentage of customer equivalents compared to the total number of customer equivalents in Illinois.

This Code allocates costs to only Illinois companies.

Code 4

Code 4 is the percentage of the number of bills sent to customers and invoices processed for each company compared to the total for all UI companies. *Code 4* is primarily used to distribute computer costs. This method of allocation is appropriate for computer costs because theses costs are substantially driven by the amount of bills and computerized billing records that have to be calculated, recorded, and printed, as well as the number of invoices processed through the computer by A/P personnel.

Code 5

Code 5 is a weighted average of *Code 1*, *Code 2*, and *Code 4*. The weight of each code is based on the number of WSC employees whose salaries are allocated on each basis. This code is primarily used to distribute SE 60. *Code 5* is the most appropriate method of allocation because it considers how much time and effort employees in the Northbrook office dedicate to each system. Administrative and accounting personnel work on all systems, so the customer equivalent allocation (*Code 1*) is used for these employees. Customer service personnel in the Northbrook office are specific to Illinois, Indiana, and Ohio operations, so the companies that are provided these services out of the Northbrook office would receive an additional percentage allocation. Finally, computer services are included since all bill and invoice processing for all operating companies is done out of the Northbrook office.

Code 6

Code 6 is used to allocate pension and ESOP costs on SE 60, and is based on the percentage of SE 52 and SE 60 salary that has been allocated to each company. This is the most appropriate method of allocation, because pension costs are directly related to employee salaries.

Code 7

Code 7 is based on the estimated property value of elevated storage tanks and standpipes (if any) and an allocation of other plant items, including the regional offices' property values and the Northbrook office property value. *Code 7* is used to allocate the company's general property insurance premium. This is the proper basis for allocation, since these are the three factors that drive the cost of the company's general property insurance premium.

Code 8

Code 8 is the allocation of the premium for excess liability insurance and is based on three factors - sewer customers, water customers, and operations payroll. The book states that this premium is based on miles of sewer mains, gallons of water sold, and operations payroll. However, miles of sewer mains is determined by multiplying the number of sewer customers by an average of 40 feet of main per customer and dividing by 5,280 feet. Because this same multiplier is used for each sewer system, the real allocation factor is the number of sewer customers. Similarly, gallons of water sold is determined by multiplying the number of water customers by an average of 200 gallons per day and then by 365 days a year. Because this multiplier is used for each water system, the real allocation factor is the number of water customers.

It is rational to base excess liability insurance on the number of customers. The number of customers drives many things, including the company's investment in plant and in vehicles. In turn, the company's investment in plant and vehicles directly relates to the amount of insurance premium the company is charged. The company uses operations payroll as its third basis factor for excess liability because the standard worker's compensation policy is allocated based on operations payroll.

Code 9

Code 9 is the percentage of operator's salaries for one company compared to the total operator's salaries for all UI regulated companies. Worker's compensation premiums are driven by operator's salaries, thereby making this allocation method appropriate.

Code 10

Code 10 distributes the premium for auto insurance, which is based on the specific number of vehicles insured according to the policy. The amount paid for auto insurance is directly related to the number of vehicles, thereby making this method of allocation appropriate. The company does allocate vehicles in some areas due to the fact that they are shared between systems. The allocated vehicles are based on the customer equivalents for the systems that share vehicles only. For example, under the Florida column, if Lake Placid, UIF, and Bayside shared vehicles, then the allocation of those vehicles would be based on the customer equivalents for those systems only.

Code 11

Code 11 is the weighted average of *Codes 7 - 10*. Each code is weighted based on the level of insurance that each code applies

- *Code 7* applies to general property.
- *Code 8* applies to excess liability.
- *Code 9* applies to worker's compensation and other insurance.
- *Code 10* applies to auto insurance.

Other Accounting Processes in Support of Affiliate Transactions

Purchases and Invoices Processing

For individual entities within the UI organization, including the South Carolina utilities, purchases are coordinated at the branch level by area managers. A purchase order log is maintained for each system detailing purchases by month. Each system's area manager reviews the purchase order log for completeness, accuracy, and significant or unusual items. No matching process exists between what was ordered, received, and invoiced. For projects expected to have costs greater than $5,000 an approved work order is required before purchases can be made. In these cases, the majority of costs are typically capitalized.[76] The primary affiliate transaction impacting South Carolina utilities are purchases of sludge hauling and disposal services from Bio Tech (a South Carolina corporation, which is also a wholly-owned UI subsidiary), although Bio Tech also performs construction/renovation/repair of facilities and buildings in South Carolina.[77]

Invoices are typically received at each system's office, which for South Carolina utilities is in West Columbia (South Carolina). As they are received, account managers review the invoices for proper spending approvals and then code the invoice to a specific general ledger (G/L) account or work order number. Once any local approvals are made (if required) by area managers, the invoices are then forwarded to Northbrook for payment without any further review. All invoices are paid through the Northbrook office, regardless of where reviewing and coding takes place.[78]

Operators and area managers have low approval limits, generally between $100 and $500, although no set approval limits exists for these titles. Other authorization levels exist for higher amounts, which until October 2006, were as follows:[79]

- Regional Directors, up to $25,000
- Regional Vice President, up to $75,000
- Vice President of Operations, up to $75,000
- Chief Executive Officer (CEO), over $100,000

No explanation was provided by WSC management to Schumaker & Company consultants as to who can approve payments between $75,000 and $100,000;[80] however, in October 2006 new delegations of authority limits were implemented for the following items:[81]

1. Developer agreements
2. Work order requirements
3. Capital and expense spending, including consent order, permit, and development commitments, and capital and expense spending for IT hardware, software, equipment, etc.
4. Sale of assets
5. Personnel (hiring and offers)
6. Travel and entertainment expense reimbursement
7. Contracts

Exhibit III-9 illustrates the new capital and expense spending limits.[82]

Exhibit III-9
Capital and Expense Spending Limits
(Including Consent Order, Permit, and Development Commitments)

Position Designated Authority	Limit
Directors/Managers	≤$5,000
Regional Directors	≤$50,000
UI Leadership Team, excluding Chief Operating Officer (COO) and CEO	≤$100,000
Regional Vice President	≤$250,000
COO	≤$500,000
President/CEO	> $500,000

IT Capital and Expense Spending Limits

Position Designated Authority	Limit
Directors/Managers	≤$2,500
Regional Directors	≤$2,500
Regional Vice President	≤$7,500
UI Leadership Team	≤$25,000
President/CEO	>$25,000

Exceptions to the above approval thresholds include the following:

- Sludge hauling, chemicals and water/sewer testing expenses at any amount need only be approved by Regional Directors.
- Yearly insurance premiums are approved upon receipt; progress invoices applied against approved premiums need only Corporate Director approval.

- Invoices for legal expenditures are forwarded to the Northbrook office for executive approval and are coded by a Senior Accountant in Northbrook.

Bio Tech's sludge hauling services to South Carolina utilities fall into the exception category.[83]

Every Wednesday, the Data Processing Coordinator runs a cash requirements report listing all A/P invoices and their due dates. The Director of Corporate Accounting receives this report, indicates a date to pay up through (typically 10 days out), and reviews the report for large dollar amounts and unusual vendors. A check run is initiated, typically on Thursdays, in which checks are run on pre-numbered check stock. A log of check numbers is maintained for control purposes. After processing, printed checks are given to the Data Entry Operator to run through the check signer. All checks between $1,500 and $5,000 must be additionally signed by the Senior Accountant within the Corporate Accounting group. Additionally, the Director of Corporate Accounting or the CFO must sign checks greater than $5,000. If either the Senior Accountant or the Director of Corporate Accounting are absent during this procedures, either of them has the authority to review the other's set of invoices. Invoices are attached to these checks for support, which may be reviewed for proper approval and coding.[84]

At the end of the month, the Senior Accountant emails the Regional Directors a list of processed invoices for their region for review.[85]

Other Processes

Other accounting processes not previously discussed, such as payroll, customer accounts receivables, rates, meter reading, connects/reconnects, customer billing and payments, bank reconciliations, petty cash, debt administration, capital projects (work orders), and others do not appear to have a direct impact on affiliate relationships and associated transactions; therefore, these areas were not reviewed as part of this task area, although some may be included in other task areas.

Allocation of Rate Base Methodology

WSC, in addition to allocating costs, also allocates common rate base, which is primarily comprised of the Northbrook office building, furniture, and computers. This allocation is not recorded on each UI subsidiary's books, but is created for each utility's rate case filing as a special financial reporting process.[86]

Findings & Conclusions

Finding III-4 Direct charging of employee time is not used to the extent appropriate.

Best practices with regard to assigning costs to UI subsidiaries would be to have costs/revenues directly charged whenever possible. The preferred hierarchy is:

1. Direct charging whenever possible
2. If not possible, then direct allocation should be used
3. Only in rare cases should indirect allocation, such as a general allocator, be used

However, direct billing is used on a limited basis within the UI organization. Direct billing is used within the UI organization for payment of accounts payable invoices where the specific SC utility can be identified. Employee time is directly charged only for rate cases and capital projects, based on manual reporting. Instead, initially allocations of time are calculated, using customer equivalents, which are based on a manual quarterly assessment of where WSC or utility employees spend their time. Then, any time designated for rate cases and capital projects reduces the allocations. (Allocating time costs first, then reducing allocations by direct charges is the reverse of what most utility organizations do. Generally, direct charges are made, and then allocations of remaining costs are done.) No employees use positive or negative time reporting for any other allocation purpose. Their ability to use such time reporting is currently limited by the old Accuterm system.[87]

Finding III-5 **The commercial customer data provided to South Carolina in the annual utility reports for the SC utilities do not agree with information provided during this project as part of RFP and/or rate filing documentation.**

Exhibit III-10 shows discrepancies in data provided to Public Service Commission of South Carolina and the South Carolina Office of Regulatory staff in annual utility reports with that included in the RFP (for this project) and/or recent rate filings.

Exhibit III-10
Comparison of Type of Customers between 2004 RFP and 2005 Annual Report

	Carolina Water Service, Inc.		Tega Cay Water Service, Inc		Utilities Services of South Carolina, Inc		Southland Utilities, Inc.		United Utility Companies, Inc	
	RFP/ Rate	Annual Report	RFP/ Rate	Annual Report	RFP/ Rate	Annual Report	RFP/ Rate	Annual Report	RFP/ Rate	Annual Report
Water										
Residential	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Commercial	Y	N	Y	N	Y	N	Y	N	Y	N
Wastewater										
Residential	Y	Y	Y	Y	Y	Y	N	N	Y	Y
Commercial	Y	N	Y	N	Y	N	N	N	Y	N

Specifically the following is improperly occurring:

- All five SC utilities do not properly segment commercial customer data for water customers in their annual report.
- Four of the five utilities, specifically CWS, TCWS, USSC, and UUC, do not properly segment commercial customer data for wastewater customers in their annual report.

Exhibit III-11 illustrates the number of customers included in the RFP, which presumably came from UI's South Carolina utilities.[88] As shown, the RFP indicated that only CWS had commercial customers. Nevertheless, rate filings indicate that commercial customer water/water distribution rates exist for all five utilities and commercial customer sewer/sewer collection rates exist for four of the five utilities (CWS, TCWS, USSC, and UUC).

Exhibit III-11
2004 RFP Customer Data

	Carolina Water Service, Inc.	Tega Cay Water Service, Inc	Utilities Services of South Carolina, Inc	Southland Utilities, Inc.	United Utility Companies, Inc
	RFP	RFP	RFP	RFP	RFP
Water					
Residential	5,653	1,713	6,859	175	95
Commercial	170	0	0	0	0
Water Distribution	2,774	1,713	6,859	175	95
Wastewater					
Residential	9,729	1,689	467	0	1,779
Commercial	181 *	0	0	0	0

This includes one wholesale utility customer, Midlands Utility, for which wastewater collection services were provided to 2,213 of these customers.

Exhibit III-12 illustrates the number of customers provided to the Public Service Commission of South Carolina in each of the utility's 2005 annual report.

Exhibit III-12
2005 Annual Report Data

	Carolina Water Service, Inc.	Tega Cay Water Service, Inc	Utilities Services of South Carolina, Inc	Southland Utilities, Inc.	United Utility Companies, Inc
	Annual Report	Annual Report	Annual Report	Annual Report	Annual Report
Water					
Residential	6,200	1,723	6,794	174	96
Commercial	0	0	0	0	0
Wastewater					
Residential	10,288	1,701	360	0	1,797
Commercial	0	0	0	0	0

As shown, no commercial customer data (water and/or wastewater) was provided for the five SC utilities in their annual reports, even though the forms provide for this segmentation.

Finding III-6 The current process is not sufficiently automated to efficiently and effectively perform cost allocations.

The Accuterm system does not have an allocation module; therefore, information from this system must be loaded manually on a quarterly basis to Excel spreadsheets. These spreadsheets were initially created approximately 10 years ago and updated as necessary. Use of these spreadsheets is extremely complicated, requiring an experienced employee to fully understand. Performing allocations in this manner is time consuming and error-prone. It also limits WSC's ability to perform direct charging for employee time.

Finding III-7 Cost allocations rely too frequently on customer equivalents (or a general allocator using customer equivalents as one of the components) to charge SC utilities.

As shown previously in *Exhibit III-6* and *Exhibit III-7*, many general expense line items use *Code 1* or *Code 5* for allocation purposes. *Code 1* is based on customer equivalents. *Code 5* is a weighted average of *Code 1*, *Code 2*, and *Code 4*, where the weight of each code is based on the number of WSC employees whose salaries are allocated on each basis. Extensive use of customer equivalents may not be the best allocation factor for many of these line items, as there is not a cost causation link between the line item and customer equivalents. As indicated in *Finding III-6*, the current process is manually intensive; therefore, making extensive use of customer equivalents currently easier than if many different codes were used.

Finding III-8 No internal or external audits are regularly performed of UI's affiliate relationships and associated transactions.

The only audits of cost allocations prior to this management audit were financial audits conducted by external financial auditors or reviews conducted by South Carolina Office of Regulatory Staff (SCORS) as part of rate case filings. These activities are generally more like financial audits and are not operational or management oriented audits. No internal audits are performed, as UI has no internal audit function.

Finding III-9 Appropriate monitoring and controls do not currently exist for purchases and invoices from Bio Tech to ensure that South Carolina utilities are receiving the most cost effective sludge hauling/disposal services and construction/renovation/repair of facilities and buildings.

Currently Bio Tech primarily provides sludge hauling and disposal services, as well as construction/renovation/repair of facilities and buildings to South Carolina utilities, although sludge

hauling and disposal services comprise the majority of WSC's payments to Bio Tech.[89] Bio Tech management has plans to expand the services that Bio Tech provides.[90] Schumaker & Company consultants have several concerns regarding how the relationship between South Carolina utilities and Bio Tech is administered, including:

- No contractual agreement currently exists identifying the type of and description of affiliate transactions that Bio Tech provides.[91] Therefore, the nature of affiliate services rendered are not clearly defined, the defined bases for associated charges are not clear, and there are no terms and conditions that identify that Bio Tech's services are favorable to regulated operations in South Carolina
- No market studies, including comparisons to outside vendors, have been performed in recent years to ensure that Bio Tech is the most effective means for South Carolina to receive the services that Bio Tech provides. This concern may get even larger as Bio Tech intends to expand its range of services in the future.
- Bio Tech charges the South Carolina utilities (and other UI utilities) the same rates (per mile rate and disposal charges) that it does for all of its customers. While Bio Tech also serves other public utilities and governmentally-owned utilities, such as municipalities, counties, special purpose districts and public service districts,[92] its primary customers are UI utilities.[93]
- Field management does not consider any other sources for the services that Bio Tech provides, and they have no idea of what the unit pricing arrangement is (if there is one). None of the field management had ever done any cost comparisons to determine Bio Tech's cost versus market price – they just used the sister company because it is an affiliate.[94] South Carolina management is involved in the decision-making process regarding services provided to them by Bio Tech
- Sludge hauling services are an exception from the normal authorization thresholds; they only need approval by someone at the Regional Director level, regardless of their size,[95] resulting in insufficient oversight, especially given the other concerns.

Given Schumaker & Company concerns, it is impossible to ensure that Bio Tech is not being cross-subsidized, as there are no mechanisms and procedures intended to guard against cross-subsidization of unregulated entities, either through intentional or unintentional means.

Finding III-10 Internal controls are limited for purchasing, invoicing, and payment activities.

Approval limits mentioned in the *Purchases and Invoices Processing* section of this chapter are reasonable for an organization the size of UI. However, it is conceivable that orders could be placed by area managers (and subsequently products or services received) that exceed his or her authority. It would not necessarily be known until an invoice is received. At that point, it is too late, as the company is likely obligated to pay. Also a matching process for what was ordered, received, and invoiced does not exist, which could result in payments for unauthorized items.

Also past South Carolina Office of Regulatory Staff (SCORS) audits have noted many coding problems involving South Carolina utilities.[96]

Excluding Bio Tech's sludge hauling services from approval, just because it is an affiliate, is not appropriate. This practice could result in excess payments being made to Bio Tech.

Recommendations

Recommendation III-3 Emphasize increased use of time reporting for allocation purposes once the Accuterm system has been replaced. (Refer to Finding III-4)

Although only a portion of Northbrook, Charlotte, and Columbia employees could be directly charged, use of exception time reporting for those cases where a specific SC utility is being served would be an improvement to current practices of only using allocation by customer equivalents (except rate cases or capital projects reporting). Also general use of positive time reporting for field employees in South Carolina would be an improvement to current practices of generally using allocation by customer equivalents (except rate cases or capital projects reporting). Also Schumaker & Company recommends that, instead of performing allocation calculations and then reducing these allocated costs by direct charges to an utility organization, direct charges should be made first to an utility organization and then remaining costs should be allocated.

It is impossible at this time for Schumaker & Company consultants to determine if use of customer equivalents bears any resemblance to what is actually happening. Only with increased use of time reporting would better information be available. Once a decision has been made regarding how to replace the Accuterm system, WSC should perform a study and investigate what options exist for cost effective use of time reporting by employees. The study should be completed in 2007 (as WSC is implementing a new system) and results presented to ORS staff upon completion.

Recommendation III-4 Begin properly reporting customer data to the Public Service Commission of South Carolina and the South Carolina Office of Regulatory Staff in annual reports. (Refer to Finding III-5)

The Water Services Corporation should immediately investigate why discrepancies have occurred between what was included in the RFP and/or rate filings and what has been reported to the PSC of South Carolina and the South Carolina Office of Regulatory Staff in annual utility reports. Specifically, commercial water customers (all five utilities) and wastewater customers (all but Southland Utilities, which has no sewer service) are not specified in annual utility reports, and should be.

The company should work together with ORS staff to identify how far back revisions to annual reports may be necessary. All new annual reports should contain proper figures.

Recommendation III-5 Expedite implementation of a new accounting system to allow for increased automation of the allocation process. (Refer to Finding III-6)

The existing use of Excel spreadsheets is time consuming and error-prone. Given the capabilities of today's systems, WSC should be able to implement an improved methodology as part of its implementation of a new accounting system. Most current systems have an allocation module that can be used for directly taking data from the general ledger module and automatically allocating charges (not already directly charged) based on pre-defined rules. As soon as the new system has gone live, then WSC should begin implementation of an allocation process that takes advantage of the new system's capabilities.

Use of increased time reporting, as discussed in *Recommendation III-3*, should be incorporated as part of this process, to increase the use of direct charging to SC utilities.

Also increased use of additional allocation factors should be considered as the allocation module is implemented.

Recommendation III-6 Regularly perform audits of affiliate relationships and transactions, with the next one to be performed soon after the Accuterm system has been replaced. (Refer to Finding III-8)

The UI organization should have its auditors periodically perform audits of affiliate relationships and transactions to ensure that practices are actually following policies and procedures. As the company will be implementing a new system soon, the first audit should take place for the year in which the new system has gone live – and new policies and procedures created to take advantage of the new system's capabilities. Audits should occur at least every three years after completion of the first audit.

Recommendation III-7 Perform a market study to determine when, and if, Bio Tech should be used by South Carolina utilities for receiving the services that Bio Tech provides. (Refer to Finding III-9)

The Water Services Corporation should immediately perform a market study to address whether the Bio Tech affiliate is a cost effective choice for sludge hauling and disposal services, as well as construction, renovation, and repair of facilities and buildings in South Carolina. WSC's extensive use of Bio Tech as its preferred vendor for these services has not been cost justified. The study should compare Bio Tech's costs and benefits against those of other potential suppliers of these services. As Bio Tech's primary customer are UI utilities, it does not necessarily have to provide these services in a manner or for a reasonable cost that is favorable to SC customers. This study should be completed in 2007 and results presented to ORS staff upon completion.

Recommendation III-8 Modify internal controls. (Refer to Finding III-10)

Approval limits should be for purchase orders, not invoices, and include Bio Tech as part of this process. If the existing approval limits for Bio Tech do not make sense given the amounts, then new limits should be established for the services that it provides. These internal controls could, and should, be changed immediately.

A matching process may be difficult, given the Accuterm system's capabilities; however, when it is replaced, the Water Services Corporation should also revise its accounting practices to include a matching process for purchases, receiving tickets, and invoices.

C. Pricing Strategies

6. ***Pricing Strategies***: Review the use of zonal rates for systems that interconnect with other government-owned systems or systems established pursuant to Section 33-36-10 of the SC Code of Laws versus statewide rates for systems where the company operates its own water supply or wastewater treatment facilities.

As shown previously in *Exhibit II-12*, most states within the UI organization have multiple companies, with potentially different rates. In South Carolina, only five different companies exist; however, in some states (Florida, North Carolina, and Illinois) WSC has many more companies. In our experience, many water companies have standardized on fewer legal entities per state, which results in considerably fewer rate cases for their regulatory/rate organizations.

WSC has various rates or tariffs for the five different legal entity utilities in South Carolina, as shown in *Exhibit III-13*.

Exhibit III-13
Utilities Inc. Operating South Carolina Utilities

	Water	Water Distribution	Sewer	Sewer Collection
Carolina Water Service	X	X	X	X
Southland Utility Company	X			
Tega Cay Water Service		X	X	
United Utility Companies	X		X	
Utilities Services of SC	X	X	X	X

Separate sewer rates exist for the Salem Church Peninsula and Road area pursuant to a contract with Richland County.

These utilities' rates are based on the type of service as follows:

- ***Water*** – Provides both the water supply and the distribution of that supply to the customer
- ***Water Distribution*** – Provides the distribution of the water from the source to the customer. In these cases the water is usually purchased from a third party such as a county water system.
- ***Sewer*** – Provides the collection and treatment of the sewerage from the customer to the treatment facility and discharge in accordance with various permits.
- ***Sewer Collection*** – Provides the collection of sewerage and delivers the sewerage to a third party (usual municipal or county treatment facility).

As shown in *Exhibit III-13*, not all of the utilities have rates for the different services.

The rates charged by the various utilities differ, as shown in *Exhibit III-14*, *Exhibit III-15*, *Exhibit III-16*, and *Exhibit III-17*, for water, water distribution, sewer, and sewer collection, respectively.

Exhibit III-14
Water Comparisons
(Monthly Rate)

	Carolina Water Service, Inc.	Southland Utility Company	United Utility Companies, Inc.	Utilities Services of SC, Inc.
Date of Schedule of Rates and Charges	March 1, 2007	March 18, 1991	May 12, 2004	January 19, 2006
Residential				
Base facilities charge per single family home, condominium, mobile home, or apartment unit	$10.25	$7.00	$11.50	$14.39
Residential commodity charge per 1,000 gallons or 134 CFT	$3.32	$2.60	$4.50	$3.91
Commercial				
Base facilities charge per SFE		$7.00	$11.50	
Base facilities charge by meter size:				
5/8"	$10.25			
1.0"	$25.62			$35.98
1.5'	$51.25			$71.97
2.0'	$82.00			$115.15
3.0"	$164.00			$230.30
4.0"	$256.25			$359.84
Commercial commodity charge per 1,000 gallons or 134 CFT	$3.32	$2.60	$4.50	$3.91
Nonrecurring Charges:				
New water service connection per SFE	$300.00	$100.00	$100.00	$500.00
Plant impact fee per SFE	$400.00	$400.00	$400.00	
New customer account charge	$13.50	$25.00	$25.00	$25.00
Reconnection charges	$35.00	$35.00	$35.00	$35.00

Exhibit III-15
Water Distribution Comparisons
(Monthly Rate)

	Carolina Water Service, Inc.	Tega Cay Water Service	Utilities Services of SC, Inc.
Date of Schedule of Rates and Charges	March 1, 2007	October 9, 2006	January 19, 2006
Residential			
Base facilities charge per single family home, condominium, mobile home, or apartment unit	$10.25	$7.56	$14.39
Residential commodity (distribution) charge per 1,000 gallons or 134 CFT	$1.90	$1.69	$2.24
Commercial			
Base facilities charge per SFE		$7.56	
Base facilities charge by meter size:			
5/8"	$10.25		
1.0"	$25.62		$35.98
1.5'	$51.25		$71.97
2.0'	$82.00		$115.15
3.0"	$164.00		$230.30
4.0"	$256.25		$359.84
Commercial commodity (distribution) charge per 1,000 gallons or 134 CFT	$1.90	$1.69	$2.24
Nonrecurring Charges:			
New water service connection per SFE	$300.00	$600.00	$500.00
Plant impact fee per SFE	$400.00		
New customer account charge	$13.50	$30.00	$25.00
Reconnection charges	$35.00	$40.00	$35.00
Fire hydrant		$100.00	

Exhibit III-16
Sewer Comparisons
(Monthly Rate)

	Carolina Water Service, Inc.	Tega Cay Water Service, Inc.	United Utility Companies, Inc.	Utilities Services of SC, Inc.
Date of Schedule of Rates and Charges	March 1, 2007	October 9, 2006	May 12, 2004	January 19, 2006
Residential				
Residential - charge per single family home, condominium, or apartment unit	$38.14	$33.02	$48.24	$41.39
Mobile homes - per unit	$27.21		$35.58	$29.74
Commercial				
Base charge per SFE	$38.14	$33.02	$48.24	$41.39
Nonrecurring Charges:				
Sewer service connection (tap fees) per SFE	$300.00	$1,200.00	$100.00	$500.00
Plant impact fee per SFE (new connections only)	$400.00		$400.00	
Notification fee	$4.00	$15.00	$4.00	$6.00
New customer account charge	$13.50	$25.00	$25.00	$25.00
Reconnection charges	$250.00	$250.00	$250.00	$250.00
Reconnection charges (with elder valve)	$35.00		$35.00	$35.00
Interceptor tank pumping charge	$150.00			$150.00

Exhibit III-17
Sewer Collection Comparisons
(Monthly Rate)

	Carolina Water Service, Inc.	United Utility Companies, Inc.	Utilities Services of SC, Inc.
Date of Schedule of Rates and Charges	March 1, 2007	May 12, 2004	January 19, 2006
Residential			
Residential - charge per single family home, condominium, or apartment unit	$24.37	$24.66	$26.64
Commercial			
Base charge per SFE	$24.37	$24.66	$26.64
Nonrecurring Charges:			
Sewer service connection (tap fees) per SFE	$300.00	$100.00	$500.00
Plant impact fee per SFE (new connections only)	$400.00	$400.00	
Notification fee	$4.00	$4.00	$6.00
New customer account charge	$13.50	$25.00	$25.00
Reconnection charges	$250.00	$250.00	$250.00
Reconnection charges (with elder valve)	$35.00	$35.00	$35.00
Interceptor tank pumping charge	$150.00		$150.00

Findings & Conclusions

Finding III-11 **WSC maintenance of five separate utilities in South Carolina creates additional rate case processing costs and inconsistencies in charges to customers.**

Although WSC manages the five utilities in South Carolina as one entity, for regulatory purposes only it treats them as separate entities. This results in more rates cases than need to be handled by not only Water Services Corporation, but also the Public Service Commission of South Carolina. From a management perspective, WSC actually operates all of the separate utilities within South Carolina as if they were one utility. None of the separate utilities actually have any employees, but receive allocations from WSC based on primarily the number of customers (as discussed in this report).

Therefore the management cost for serving these customers would be the same for each utility. However, it is difficult to understand how certain nonrecurring charges, specifically reconnection fees, new customer account fees, and notification fees would be different for each utility, even though it is

the same entity providing that service. The only explanation for these differences is historical – i.e. the costs associated with filing multiple rate cases delay these differences from being corrected.

However, the capital (physical plant facilities) invested would vary by utility, which could account for some of the variation in rates. Water costs would vary based on the source of water. Sewerage treatment costs might vary between locations. Therefore, these differences would need to be recognized in the rate design resulting in different rates in some categories. It would not necessarily be possible to establish uniform rates in all categories; however, the need for multiple rate cases would save additional costs that would be incurred by the ratepayers and the Public Service Commission of South Carolina.

Recommendations

Recommendation III-9 **Investigate the benefits of streamlining rate case processing by consolidating the companies for regulatory purposes into one entity, more in line with how the water utilities are currently managed. (Refer to Finding III-11)**

From a regulatory standpoint, consolidation would be a significant change from the current regulatory arrangement; albeit more in line with how the water utilities are being managed. This is not a change that can be made by WSC alone but would require regulatory filings for approval of the consolidation. The overall objective would be to help minimize rate case costs both on the part of WSC and the affected governmental agency resources and address the differences identified in the above finding.

IV. Staff Functions

This chapter includes a review of the human resources function within the Water Services Corporation, Inc. (WSC) of Utilities, Inc. (UI), any pending litigation involving affiliated South Carolina companies that may impact WSC, and WSC technology tools and training policies and practices.

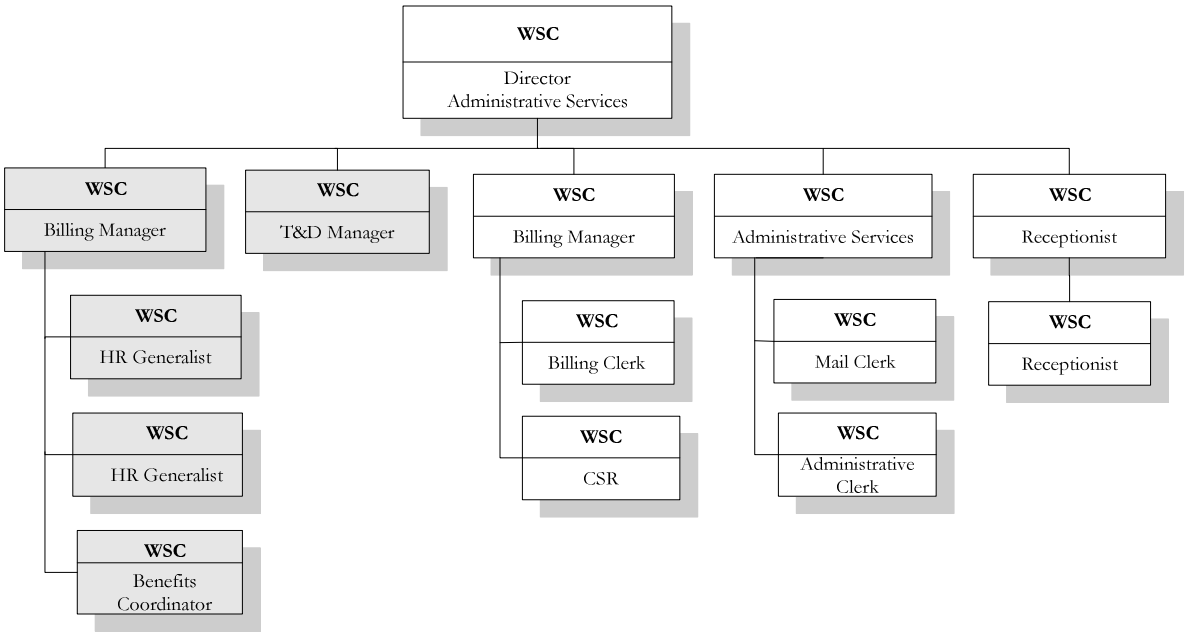
A. Human Resource Policies and Practices

7. ***Human Resource Policies and Practices***: Review the extent to which managerial performance is vigorously assessed and corrective action is taken where warranted. Review adequacy and implementation of compensation plans and how they relate to industry standards. Review turnover rate per profession in comparison with industry standards. Describe any anomalies that may be found.

Background Information

Exhibit IV-1 illustrates the Administrative Services organization, which includes the HR and Training & Development (T&D) functions.[97]

Exhibit IV-1
Administrative Services Organization



Human Resources

The Human Resources (HR) Department is composed of four full-time employees, as shown in *Exhibit IV-1*, with all having responsibilities relating to management of employee information.[98]

Up to roughly three years ago, there was no central HR department at Water Services Corporation. Slowly, has been putting an HR function together at Northbrook and at local offices. In mid-2005, an HR Manager was named and the HR group acquired one HR Generalist and a Benefits Coordinator. In September 2006, another HR Generalist position was added to the function.[99]

The primary operational activities that are performed by HR staff include the following:[100]

- Recruiting and start-up
- Employee relations
- Benefits
- Employee review policies and procedures
- Disciplinary action assist and mentoring
- Incentive plans
- Turnover capture
- Diversity/EEO policies and procedures
- Compensation standards and job descriptions

Many of these activities are informal due to the fact that the HR organization is in its early stages. UI's work towards more organized plans, such as a recruiting and retention plan, is expected to begin as a human resources information system (HRIS) and an updated website become available.[101]

WSC currently uses ADP 5.1 for payroll and HR uses ReportSmith™ to download information from the payroll systems to spreadsheet format for review. WSC is currently in the process of investigating new computer software, which HR expects to include HRIS capabilities.[102]

Although the HR Department has now been established with its own manager since md-2005, it does not separately track its expenses; therefore, Schumaker & Company is unable to provide an indication of the level of HR operating expenses since then.[103]

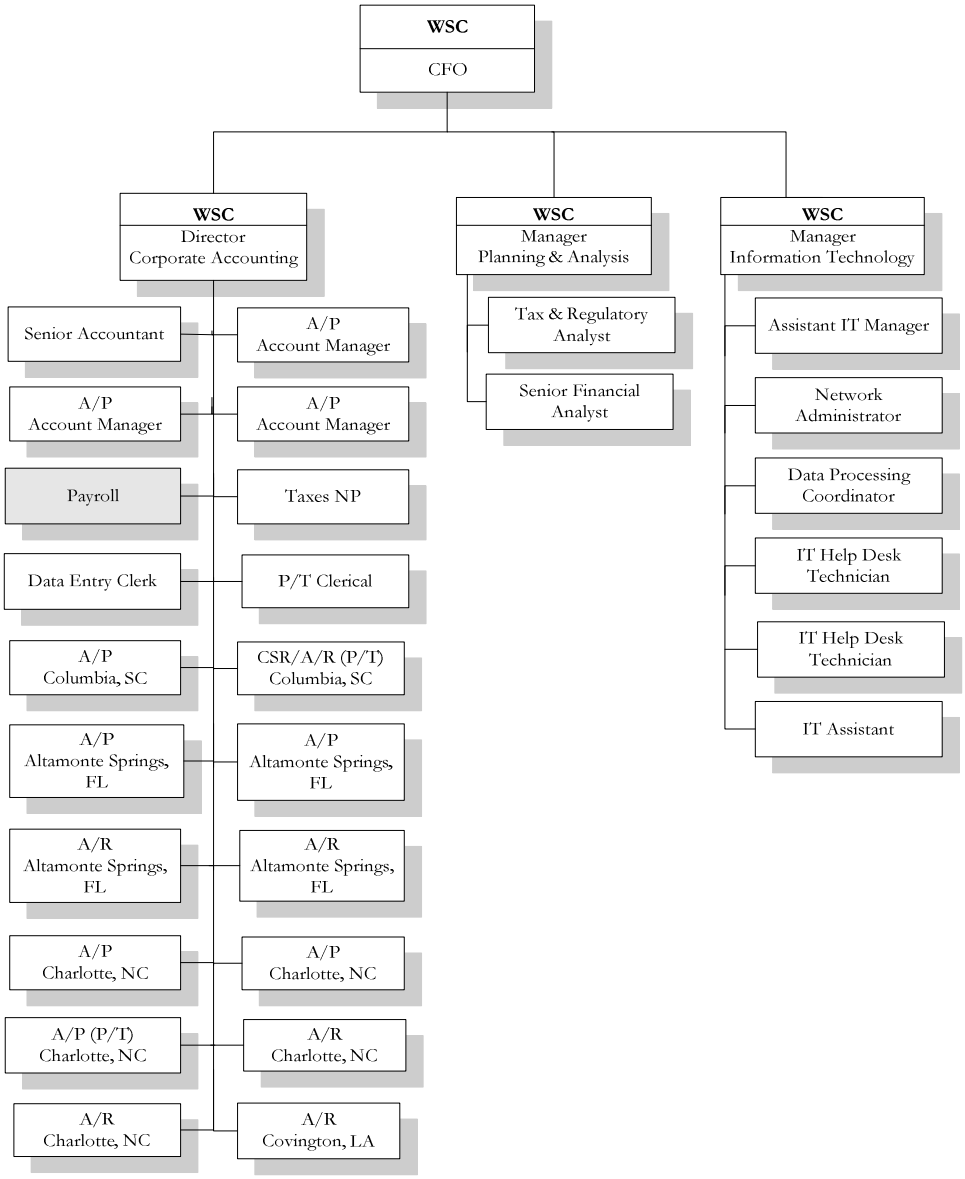
The primary way HR communicates with employees is by use of Microsoft Office tools, e-mail, and telephone,[104] although it obtains employee feedback through its employee hotline and direct correspondence with all staff levels throughout the year.[105]

Payroll

Although HR staff initiates and retrieves payroll information from management and employees throughout WSC on an on-going basis, through new hires, reviews, and separations, it is not a primary function of the HR Department. Data gathered is transferred to Payroll staff, which is part of the

Corporate Accounting function reporting to the Chief Financial Officer (CFO), as shown in *Exhibit IV-2* on the following page, for filing and data entry. HR has no direct or in-direct reporting structure with the Payroll organization.[106]

Exhibit IV-2
Payroll Organization



Training & Development

As of August 2006, one person provides training and development (T&D), although WSC does not consider it a part of the HR group. However, for the purposes of this audit, Schumaker & Company

considered it an HR function. Initial T&D activities will be "plan and do" activities for all general training requirements, excluding safety/compliance training, which will continue to be handled by field Operations staff.:[107] Specifically, the T&D Manager will be responsible for improving the productivity of UI employees through the development, coordination, and presentation of T&D programs, including employee relations, new employee orientation, performance appraisal, and career development. Additionally the manager is response ongoing assessment of company-wide developmental needs to drive training initiatives and is expected to identify and arrange suitable training solutions for employees.[108]

The T&D Manager may provide consultative assistance to IT staff and field trainers responsible for equipment and operational procedures; however, he is not directly responsible for these programs.[109]

Billing

Customer billing activities are extremely manual with a very old billing system and many Excel spreadsheets and paper checklists. This group is looking at new customer billing software, which they are hoping will increase automation and reduce human involvement for selected activities, such as notices. Also included in this group is final bill creation, which is a totally manual effort.[110]

Administrative Services

The primary operational activities performed by Administrative Services staff include the following:[111]

- Facilities (landscaping, etc.) for Northbrook office only
- Property and casualty insurance
- Fleet management (specifically ordering of new utility vehicles only) for local regions.
- Mail room (incoming mail, bill mailing, etc., plus backup for receptionists, etc.)

UI owns the Northbrook office building, but UI both owns and leases local offices. Due to crowded conditions at Northbrook, the Director of Administrative Services is responsible for looking for new office space in Northbrook area. The company hopes to move by the end of 2007. The Director does not know yet if UI will own or lease space, as it will depend on what is available. She is right now developing an RFP to give to developers.[112]

Receptionists

Two receptionists handle telephones and other projects from Northbrook groups based on their availability and management authorization.[113]

Goals & Objectives

The HR Department does not have an official mission statement; however, there are goals and objectives specified in the *Utilities, Inc.* "*What You Can Expect from Utilities, Inc.*," *Employee Manual*, which incorporates the Human Resource Department responsibilities as:[114]

- Selecting people on the basis of skill, training, ability, behavior, and character without discrimination with regard to age, sex, color, race, creed, national origin, religious persuasion, marital status, political belief, or disability that does not prohibit performance of essential job functions.
- Paying all employees according to their effort and contribution to the success of the business.
- Reviewing wages, employee benefits, and working conditions constantly with the objective of providing maximum benefits that are consistent with sound business practices.
- Providing paid vacations and holidays to all eligible employees.
- Providing eligible employees with medical, disability, retirement, and other benefits.
- Developing competent people who understand and meet Utilities, Inc. objectives and who accept with open minds the ideas, suggestions, and constructive criticisms of fellow employees.
- Assuring that employees, after speaking with their managers, have an opportunity to discuss any problem with officers of Utilities, Inc.
- Respecting individual rights and treating all employees with courtesy and consideration.

And, in return, Utilities, Inc. specifies in the same employee manual that it expects "performance and good team behavior." The manual also defines performance as being that the employee "knows their own duties and how to fulfill them promptly, correctly, and pleasantly." The manual encourages employees to grasp opportunities for personal development as offered.[115]

Although no formal HR mission, goals, and objectives existed during Schumaker & Company's audit field work, UI management indicated in early 2007 that it expects to define 2007 goals and objectives.[116]

Findings & Conclusions

Finding IV-1 Employee performance reviews are based on their own perspective with minimal input from management or peers.

WSC/UI operates a comprehensive performance management program scheduled every July first that applies to below executive level employees. HR initiates the process with a notice to supervisors in the April/May timeframe to send out the standard review *Utilities, Inc. Performance Evaluation Form* to their employees. The supervisors are provided with a deadline and a standard increase percentage available across the board (i.e., 3%). Employees then complete the form, providing accomplishments, goals for the

future, goals completed/not completed for the past year, and how they suggest improving their work environment. Supervisors may also fill out the form (or modify it) for each of their employees, but it is not mandatory. The employees do not complete the performance rating section; supervisors do. Evaluations are then scheduled between employee and supervisor. At the evaluation, supervisors are to complete the performance rating section and both participants are to sign and date the form.[117] Subsequently HR reviews the performance reviews before they are filed.[118]

If an employee had exemplary performance and the supervisor wishes to provide them with a percentage increase higher than the standard percentage, they must get final approval from the Utilities, Inc. President. Normally, this is done with a bonus, rather than a higher percentage increase. Other exceptions might include promotions, which to align with others in that classification, a higher percentage in needed. When complete, all forms are sent to HR in Northbrook for personnel filing and payroll changes.[119]

Finding IV-2 Not all job descriptions and compensation ranges are standardized or documented.

Utilities, Inc. does not centrally maintain job descriptions for most of its employees, and some position descriptions are outdated or missing. HR is currently in the process of standardizing job descriptions and salary ranges. It is not yet complete and was not available for the purposes of this audit. Cost of living for local areas is being considered and included. No outside consulting has been requested or done in this area by the HR Department. No formal studies of job descriptions and compensation have been done. The HR Manager belongs to American Water Works Association (AWWA) and Marketing Research Association (MRA), where the HR Manager gets salary surveys, tools, and cost of living adjustment tools. Also used is the Society for Human Resource Management (SHRM) web site, although it does not have surveys.[120]

Employees cannot perform effectively and efficiently if they are unaware of their specific job responsibilities. Unclear assignments involving duties and responsibilities result in un-accomplished tasks. Job function ambiguity could lead to effort duplication, no efforts at all, or haphazard efforts. A well-written job description distinguishes essential and non-essential job responsibilities and provides an overview of the work performed in a position. A job description also establishes information to use in determining salary and proper position titles and classifications, as well as positions' designations under the Fair Labor Standards Act (FLSA). Accurate job descriptions identify and delegate responsibilities within an organization and help ensure consistent job analysis and comparison for compensation purposes. The SHRM, a noted authority on HR practices, provides information and examples of job descriptions on its web site.

Employees can perform more effectively and efficiently if they properly understand their job responsibilities. A well-crafted job description also reduces a company's liability in the pre-employment selection process by focusing hiring representatives on legitimate and nondiscriminatory job-related requirements. The definition of essential and non-essential job functions in job descriptions is also

important under the Americans with Disabilities Act (ADA). The delineation of essential and marginal functions in job descriptions serves as an employer's "good faith" practice to promote equal access of employment opportunities to qualified individuals without regard to disabilities. The employer's distinction allows a disabled individual who is otherwise qualified for the position to determine whether the individual can perform all the essential job duties with or without reasonable accommodation by the employer. Well-written job descriptions clearly communicate performance standards and expectations to all employees and reduce confusion regarding responsibilities.

In simple and clear language featuring action verbs, job descriptions document major job duties and the following elements: a single job title that best depicts the complexity, specialization, or generalist nature of the job; department; title of the supervisor to whom the position reports; pay grade; FLSA status; explicit summary of the job description and measurable work outcomes; essential duties and responsibilities; supervisory responsibilities, if any; minimum qualifications; education and/or experience required; necessary language skills; mathematical skills needed; reasoning ability and physical demands. Some job descriptions also include preferred qualifications.

Many companies review and update job descriptions on a periodic basis to ensure work performance matches duties specified in the job description and that employees are evaluated and compensated fairly.

Finding IV-3 Utilities, Inc. does not have an effective way of communicating with personnel.

Utilities, Inc. has no effective communication tool that it uses to share information and keep employees abreast of pertinent information that may affect them or their work environment. The location of personnel, who are scattered among several buildings and several states, increases the difficulty of effective communication.[121]

UI relies primarily on the telephone, electronic mail, written memos, notes in employee paychecks, and sometimes word of mouth to communicate with employees. It also publishes a periodic newsletter that contains general information.[122] Some employees do not sign onto their computer system regularly and some do not have computer workstations. Telephone communications often are ineffective, because messages are not always relayed promptly or accurately.[123] Although field staff had discussed the potential use of a "Blackberry" or similar device, their use had not yet been implemented in South Carolina during Schumaker & Company's field work.[124]

If employees have expressed concern, they most likely do so through the employee hot line where issues and suggestions are encouraged. Questions or problems are directed to Northbrook HR and follow-up is done by an HR Generalist. These interactions can be anonymous.[125]

Finding IV-4 The HR Department lacks a formal mission statement and associated departmental goals and objectives.

The HR Department does not currently have a formal mission statement. Mission statements generally improve employee productivity and assist departments in clearly defining job duties. The use of a mission statement and associated goals are important, as employers have found that a lack of clearly defined goals tends to frustrate and confuse employees. This, in turn, causes a decrease in motivation, productivity, and quality of work. Ultimately, this can result in a backlog of work, higher turnover rates, and added costs associated with hiring and training new employees. The established employee relations policy specified in the *Utilities, Inc.* "*What You Can Expect from Utilities, Inc.*," *Employee Manual* may be the only written statements reflecting Human Resource department goals (refer to *Goals and Objectives* stated earlier in this chapter).[126]

Once an organization crafts a mission statement, the next step is to set goals and objectives. UI's HR Department has yet to establish a comprehensive set of written goals. Goals may have multiple objectives and are clear targets for specific actions. Objectives are more detailed than goals, have shorter time frames, and are measurable, quantifiable, and achievable. Strategies are the methods used to achieve goals and objectives. Sample metrics might include: total staffing levels, open requisitions, disability case management, hot line case management, and grievance activity levels where the outcome measures and output measures indicate the success of the strategies in achieving the objectives and goals.

Establishing regular goals and strategies are an important part of a good management process, regardless of whether or not they are used for budgeting, although tying the two together is preferable.

Finding IV-5 Executive compensation levels are not clearly defined or documented, nor are they based on formal comparative analysis.

At UI use of the terminology "executive compensation" refers only to the seven members of the UI leadership team, who are paid both salaries and incentives/bonuses. No salary ranges currently exist for these executive positions. At year-end the President and Chair determine salaries for executive employees, with input from the HR organization. The Board in turn determines the President's and Chair's salaries.[127] In 2006, salaries for theses executives totaled approximately $1,170,000.[128]

Currently an executive's salary is only based on general goals, while incentives/bonuses are based on the company's and individual's performance with regard to favorably achieving revenue, operating expense, and capital expenditure budget figures. During a year, executive employees do not know how much will be paid in incentives/bonuses based on specific goals and objectives. They only know their maximum for incentives/bonuses. For 2006 this maximum was 25% of their respective salaries, or approximately $292,500. It is at the Board's discretion how much, if any, of incentives/bonuses are paid each year. For 2006, the Board decided in early March 2007 that all seven executives would receive their maximum incentive/bonus[129]

Although (without performing a formal compensation study) salaries appear reasonable given that executives work in Northbrook (IL) near Chicago, to Schumaker & Company's knowledge, no formal comparative studies are performed to determine salary or incentive ranges.

Finding IV-6 South Carolina turnover rates appear reasonable.

Exhibit IV-3 illustrates turnover rates for 2004, 2005, and 2006 (through June 2006) for South Carolina full-time operations and office employees.[130]

Exhibit IV-3
South Carolina Turnover Rates
2004-2006

Employee Type	2004	2005	2006
Full-time Operations	3%	7%	5%
Full-time Office Employees	20%	18%	10%
Total	**7%**	**9%**	**6%**

2006 data reflects January 1- September 30 only

These turnover rates appear reasonable based on benchmarking these figures against SC comparators, using Bureau of Labor Statistics (BLS) (www.bls.gov) and Nobscot Corporation (www.nobscot.com) data. The figures for SC, for example, are just below the BLS average for overall water utilities.

Recommendations

Recommendation IV-1 Require mandatory management reviews of employee performance and adapt a more 360°-like review process across all employees. (Refer to Finding IV-1)

The evaluation process should allow continuous communication of expectations and actual performance between employees and their supervisors. For employees to be the sole source of their own behaviors and skills, growth is limited. Mandatory management written reviews are recommended, using the same *Utilities, Inc. Performance Evaluation Form*, with slight modifications for perspective, as those given to the employee. Both employee and supervisor should complete the performance rating section of the form prior to the evaluation meeting to initiate discussion for those areas where there is any discrepancy. Use of similar forms helps with comparability. At the evaluation, employee and supervisor would then jointly agree on performance ratings to be reported and develop individual performance plans that focus on technical, behavioral, and operational competence. Job duties should be measurable, so that a performance level can be determined. As job duties change, the expectations for the employee should change accordingly. The evaluations should provide justification for any salary change or disciplinary

action. In addition, the completed, signed, and dated evaluation should be forwarded to the designated Human Resources representative and the employee should get a copy.

Employees and supervisors should then meet again after six months to monitor progress where employees can be rated "on track" or "off track" with respect to their performance against their annual goals and competencies.

If possible, peer(s) should also be given the opportunity to review an individual anonymously (best accomplished through electronic submission) by completing the performance rating section as seen on the *Utilities, Inc. Performance Evaluation Form* and providing it to the supervisor of the employee being reviewed prior to the scheduled evaluation meeting. Again, use of similar forms helps with comparability.

When a supervisor's performance review is initiated, subordinates and peers should be provided with the means for anonymous contributions by completing the *Utilities, Inc. Performance Evaluation Form* through the performance rating section only. This 360° perspective on the individual's performance will provide a more complete picture of how well an individual performs in their assigned position and whether or not adjustments to responsibilities or training should be recommended.

Recommendation IV-2 **Complete the process to develop accurate and standardized job descriptions and salary ranges for all positions. (Refer to Finding IV-2)**

Concisely written and accurate job descriptions provide essential information to validate selection criteria for jobs and allow a company to maximize its use of human capital by avoiding organizational redundancies. Well-written job descriptions clearly communicate performance standards and expectations for all employees and designate specific points of responsibility company-wide.

HR should consider appointing a job analysis committee to coordinate the development of job descriptions for all positions. Employees should submit a detailed list of duties they perform and supervisors should amend duties to fit state or local needs and submit the list to the committee. The committee should then forward descriptions, with appropriate recommended changes (if any), to the HR Manager for review and subsequently completion.

HR should then establish a policy stating that each department will be responsible for reviewing and updating job descriptions on a three-year cycle, with one third of the job descriptions reviewed each year.

Recommendation IV-3 Develop a plan to ensure that all employees receive vital personnel information in a timely and consistent manner. (Refer to Finding IV-3)

Utilities, Inc. should consider adding a web-based news center, including use of electronic mail regularly, or in selected cases distributing written information that must be signed for by employees, to more effectively disburse information.

A first step could be to create an employee news center online. The online (web-based) news center could be sanctioned by Utilities, Inc. for all locations and used to communicate business-related information, such as information about business changes, improvements, benefits, and other issues. Utilities, Inc. already has an operational Web site at http://www.utilitiesinc-usa.com, so the news center could be just a link off the home page. Especially as this service is initiated, department heads should make sure that employees are aware immediately of important information being disseminated via the online news center.

Then steps could be taken to inform department heads and staff of deadlines for submitting articles to the online news center (or HR first for approval) and encourage them to use it to communicate with staff.

Recommendation IV-4 Establish a mission statement and associated goals and objectives for Human Resources. (Refer to Finding IV-4)

Implementing this recommendation will result in a succinct mission statement along with goals and objectives that will help the department operate in a more focused effort. Although organizations implement goals and objectives in different ways, most have common elements. First there must be commitment to the strategic planning process, begin doing it, develop and refine, identify future challenges and opportunities, identify the company's strengths and weakness, develop concrete strategies to achieve the mission, and develop a plan for evaluation.

The HR Department should develop a mission statement that accurately describes its main functions and reasons for existence. The approved mission statement should be posted throughout the HR office and each WSC location. In this way, HR staff will be constantly reminded of the importance of their individual work and how it contributes to the department's mission and all employees will understand the HR function.

The HR Manager should develop a list of overall departmental goals that encompass the department's core functions. As an example, one departmental goal could be "Hire qualified employees in a timely manner." Once the departmental goal is established, potential objectives might include:

- Post and advertise all job openings within 24 hours of final approval
- Enter all applicant information into the personnel system shortly after the posting is closed

- Schedule all applicant interviews within two days of receiving a department's choices of interviewees

The goals/objectives and associated results should be included in a monthly report to the HR Manager. All HR staff should be aware of the results. This system will keep them apprised of the department's aim and success at achieving them.

Because department functions may not radically change each year, the goals will not likely change much from year to year. The objectives, however, may change as they are tracked. The HR Manager could discover that some objectives do not contribute much to the measurement of the department's success, or that a particular function; one not listed as an objective, is taking an increased amount of employees' time and should be included as an objective. For these reasons, the department should schedule an annual review of the appropriateness of the objectives and perhaps less often a review of the goals.

Recommendation IV-5 **Formalize executive compensation procedures and regularly perform studies to identify appropriate executive pay levels. (Refer to Finding IV-5)**

More formalization, including defined salary ranges and incentive/bonus plans, should be developed in 2007 so that executives know (by mid-year) what compensation to expect given their performance. Formal performance reviews should be conducted for executive employees to give feedback as to their performance. Individual incentive/bonus plans should be developed that incorporate specific goals that an executive is targeted to achieve. In subsequent years, these plans should be set before the year begins.

Additionally, the pay ranges (salaries and incentives/bonuses) for executives should be based on formal comparative analysis to ensure that ratepayers are not being impacted on pay levels that are too high.

B. Pending Litigation

8. ***Pending Litigation***: Review any pending litigation from affiliated South Carolina companies that may impact Water Services Corporation. Contractor will agree and covenant not to disclose in its audit any confidential information related to pending litigation and will agree to use information it learns about pending litigation for no other purposes than for this.

Findings & Conclusions

Finding IV-7 **At this time, there is no pending litigation from affiliate South Carolina companies that may impact Water Services Corporation.**

Currently, WSC has 13 rate cases pending in Florida, one rate case pending in Nevada, one rate case pending in North Carolina, one rate case pending in Indiana, and one rate case pending in Virginia.

Recommendations

None

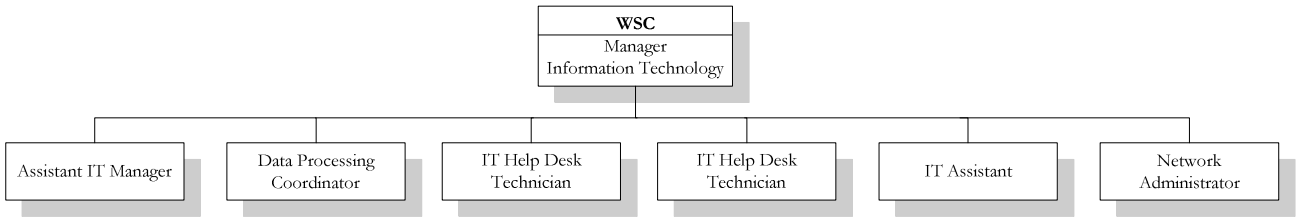
C. Technology Tools and Training

9. ***Technology Tools and Training***: Review the company's use of technology to further its business objectives. Review training policies and practices to determine whether adequate training is provided to all employees.

Background Information

The information technology systems at Water Services Corporation, Inc. are maintained by a seven-person department, which is organized as shown in *Exhibit IV-4*.[131]

Exhibit IV-4
WSC IT Department Organization



The department is responsible for:

- Installation and maintenance of the hardware and software used for WSC's Customer Information and Billing System
- WSC's basic accounting systems (GL and AP systems)

- The underlying network infrastructure (servers, workstations, routers, and network transport) that consists of a recently implemented migration to a Microsoft Windows 2003 network.[132]

There are currently approximately 250 -300 users of the computer network. With approximately 40 of these users located in Northbrook, the majority of the users are located at the remote locations. The department is currently in the process of transitioning from Apple servers located in the various remote locations to a completely Windows 2003 network.[133]

Currently, the remote sites are connected via dedicated 56k lines. These lines are currently being used for the support of the customer information and billing system, the transmission of meter reading information, and also carry voice traffic. The department is beginning to look at dedicated T-1 facilities between locations.[134]

Billing System

The billing system is an older character-based system that has been used within WSC for many years (predating many of the current staff). It is more or less a custom application that was written for WSC many years ago – perhaps 20 years ago.

Accounting System

The accounting system is of a similar age as the billing system. The accounting system is only used for maintaining the accounting records with little additional capability such as forecasting and budgeting, inventory control, purchasing and materials management, etc. and other items that are characteristics of today's enterprise resource planning (ERP) systems.[135]

In the case of both the billing system and the accounting system, the underlying technologies are so old that it is difficult to get outside support for these systems at this time. However, some WSC personnel are capable of supporting these older systems.

Windows 2003 Network

WSC has recently begun migrating to a Windows 2003 network infrastructure. Prior to last year, WSC had a combination of Macintosh workstations and Apple servers at some locations and some Windows based personal computers. Although this configuration had been made to work, it was a heterogeneous environment that is a more difficult environment to support and more difficult for interfacing with outside organizations – i.e., state regulatory commissions. The implementation of this new Windows 2003 network is just beginning. Two Windows 2003 servers have been implemented with 5-6 more eventually being placed at the remote locations.

Findings & Conclusions

Finding IV-8 WSC's information systems are outdated and in need of significant upgrade.

As discussed above, the current billing and accounting systems are older technologies that do not provide the features available in current commercially off-the-shelf (COTS) software packages. In addition, ongoing support of these older systems is questionable, at best. The current billing and accounting systems are in the process of being replaced with a COTS packages. WSC has engaged Deloitte & Touche to guide WSC through this review, selection, and implementation process. WSC anticipates a two-year implementation process.[136]

Finding IV-9 There is little indication of much of an information technology planning process.

Progressive organizations - "best in class" - rely on information technology as a key asset for "competing" in today's environment. With Utilities, Inc. presenting itself as the largest water utility holding company in the United States, it would be expected that they would strive to be in a "best in class" company.

There is no existing IT Department mission statement. The IT Department functions primarily as a support group for all computer-related needs of Utilities, Inc. It appears to be doing this support without a clear plan of the direction that information technology is headed within Utilities, Inc.[137]

A budget does not exist for IT operating expenses and capital expenditures. The same level of oversight that is given other portions of the capital program is not performed regarding IT expenditures.

Not only is there no overall information technology plan, but there is little existing documentation or diagrams available of the current network infrastructure. No written plan for the implementation of Windows 2003.[138]

Finding IV-10 There is insufficient emphasis on training and certification within the IT Department.

Although the IT Department has taken some training in relevant technologies, its staff has no requirement or even incentives for obtaining certifications. There are currently seven individuals in the IT Department to support a 250 workstation network with a couple of servers. With proper training and certifications, we are aware of other organizations that support much larger networks (800-1,000 workstations) with fewer or the same number of staff.[139]

Finding IV-11 Several of WSC's current applications may need to be rewritten with the migration to a Windows 2003 network.

The adoption of the newer billing and accounting packages will permit WSC to consolidate some of its technology systems. In some cases, some of the smaller applications written and supported within the IT Department will be replaced by this new system. However, server systems might need to be migrated to different technology; including:

- Capital Projects Database
- Incident Database
- Issues Database

Recommendations

Recommendation IV-6 Develop a written network infrastructure plan consistent with the needs of the new billing and accounting systems and network users needs. (Refer to Finding IV-8, Finding IV-9, and Finding IV-11)

One would hardly begin to build a building without construction drawings and yet many IT organizations begin building networks without developing a complete set of drawings. A written IT plan needs to be developed in advance of actual implementation. The IT plan should address the following items:

- ***Information Technology Department Organization and Management*** – Overall presentation of the management and organization of information technology activities, which would include organization structure, staffing levels and skills, IT business processes, and management systems.
- ***Information Technology Systems*** – Description of current and project future information technology systems in place, which would include enterprise resources planning (ERP) systems, fleet management systems, materials management systems, GIS systems, document imaging and processing systems, workflow systems, email systems, internet, website and access, mobile technologies, and any other systems that are anticipated to be used in WSC's day-to-day business. It would also include a review of the software acquisition and/or development processes and ongoing support provided within the organization.
- ***Network Infrastructure*** – Description of current and future hardware and software, including speed, capacity, and potential for future growth including:
    a. Physical network diagram
    b. Servers – configuration, age, performance, software configurations
    c. Workstations – configuration, age, performance, software configurations
    d. Routers
    e. Printers

f. Cabling
g. Security
h. Capacity and speed
i. Telephone and cellular services
j. Voicemail/unified messaging
k. Mobile services
l. Multimedia services

- ***Systems Security and Reliability*** – A review and assessment of physical security, logical security, fault tolerance, disaster recovery, and computer room layout, including:
  - Physical security arrangement
  - Network security (security configurations), including Active Directory, organizational units, virus scanning, spam control, and spy ware mitigation technologies
  - Firewalls
  - Fault tolerance
  - Backup processes
  - Disaster recovery
- ***User Support*** – Plans for hardware/software maintenance and repair, help desk functions, patch updates, software upgrades, and other ongoing activities need to be reviewed.

Recommendation IV-7 Place greater emphasis on ongoing training and certification in the IT Department. (Refer to Finding IV-10)

IT personnel should be provided incentives to obtain certifications. These incentives should "pay for themselves" as the IT Department becomes capable of providing most of the IT support required from internal resources versus having to use outside consultants. Outside consultants should only be used to providing specialized skills or for augmenting internal resources.

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[1] / Interview 4
[2] / Interview 4
[3] / Press Release on Sale
[4] / Interview 4
[5] / Interview 4
[6] / Interview 8
[7] / Interview 4
[8] / Interview 8
[9] / Interview 4 and Information Request 51 and 52
[10] / Interview 4
[11] / Interview 8
[12] / Interview 8
[13] / Interview 4

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[15] / Interview 4
[16] / Interview 8
[17] / Interview 8
[18] / Interview 8
[19] / Interview 8
[20] / Interview 8
[21] / Information Response 19
[22] / RFP
[23] / RFP
[24] / RFP
[25] / RFP
[26] / RFP
[27] / RFP
[28] / Information Response 1
[29] / Interview 2 and Information Response 2
[30] / Various interviews
[31] / Information Response 3
[32] / Information Response 3
[33] / Information Response 3
[34] / Information Response 3
[35] / Information Response 3
[36] / Information Response 3
[37] / Interview 2
[38] / Information Response 28
[39] / Information Response 68
[40] / Interview 2
[41] / Interview 2
[42] / Information Response 2
[43] / Interview 2
[44] / March 20, 2007 Company Comments
[45] / Information Response 28 and March 20, 2007 Company Comments
[46] / Information Response 28, OQ Response II-7, and March 20, 2007 Company Comments
[47] / Interview 6
[48] / Interview 6
[49] / Interview 6
[50] / Interview 6
[51] / Interview 6
[52] / Interview 6
[53] / Information Response 1 and Interviews 2 and 9
[54] / Information Response 3
[55] / Interview 2
[56] / Interview 2 and Information Response 24
[57] / OQ Response III-1
[58] / Information Response 24
[59] / Interview 2
[60] / Interviews 2 and 9 and Information Responses 24 and 29
[61] / Interviews 2 and 9 Information Responses 24, 29, and 55
[62] / Interview 2

[63] / Interviews 2 and 9 and Information Response 24
[64] / Interview 2
[65] / Information Response 24
[66] / Information Response 24
[67] / Information Response 24
[68] / Information Response 24
[69] / Information Response 24
[70] / Information Response 24
[71] / Information Response 24
[72] / Information Response 24 and OQ Response III-3
[73] / Information Response 24
[74] / Information Response 24
[75] / March 20, 2007 Company Comments
[76] / Interview 9 and Information Response 27
[77] / Interviews 2 and 9 and Direct Testimony of Steen M. Lubertozzi in Docket No. 2006-92-WS
[78] / Interview 9 and Information Response 27
[79] / Information Response 27
[80] / OQ Response III-4
[81] / March 20, 2007 Company Comments
[82] / March 20, 2007 Company Comments
[83] / Various field interviews
[84] / Interview 9 and Information Response 27
[85] / Information Response 27
[86] / Information Response 27
[87] / Interviews 2 and 9 and March 20, 2007 Company Comments
[88] / March 31, 2007 ORS Comments
[89] / Interview 13 and Direct Testimony of Steven M. Lubertozzi in Docket No. 2006-92-WS
[90] / Interview 13
[91] / Information Response 58
[92] / Interviews 2 and 13 and Direct Testimony of Steen M. Lubertozzi in Docket No. 2006-92-WS
[93] / Interview 13
[94] / Various field interviews
[95] / Information Response 27
[96] / Discussions with SCORS representatives
[97] / Information Response 1
[98] / Information Response 1 and Interview 1
[99] / Interview 1
[100] / Interview 1
[101] / OR Response IV-2
[102] / Interview 1
[103] / OQ Response IV-1
[104] / Interview 1
[105] / OR Response IV-3
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[108] / OQ Response IV-4
[109] / OQ Response IV-4
[110] / Interview 10
[111] / Interview 10

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[113] / Interview 10
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[116] / OQ Response IV-5
[117] / Information Response 47 and Interview 1
[118] / OQ Response IV-6
[119] / Interview 1
[120] / Information Response 50 and Interview 1
[121] / Interview 1
[122] / Interview 1 and March 20, 2007 Company Comments
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[124] / Various Field Interviews
[125] / Interview 1
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[127] / Interview 10 and March 20, 2007 Company Comments/Follow-up
[128] / March 20, 2007 Company Comments/Follow-up
[129] / March 20, 2007 Company Comments/Follow-up
[130] / Information Response 48
[131] / Interview Request 3
[132] / Interview Request 3
[133] / Interview Request 3
[134] / Interview Request 3
[135] / Interview Request 3
[136] / Interview Request 4
[137] / Interview Request 3
[138] / Interview Request 3
[139] / Interview Request 3